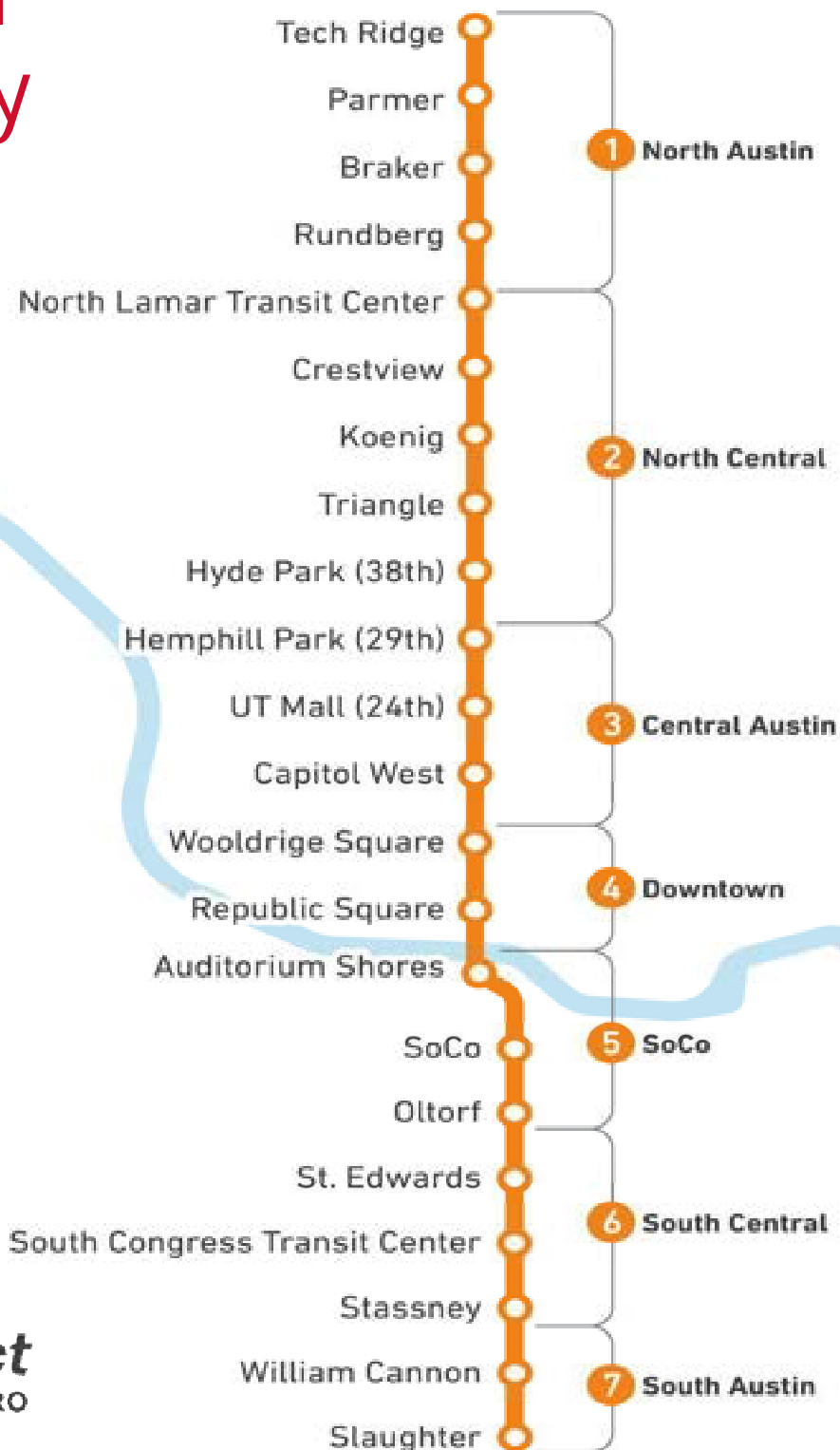


Planning & Environmental Linkages Study

October 1, 2020



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List of Acronyms

AARP	American Association of Retired Persons
ACS	American Community Survey
APD	Austin Police Department
APE	Area of Potential Effects
ART	Autonomous Rapid Transit
ASTM	American Society for Testing and Materials
BCCP	Balcones Canyonlands Conservation Plan
BGEPA	Bald and Golden Eagle Protection Act
BRT	Bus Rapid Transit
CAA	Clean Air Act
CAMPO	Capital Area Metropolitan Planning Organization
CAPCOG	Capital Area Council of Governments
Capital Metro	Capital Metropolitan Transportation Authority
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CIG	Capital Investment Grants
CM/GC	Construction Management/General Contractor
CO	Carbon monoxide
CoA	City of Austin
DB	Design-Build
DBB	Design-Bid-Build
EJ	Environmental Justice
EO	Executive Order
EOR	Element of Occurrence Records
ESA	Endangered Species Act
ESA	Environmental Site Assessment (in hazmat)
FEMA	Federal Emergency Management Administration
FGS	Fixed Guideway Setting
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
GA	Geologic Assessment
GHG	Greenhouse Gas
HCT	High-Capacity Transit
IHWCA	Industrial Hazardous Waste Corrective Action

IP	Individual Permit
LOS	Level of Service
LEP	Limited English Proficiency
LPST	Leaking Petroleum Storage Tanks
LRT	Light Rail Transit
LPA	Locally Preferred Alternative
LWCF	Land and Water Conservation Fund
MBTA	Migratory Bird Treaty Act
MCAC	Multimodal Community Advisory Committee
mg/m ₃	Milligrams per cubic meter
µg/m ₃	Micrograms per cubic meter
MPO	Metropolitan Planning Organization
MSA	Metropolitan Statistical Area
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NFIP	National Floodplain Insurance Program
NHD	National Hydrography Dataset
NHPD	National Historic Preservation Act
NO ₂	Nitrogen dioxide
NO _x	Nitrogen oxide
NPA	Neighborhood Planning Association
NRHP	National Register of Historic Places
NTD	National Transit Database
NWI	National Wetland Inventory
NWP	Nationwide Permit
O ₃	Ozone
Orange Line	Orange Line Corridor Project
OTHM	Official Texas Historical Markers
PA	Programmatic Agreement
PB	Lead
PCAN	Project Connect Ambassador Network
PCN	Pre-Construction Notification
PEL	Planning and Environmental Linkages
PM	Particulate matter
PMOR	Program Manager Owner's Representative
PPB	Parts per billion

PPM	Parts per million
REC	Recognized Environmental Condition
ROW	Right-of-Way
RTHL	Recorded Texas Historic Landmarks
SAL	State Antiquities Landmarks
SCC	Standard Cost Categories
SGCN	Species of Greatest Conservation Need
SHPO	State Historic Preservation Officer
SO ₂	Sulfur dioxide
SoCo	South Congress
STOPS	Simplified Trips-on-Project Software
SWPPP	Stormwater Pollution Prevention Plan
TAC	Technical Advisory Committee
TAC	Texas Administrative Code
TAZ	Traffic Analysis Zones
TCEQ	Texas Commission on Environmental Quality
THC	Texas Historical Commission
TMDL	Total maximum daily load
TPDES	Texas Pollutant Discharge Elimination System
TPWD	Texas Parks and Wildlife
TXNDD	Texas Natural Diversity Database
USACE	U.S. Army Corps of Engineers
U.S.C.	United States Code
U.S. DOT	U.S. Department of Transportation
U.S. EPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Services
VCP	Voluntary Cleanup Program
VOC	Volatile organic compounds

1.0 Background

This Planning and Environmental Linkages (PEL) Study documents Capital Metropolitan Transportation Authority's (Capital Metro) Orange Line Corridor Project (Orange Line). Over the last several years, Capital Metro has conducted numerous transportation-related studies within the Austin area. The Project Connect Central Texas High Capacity Transit System Plan (Capital Metro, 2012) outlined the goals and priorities for high capacity transit (HCT) service in the region and provided a solid framework to progress HCT development. The Project Connect Central Corridor High Capacity Transit Plan (Capital Metro, 2014) identified two priority corridors for development of HCT solutions. The current Project Connect initiative carries forward the goals and objectives of both the System Plan and 2014 studies, while aligning its goals with those of the Capital Metro 2016-2021 Strategic Plan Overview (Capital Metro, 2016) and Imagine Austin Comprehensive Plan (City of Austin [CoA], 2012). In addition, the council-adopted Austin Strategic Mobility Plan (CoA, 2019) calls for a balanced transportation network that includes HCT.

On December 18, 2018, Capital Metro approved the Project Connect Long Term Vision Plan, which included 2 dedicated pathway HCT corridors, 7 Bus Rapid Transit (BRT) light corridors, 2 commuter rail corridors, 8 commuter bus corridors, and downtown circulator corridors, as well as numerous enhancement projects. Together, this "program of projects" constitutes a cohesive transit system to deliver real mobility solutions and benefits for the region in concert with the underlying fixed route network and other complementary mobility programs and services.

The Orange Line was identified as one of the dedicated pathway HCT corridors and consists of a 20-mile corridor currently served by for Capital Metro's MetroRapid 801 from the Tech Ridge Park & Ride in north Austin to the Southpark Meadows Park & Ride in south Austin. As described in the Project Connect Long Term Vision Plan, the Orange Line would serve as the spine of the regional HCT network and provide faster, more reliable transit connections. The Vision Plan also cites HCT as a safe and economically competitive means of travel compared to the automobile.

Capital Area Metropolitan Planning Organization (CAMPO) adopted the 2045 Long-Range Transportation Improvement Plan on May 4, 2020. The Orange Line was included in the Regional Transportation Plan Project List.

1.1 PEL Study Description

1.1.1 What is a PEL Study?

A PEL study fosters a collaborative and integrated transportation decision-making process. Generally executed early in the transportation planning process, the PEL study fosters consideration of environmental, community, and economic goals. These goals carry through to the project development and environmental review process, and ultimately through design, construction, and maintenance. The core intent of a PEL study is to serve as a tool for engaging the public and agencies in developing transportation improvement projects and creating a link between past, current, and future transportation decisions, thus potentially minimizing any duplication of effort and time lost between studies.

Additionally, a PEL study has the potential to shorten the time needed to implement a project by allowing planning-level decisions to be carried into future, more detailed environmental studies. PEL studies are generally more focused than regional planning efforts, but broader than traditional project-specific environmental analyses typically conducted during the National Environmental Policy Act (NEPA) process. However, the PEL study must adhere to certain standards and include extensive public involvement and agency coordination to advance to the NEPA process as described below.

1.1.2 Purpose of the PEL Study

The purpose of this PEL study document (herein referred to as Orange Line PEL Study) is to inform the selection of the Locally Preferred Alternative (LPA) which is made up of a route, transitway, vehicle, service plan, and any required support infrastructure (tracks, stations, and maintenance facilities). "LPA" is the

technical term that the Federal Transit Administration (FTA) uses to describe a community-selected transit investment that is seeking federal capital funds. Capital Metro will seek Federal funding in line with recent trends in Capital Investment Grant (CIG) authorizations under the New Starts Program (FTA, 2016).

The Orange Line PEL Study is also designed to inform the NEPA scoping process, document stakeholder input, identify and evaluate reasonable and feasible alternatives, and dismiss Orange Line alternatives from further consideration. To help maximize the utility of the results to inform NEPA, U.S. DOT has developed a PEL Questionnaire. The questionnaire is intended to act as both a guide and summary of the planning process and ease the transition from planning to NEPA analysis. The PEL Questionnaire provided in Appendix A outlines the framework supporting the Orange Line PEL Study and addresses the components of U.S. DOT Planning Regulations (23 Code of Federal Regulations [CFR] §450.212 and §450.318). The completed questionnaire helps to ensure that information collected, and decisions made during the PEL study can be used during the subsequent NEPA process.

1.2 PEL Study Location

The focus of the Orange Line PEL Study is the 20-mile Orange Line Corridor currently served by Capital Metro’s MetroRapid 801 from the Tech Ridge Park & Ride in north Austin south through downtown to the Southpark Meadows Park & Ride in south Austin. The study area for the Orange Line PEL Study extends ½ mile from the center line of the Orange Line alignment as documented in Capital Metro’s Project Connect Long Term Vision Plan (Figure 1-1).

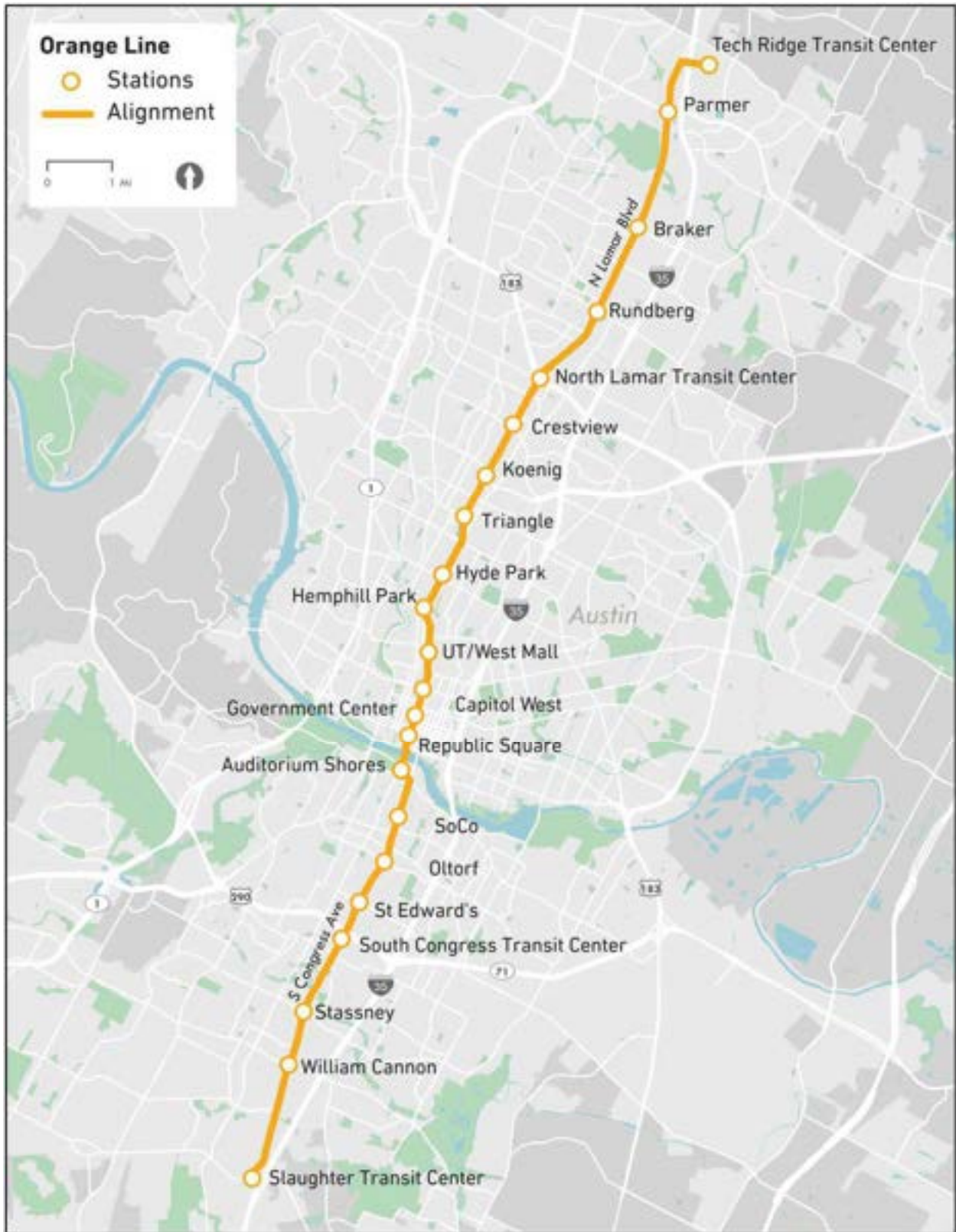
1.3 PEL Study Methodology

The methodology for this Orange Line PEL Study was developed in accordance with various Federal guidance documents and regulations including those listed in Table 1-1.

Table 1-1: PEL Study Regulations and Guidance

Regulation/Guidance Document	Description
FTA 49 CFR Part 613 - Statewide and Nonmetropolitan Transportation Planning; Metropolitan Transportation Planning; Final Rule (May 27, 2016)	Details how results or decisions of transportation planning studies may be used as part of the overall project development process consistent with NEPA
U.S. DOT 23 CFR § 771.111 - Early Coordination, Public Involvement, and Project Development (April 1, 2011)	Specifies that early coordination with the appropriate agencies and the public aids in determining the type of NEPA document required, the scope of the document, the level of needed analysis, and the related environmental requirements.
FHWA Guidance on Using Corridor and Subarea Planning to Inform NEPA (April 5, 2011)	Provided to assist transportation planners and environmental practitioners in the use of corridor and subarea planning to inform the NEPA review process
U.S. DOT 23 CFR §450.212 & 23 CFR §450.318 - Transportation Planning Studies and Project Development (April 1, 2018)	Authorizes public transportation operator(s) to undertake a multimodal, systems-level corridor or subarea planning study as part of the metropolitan transportation planning process. The results or decisions of these transportation planning studies may be used as part of the overall project development process consistent with NEPA.
23 United States Code (U.S.C.) 139 - Efficient Environmental Reviews for Project Decision-making (January 3, 2012)	Outlines environmental review process with the intent of reducing duplication, to the maximum extent practicable, between the evaluation of alternatives under NEPA and the metropolitan transportation planning process or a State environmental review process
23 CFR Appendix A to Part 450 - Linking the Transportation Planning and NEPA Processes (April 2, 2016)	Describes how information, analysis, and products from transportation planning can be incorporated into and relied upon in NEPA documents under existing laws
FHWA Environmental Review Toolkit, Planning and Environmental Linkages	Online source for PEL implementation tools, effective practices, publications, training/workshops, and archived material

Figure 1-1: Orange Line Corridor



Pursuant to the above regulations, all corridor and subarea studies utilizing the PEL study approach must adhere to certain standards and include extensive public involvement and agency coordination to advance to the NEPA process. Some of the key criteria that a Federal agency must consider in deciding whether to adopt planning-level analyses or decisions in the NEPA process include:

- Involvement of interested state, local, tribal, and Federal agencies
- Public review
- Reasonable opportunity to comment during the development of the corridor or subarea planning study
- Documentation of relevant decisions in a form that is identifiable and available for review during the NEPA scoping process and can be appended to or referenced in the NEPA document
- Review by FTA

To satisfy that these criteria produced results that are most useful to future NEPA studies, the Orange Line PEL Study:

- Engaged stakeholders (public, agencies, etc.) early and often throughout the planning process
- Identified the transportation needs and issues within the study area
- Identified potential solutions (alternatives) to meet the identified needs, and evaluated them for their potential mobility benefits and impacts
- Recommended viable alternatives that could be carried forward into future, more specific environmental studies
- Documented all activities, coordination, and results related to the Orange Line PEL Study

Within the NEPA process, the Orange Line PEL Study information will be used as a starting point for the project-specific analysis. The technical and environmental reports produced during the Orange Line PEL Study will be incorporated in future NEPA documents as appendices, referenced in the text, included as part of the Administrative Record, and serve as part of the history of the decision-making process. The summary reports generated from the public and stakeholder outreach activities will also provide context for the public's role in the decision-making process and be incorporated into future NEPA studies in the same manner.

2.0 Corridor Vision / Purpose and Need

Central Texas is rapidly changing. While the region's population exceeds two million today, and is projected to double by 2040, road capacity is expected to increase by only 15 percent. Project Connect is a comprehensive transit vision to improve existing high-capacity transit services and develop new, high-capacity public transportation projects that provide efficient travel options into, out of, and around Central Austin from the surrounding region. Completed in December 2018, Project Connect lays out a regional vision for transit investment. The Orange Line High-Capacity Transit (HCT) corridor, which connects Tech Ridge in the north, Central Austin, and Southpark Meadows in the south, was identified as the highest ridership HCT corridor. The Orange Line would serve as the spine of a regional HCT network and provide faster, more reliable transit connections.

2.1 The Purpose of Orange Line HCT Investment

The purpose of the Orange Line HCT investment is to meet growing corridor travel demand with a reliable, safe, cost effective, time competitive, state-of-the-art high capacity transit option that is congestion proof. The Orange Line HCT Corridor Study is being undertaken by Capital Metro to assess the need for an HCT system in Central Austin with transitways, which are pathways only transit vehicles can use in order to provide the highest level of reliability, speed, and safety, and are separated from other vehicles to keep transit vehicles moving free of traffic. In addition, the study is being undertaken to evaluate a range of alternative alignments, station locations, and vehicle modes.

The study will follow the NEPA process, so that the recommended alternative may be eligible for potential federal funds, as well as state and local funds. The NEPA process begins with the identification and detailed assessment of the need for a transit project. The process will continue with an evaluation of a range of alternatives and vehicle modes that would satisfy the identified needs, complemented by a significant level of community participation in the evaluation process; resulting in a recommendation for an LPA. The NEPA process will also evaluate future conditions in the year 2040 if nothing is implemented beyond planned improvements (the No Build Alternative). It will also evaluate lower-cost transportation system improvements as well as physical improvements and transit service enhancements on the existing corridor.

2.2 The Need for Orange Line HCT Investment

The need for Orange Line HCT is demonstrated by increasing congestion within the Orange Line corridor and parallel roadways, which is exacerbated by the inability to sufficiently expand roadway capacity to accommodate the projected demand while maintaining reliable travel speeds or levels of service. Orange Line HCT would efficiently expand mobility capacity by leveraging the existing transportation network infrastructure. Sustaining Austin's strong economy relies upon ongoing population and employment growth, which would increase travel demand and corresponding congestion without an efficient means to move more people. Failure to accommodate this increased demand for efficient mobility is a threat to continued community and economic growth.

Four needs have been identified and outlined for the Orange Line corridor HCT investment and are as followed:

2.2.1 Need #1: Sustainably Support Austin's Population and Economic Growth

Significant population and employment growth are affecting all travel modes and travel times. CAMPO estimates the Orange Line corridor's population and employment are expected to grow 65 percent and 93 percent, respectively, from 2010 to 2040. Within Travis County, where the Orange Line corridor is located, population and employment growth from 2010 to 2040 is forecast at 71 percent and 112 percent, respectively. Counties at both ends of the Orange Line corridor, Williamson and Hays, are experiencing some of the most significant growth in the region, with their populations doubling or tripling between 2010 and 2040. The region's growth will reduce people's ability to access jobs, education,

medical care, and other needs while reducing the quality of life, particularly as development of residential, employment, and entertainment centers continue in Central Austin.

2.2.2 Need #2: Increase Transportation Network Capacity to Meet Increasing Travel Demand

CAMPO estimates that while the region's population doubles by 2040, new roadway capacity will grow by 15 percent between 2010 and 2040. As population and employment have grown in Central Texas, the traditional approach to providing transportation capacity by expanding roadways has become increasingly complex and expensive. In order to provide mobility and accessibility for current and future residents, the region will need to make better use of existing transportation right-of-way (ROW) and find ways to move more people in a limited amount of space.

2.2.3 Need #3: Improve Transit Access between Affordable Housing and Jobs

Employment opportunities continue to increase within and adjacent to the Orange Line Corridor. However, access to those jobs is challenged by the lack of affordable housing and reliable mobility options. While employment options in downtown Austin continue to grow, the cost of living in downtown has increased and government-backed affordable housing cannot bridge the gap alone. Employees are forced to live further from their jobs which results in the need for affordable and reliable transportation.

2.2.4 Need #4: Support Growth of and Connectivity to Regional Activity Centers

Capital Metro would provide better transit service along the Orange Line Corridor to connect existing activity centers and future growth along the corridor. Population in the Austin metropolitan statistical area (MSA) has increased by 34 percent in the past 10 years and is projected to double by 2040. By providing improved transit service between established activities centers, Capital Metro would encourage additional transit-supportive land use at strategic locations. These areas of transit-supportive land uses would be connected through a network of improved transit service.

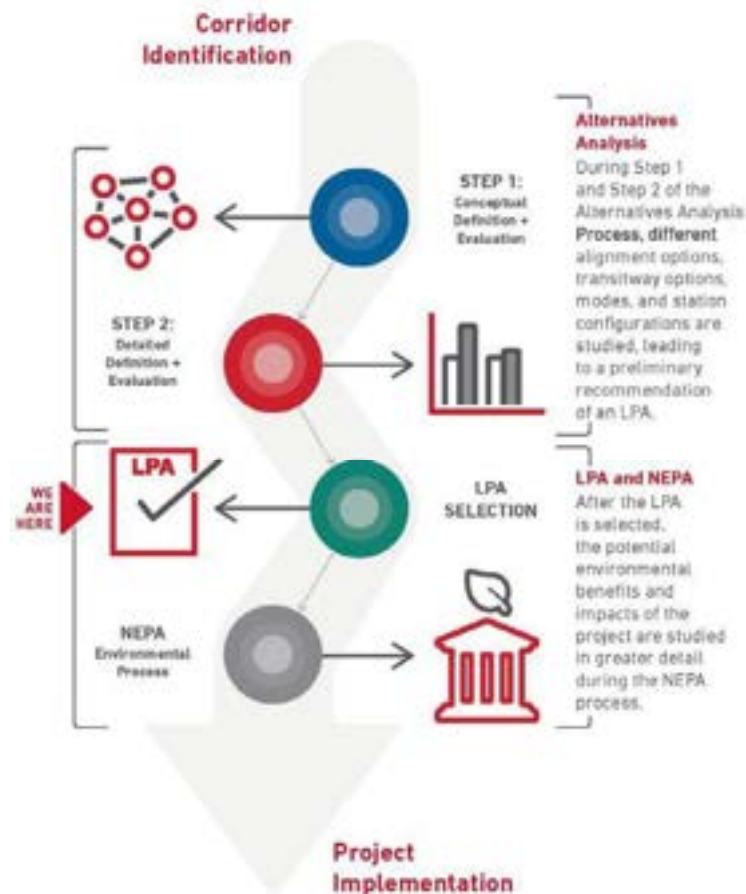
3.0 Ranges of Alternatives Considered, Screening Criteria, and Screening Process

3.1 Description of Process

Capital Metro adhered to the FTA and NEPA process in order to be eligible for FTA's CIG funding. These formal guidelines require the adoption of an LPA. To determine an LPA, an alternatives analysis process was conducted prior to or within the formal environmental process. Since the EIS must be completed within two years, Capital Metro conducted an alternatives analysis to determine an LPA prior to the EIS. The findings and due diligence documents for the alternatives analysis process will move forward into the EIS through the FHWA/FTA PEL federal guidelines.

The Orange Line Corridor alternatives analysis process used a phased approach, as illustrated in Figure 3-1. The process used a structured as a tiered screening, where alternatives are defined, evaluated, and refined or eliminated in each step of the process:

Figure 3-1: Analysis and LPA Selection Process



Step 1 (The Definition and Evaluation of Conceptual Alternatives) assessed the implementation viability of each of the four transitway types within the context of each of the seven corridor segments. This step did not address modes or transitway types; it was simply an assessment of each segment's implementation viability.

Step 2 (The Definition and Evaluation of Detailed Alternatives) paired each of the mode alternatives with the transitway and segment pairings that emerged from Step 1 and compared the benefits and impacts of each. Step 2 concluded with the identification of the Preliminary Preferred Alternative.

The LPA Refinement refined the Preliminary Preferred Alternative to maximize its competitiveness for federal capital funding. The refinement concluded with the identification of the LPA and its associated environmental benefits and impacts that will be further evaluated under the formal NEPA process.

The evaluation criteria identified for each step of the alternatives analysis process relates to the goals and objectives identified for the Orange Line Corridor, as shown in Figure 3-2. The evaluation criteria associated with each step are a combination of quantitative and qualitative measures.

- The Step 1 Evaluation applied fewer and broader measures, including information from previous corridor/regional studies
- The Step 2 Evaluation applied more detailed and alternative-specific evaluation criteria
- The LPA Refinement evaluated the Preliminary Preferred Alternative against key federal criteria to identify and refine the LPA

Table 3-1 presents the evaluation criteria that were used during the two steps of Orange Line alternative evaluation and the LPA refinement. Note that each successive step built upon the criteria from the previous step, ensuring a consistent evaluation throughout. The following sections of this report describe these criteria in more detail.

The bottom row of Table 3-1 links community engagement activities to each of the evaluation steps to indicate that community input and preference have had an influence on design decisions throughout alternative development and evaluation.

Figure 3-2: Orange Line Corridor Goals and Objectives



Table 3-1: Orange Line Evaluation Criteria

Goals	Step 1: Conceptual Evaluation	Step 2: Detailed Evaluation	LPA Refinement
Customer Experience	ROW width Project Connect Station Area Evaluation Plan Results	Ridership	Mobility* Congestion Relief*
Reliability	ROW width	Ridership Transportation Network Impacts	Mobility* Congestion Relief*
Sustainability	ROW width Project Connect Station Area Evaluation Plan Results	Ridership Environmental Analysis Station Area Analysis	Mobility* Congestion Relief* Environmental Benefits*
Land Use and Policy	Project Connect Station Area Evaluation Plan Results	Station Area Analysis	Existing Land Use* Economic Development Effects*
Implementation and Operations	ROW width	O&M costs Capital costs	Cost Effectiveness*
COMMUNITY ENGAGEMENT	Segment meetings series 2: July 2019	Segment meetings series 3: October 2019	Segment meetings series 4: January 2020

*consistent with FTA New Starts criteria

3.2 Prioritization and Phasing

The Orange Line Corridor Study advanced the work that was done during Project Connect and resulted in the adopted Vision Plan. The Orange Line alternatives studied during the Step 1 Evaluation are described in the Alternatives Analysis Report (Appendix B) and summarized below:

- Orange Line Corridor segments (Figure 3-3)
 - North Austin
 - North Central Austin
 - The Drag
 - Downtown
 - South Congress (SoCo)
 - South Central
 - South Austin
- Modes (Figure 3-4)
- No Build (continuation of existing service – no changes)
- Improvements to the 801 (infrastructure and service investments to improve speed and reliability)
- Bus Rapid Transit (BRT)
- Light Rail Transit (LRT)
- Autonomous Rapid Transit (ART)
- Transitway Types (Figure 3-5)
 - Elevated
 - At-grade
 - Cut-and-cover tunnel
 - Bore tunnel

Figure 3-3: Segmentation of the Orange Line Corridor



Figure 3-4: Modes for Consideration in the Orange Line Corridor



Baseline Alternative

Continued operation of MetroRapid 801 with transit speed and reliability improvements.

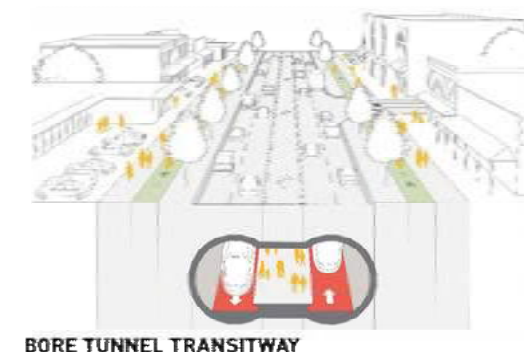


Dedicated Pathways/Transitways

Fully dedicated lanes or facilities set aside for public transportation vehicles that allow for traffic-free travel. These lanes could serve:

- » Bus Rapid Transit (BRT)
- » Light Rail Transit (LRT)
- » Autonomous Rapid Transit (ART)

Figure 3-5: Four Transitway Types for Consideration in the Orange Line Corridor



3.2.1 Conceptual Evaluation

The conceptual evaluation of Step 1 established a method for carrying forward transitway options for each segment to the Detailed Evaluation of Step 2. The evaluation used the available right-of-way (ROW) width and transit supportive nature of preliminary station locations to determine the appropriateness of

four¹ different transitway types within each segment. Throughout the Orange Line Corridor, the type of transitway could vary due to differing ROW constraints and land use. For the purposes of the Step 1 analysis, these constraints were assessed by segment. In segments where a large percentage of the ROW is narrow and/or the station areas are highly transit supportive, a more capital-intensive transitway (such as Elevated or Underground) could be considered, while segments with minimal amounts of narrow ROW and less transit supportive station areas may not warrant a more expensive transitway capital investment.

To expedite the analysis and ensure consistency with work completed to-date, the Step 1 evaluation used the percentage of the segment ROW width calculated as “Narrow” (less than 80’) from the Purpose and Need Early Scoping public meetings (completed in May 2019) and “Low/Medium/High” transit supportive station area scores from the Station Area Evaluation conducted for the Project Connect Long Term Vision Plan. The inputs to produce results of the Step 1 conceptual evaluation can be found in Appendix B.

The results of the Step 1 conceptual evaluation are shown in Figure 3-6. The conceptual evaluation determined that due to the less transit supportive nature of the station areas and the ample ROW available in Segments 1, 6, and 7, elevated and underground transitways were generally eliminated for further consideration within those segments of the Orange Line Corridor. In Segments 2, 3, 4, and 5, all transitway options moved forward into the detailed evaluation phase.

Figure 3-6: Step 1 Conceptual Evaluation Results



Table 3-2 summarizes the Build Alternatives identified as part of the Step 2 alternatives definition process. These alternatives are compared to the No Build Alternative using a variety of evaluation metrics in the following section.

¹ Following the Step 1 evaluation, “Cut-and-Cover” and “Tunnel” transitway types were consolidated to a general “Underground” option for future phases of evaluation.

Table 3-2: Orange Line Alternatives

Alternative	Mode	Transitway Type	Corridor Segments						
			1	2	3	4	5	6	7
			North Austin	North Central	Central	Downtown	SoCo	South Central	South Austin
No Build	-	None	NA	NA	NA	NA	NA	NA	NA
Build	BRT	Street Level	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		Elevated	No	Yes	Yes	Yes	Yes	No	No
		Cut-and-Cover	No	Yes	Yes	Yes	Yes	No	No
		Bored Tunnel	No	Yes	Yes	Yes	Yes	No	No
	LRT	Street Level	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		Elevated	No	Yes	Yes	Yes	Yes	No	No
		Cut-and-Cover	No	Yes	Yes	Yes	Yes	No	No
		Bored Tunnel	No	Yes	Yes	Yes	Yes	No	No

3.2.2 Refining the Alternatives for Detailed Evaluation

While Table 3-2 lists the universe of alternatives for detailed evaluation in Step 2, some of these alternatives would not be feasible for implementation and/or operations. The Lady Bird Lake (Colorado River) crossing is the constraining factor in the design of segments 4 and 5 – that decision dictates how (street-level, elevated, or underground) and where (new bridge, rebuilt 1st Street Bridge, or tunnel) the transitway could be located north and south of the crossing. Figure 3-7 “maps” the designs that could be feasible based on the viable Lady Bird Lake (Colorado River) crossing options. This conceptual assessment of detailed alignment options was analyzed and presented to stakeholders at the City of Austin Transportation Department for further vetting and coordination. While some of the options recommended for elimination could be further studied during future project phases, they were recommended to be removed from consideration during this phase of the study. Additional information regarding the alternatives carried forward for detailed evaluation can be found in Appendix B.

3.3 No Action Alternative

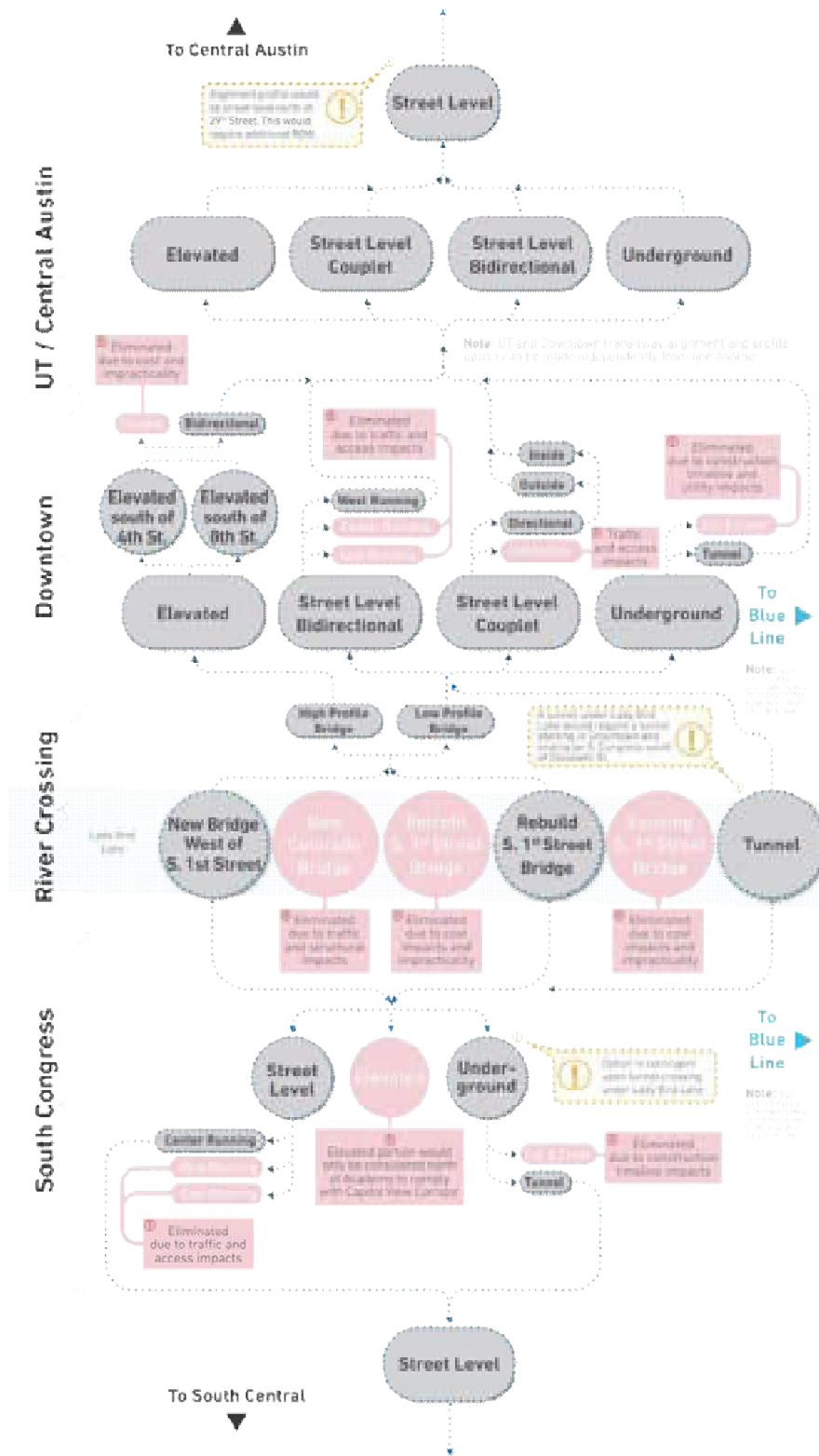
As required by the FTA, Capital Metro will carry forward a “No Build” or “Do Nothing” alternative for comparison. For the Orange Line Corridor, the No Build Alternative keeps the existing transit network consistent with Capital Metro’s existing 2019 network which includes Capital Metro’s 2018 system overhaul changes referred to as Cap Remap.

The No Build Alternative provides the baseline against which the Build Alternative is compared. The FTA Simplified Trips-on-Project Software (STOPS)-based No Build ridership model uses the existing transit network described above. Forecasted ridership will be estimated based on existing ridership in the corridor and other factors, such as population and employment forecasts.

3.4 Alternatives Eliminated

The Step 2 evaluation of the Orange Line Corridor used the evaluation criteria established in the technical evaluation methodologies and the detailed alternatives defined as a result of the Step 1 evaluation to generate high-level comparison between different combinations of options for alignments, transitway, and modes within the Orange Line Corridor. Table 3-3 provides a summary of some of the key metrics from the technical evaluations, while the sections that follow discuss some of the key assumptions and results from each of the six technical memorandums that summarized the detailed evaluation.

Figure 3-7: Refining the Alternatives for Detailed Evaluation



Note: While some of these options that are recommended for elimination may be further studied during future project phases, it is recommended that they are removed from consideration during this phase of the study

The metrics displayed in Table 3-3 report the results of the analysis for capital and Operating and Maintenance (O&M) costs, ridership, and travel time, which are often the factors that are used by communities to select an LPA. These factors, are not, however the only that were generated through this study – potential impacts to the transportation network (traffic, parking, and active transportation), station areas socio-economics, demographics, and land use, and potential environmental impacts, are all considerations that should be integrated into the process of identifying the LPA. Selection of the LPA was made through the balance of high-level tradeoffs between key decision points – such as the cost of minimizing street-level impacts through grade separated transitways – but do not necessarily reveal any one tested combination to be the “right” choice for the LPA. This information was intended to provide decisionmakers and the public with information that will help them balance costs and benefits, and the ultimate selection of the LPA may represent a different combination of mode, transitway, and alignment that meets the Purpose and Need of the project, is financially feasible, and has strong local support.

3.5 Locally Preferred Alternative

As shown in Figure 3-8, the Orange Line LPA is defined as light rail operating in an approximately 20-mile dedicated transitway from Tech Ridge on the northern end of the corridor to South Park Meadows on the southern end of the corridor. The transitway is proposed to operate at street level (center-running) throughout most of the corridor. The Orange Line transitway profile near Crestview Station (Airport Boulevard and North Lamar Boulevard) and the Red Line crossing will be determined during Preliminary Engineering. Select locations between MLK and Crestview Station may use an elevated transitway, if necessary. Through Downtown, a tunnel would be implemented for two primary reasons: 1) to avoid conflicts at the surface and 2) to accommodate longer trainsets that will be required as the system grows.

Twenty-two stations are planned along the LPA. The placement of these facilities will be coordinated with the local community during the design phase. Service has been modeled to operate every 10 to 15 minutes, seven days a week, from 5:00 a.m. to 3:50 a.m. (12:50 a.m. on Sundays), the next day. The Orange Line would feature off-board fare collection, larger stations with level boarding, ADA accessibility, and intersection signal prioritization.

The Orange Line would connect with the Blue and Gold Line in downtown Austin near Republic Square at 4th Street and Guadalupe; the connection (including potential joint use of a tunnel) will be designed during Preliminary Engineering.

Table 3-3: Selected Evaluation Metrics for All Alternatives

		No Build	TSM ²	Build Alternatives			
				Mostly Elevated (Configuration A)		Mostly Street Level (Configuration B)	
				BRT	LRT	BRT	LRT
Running Time	One-Way ³	91-96 mins	91- 96 mins	42-43 min		52-53 min	
	Tech Ridge to Republic Square	54 – 56 min		26-27 min		32-33 min	
	Republic Square to Slaughter	37 – 40 min		15-16 min		19-20 min	
Average Weekday Boardings	2028 (Low)	--		38,600		33,700	
	2028 (High)	--		55,000		47,600	
	2040 (Low)	12,300	11,100	53,600		45,200	
	2040 (High)			73,700		61,600	
Capital Cost ⁴		--	\$214.3 M	\$3,479.1 M	\$5,062.7 M	\$1,972.6 M	\$3,761.0 M
Annual Operating & Maintenance Cost ⁵		--	\$80.7 M	\$30.3 M	\$55.6 M	\$24.4 M	\$50.2 M

² TSM running times reflect PM peak running times.

³ Reflects a rounded average of the northbound and southbound one-way running time.

⁴ Represented in mid-construction year dollars (2023 for TSM; 2025 for Build Alternatives)

⁵ Represented in opening-year dollars (2028 for all alternatives)

Figure 3-8: Orange Line LPA

ORANGE LINE *at a glance*

Mode *Light Rail*



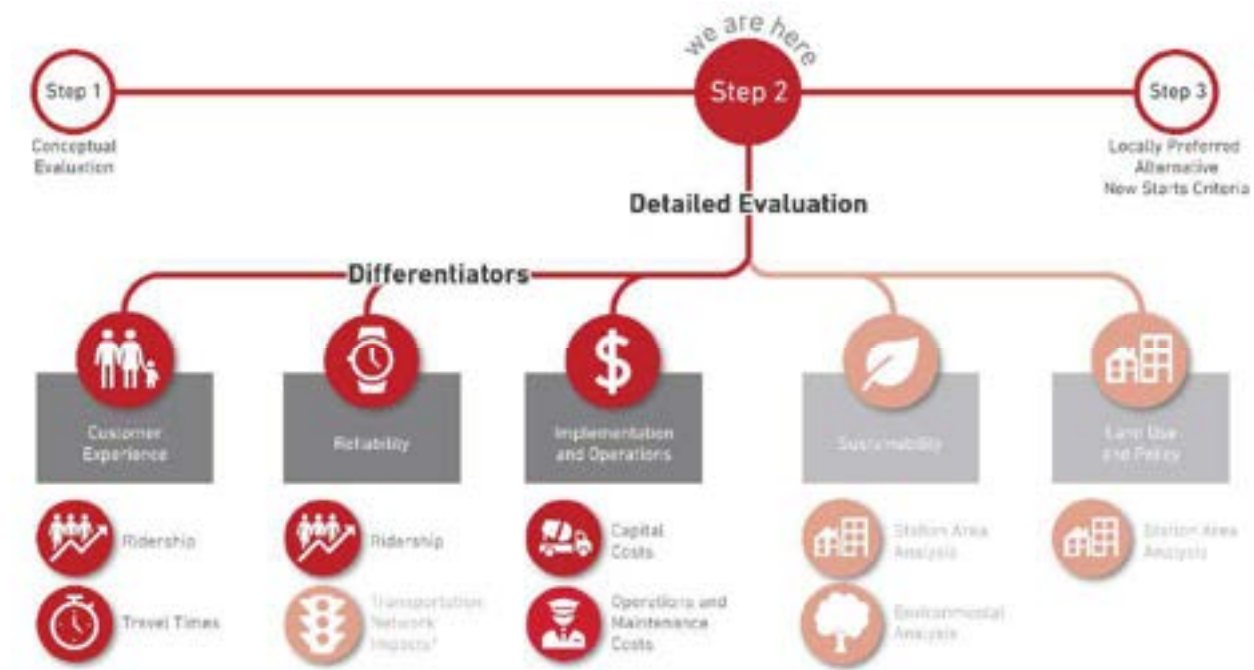
4.0 Planning Assumptions and Analytical Methods

The Step 2 evaluation of the Orange Line Corridor alternatives includes the use of quantitative and qualitative assessments of benefits and impacts to understand the performance of the alternatives and identify a preliminary LPA to evaluate further through the NEPA process. The evaluation centers on six areas of technical analyses documented in technical memoranda that provide comparative metrics on how well the alternatives address the Orange Line Corridor’s goals and objectives. These six memoranda are attached as appendices to the *Evaluation of Detailed Alternatives Report* and include:

- Ridership
- Capital Costs
- O&M Costs
- Station Area Analysis
- Environmental Analysis
- Transportation Network Impacts Analysis

The metrics documented in these memoranda were related to the project goals and objectives shown in Figure 4-1. The evaluation categories that provide the most distinction between alternatives are the potential ridership, travel times, capital costs, and O&M costs, shown in the figure with dark red icons to highlight the role these metrics play as differentiators in the overall alternatives analysis process. The other technical evaluations and metrics are also useful for a variety of other reasons discussed later in this report, but do not provide as much differentiation between the alternatives at this stage of analysis. These metrics are shown in lighter red on the figure below.

Figure 4-1: Detailed Evaluation Analyses and Goals/Objectives



4.1 Ridership

4.1.1 Assumptions

Orange Line Corridor modeling team developed ridership forecasts utilizing the FTA's STOPS model. The 2018 Cap Remap transit network was included as the No Build scenario. The build network was developed assuming BRT and LRT scenarios and that the Orange Line Corridor would utilize fully dedicated guideway (i.e. transitway). The forecasts shown using a Fixed Guideway Setting (FGS) of 0.3 to 0.6 represent the reasonable range of ridership potential for BRT. The forecasts using an FGS of 0.6 to 0.8 are considered to represent the reasonable range of ridership potential for LRT.

Ridership forecasts are an indication of potential demand for service; however, STOPS does not indicate if the modeled service can accommodate all the forecasted demand. As such, a capacity analysis was completed by factoring peak hour peak direction maximum passenger loads. When necessary, the service plan was modified either by increasing service frequency for BRT service or by adding vehicle cars to LRT trains. This process ensured that that the service plan used for cost estimating and future results could accommodate the forecasted demand.

4.1.2 Results

The Orange Line Corridor as a part of Project Connect represents one of the two proposed dedicated transitways. The transitway would provide reliable and frequent transit operating in a congestion-proof environment from which the entire Capital Metro System would benefit. The range in results depend on the configuration and the mode for the Orange Line.

The mostly elevated alternative would provide the highest ridership results due to faster running times achieved through grade separation. The highest ridership Orange Line stations for the mostly elevated alternative would be UT Mall, Rundberg, and Republic Square. The highest ridership Orange Line stations for the mostly street level alternative would be UT Mall, Rundberg, and Crestview.

Regardless of the operating configuration, both alternatives represent operating on a dedicated transitway and produce significant increases in ridership along the corridor ranging from a 175% to 351% increase for the 2028 opening year along the corridor compared to the expected 2028 ridership for the No Build MetroRapid 801 that operates in mixed traffic, based on potential diversions from other routes due to constants and visibility factors.

The operational enhancements of the Orange Line result in a premium service that is attractive at the system level and benefits the system level ridership resulting in 11% to 28% increase for the 2028 opening year compared to the No Build system level ridership.

Tables 4-1 and 4-2 represent the 2028 and 2040 respective ridership.

Table 4-1: STOPS 2028 System Ridership

Year	2028				
	No Build	Mostly Elevated		Mostly Street Level	
Visibility Factor		0.3	0.8	0.3	0.8
High Frequency Routes	58,600	60,400	63,500	58,500	62,000
MetroRapid Routes	19,300	5,200	5,300	5,600	5,500
Local Routes	37,700	35,100	35,800	35,000	35,400
Metroflyer Routes	900	800	800	800	800
Limited or Express Routes	1,700	1,200	1,100	1,300	1,300
Metrorail (Red Line)	6,200	7,300	7,000	8,300	8,000
Special Routes	600	500	500	500	500
UT Shuttles	21,000	18,700	17,000	18,000	16,700
Round Rock Transit Routes	100	200	300	200	200

Year	2028				
	No Build	Mostly Elevated		Mostly Street Level	
Orange Line	--	38,400	55,000	33,600	47,700
Capital Metro System	146,100	167,800	186,300	161,800	178,100

Table 4-2: STOPS 2040 System Ridership

Year	2040				
	No Build	Mostly Elevated		Mostly Street Level	
Visibility Factor		0.3	0.8	0.3	0.8
High Frequency Routes	80,100	82,400	87,300	80,700	85,400
MetroRapid Routes	25,500	7,400	7,700	8,000	7,900
Local Routes	46,100	42,100	43,700	42,200	43,200
Metroflyer Routes	800	700	700	700	700
Limited or Express Routes	2,300	1,800	1,600	1,800	1,900
Metrorail (Red Line)	10,700	13,800	13,200	15,000	14,500
Special Routes	1,000	800	800	800	800
UT Shuttles	19,600	17,200	16,000	16,800	15,800
Round Rock Transit Routes	100	200	300	200	200
Orange Line	--	53,800	73,600	45,300	61,600
Capital Metro System	186,200	220,200	244,900	211,500	232,000

4.2 Capital Costs

4.2.1 Assumptions

Capital cost estimates were prepared for each of the Orange Line Corridor Build Alternatives. Standard Cost Categories (SCC) represent FTA's format for the reporting, estimating, and managing of transit capital projects and were used in this estimate. Financing costs (SCC 100) were not included as the development of the financial plan and would not be completed until the selection of an LPA. Unit costs used to develop the capital cost estimates were developed in coordination with Capital Metro using similar recently completed FTA-funded projects and scaling the unit costs to the local market. All costs were escalated to a mid-construction year estimate using a 3.5 percent annual inflation rate. Key assumptions used for the Orange Line Corridor capital costs include:

- Unit prices for the various standard cost elements are based on unit prices for other completed U.S. transit projects and tempered for the Austin market.
- Quantity estimates are based on the conceptual designs developed for each alternative.
- Capital costs are escalated by 3.5% per year for inflation and reported in 2025 dollars.
- Guideway
 - LRT tracks
 - Embedded track – Street level
 - Direct fixation – Elevated
 - BRT guideway
 - Concrete guideway throughout the alignment
- Signals
 - At grade crossings of the guideway would be limited to signalized intersections
 - Signals in aerial sections would be modified
 - Consider mid-block crossings only for center platform

- Roadway work
 - Reconstruction of sidewalk may be on both sides of the street along the alignment with ADA crosswalks at all signalized intersections
 - Assuming reconstruction of roadway along alignment including curb and gutter and drainage where needed.
 - Cross streets may need to be rebuilt or modified
 - Medians assume landscape 50% concrete 50%
- Professional services and contingency are calculated as percentages of different subtotal costs and therefore vary depending on both the transitway and mode

4.2.2 Results

The capital cost estimates for the Build Alternatives are provided below in Table 4-3. All costs are represented in 2025 millions of dollars (estimated mid-year of construction). In general, the Street Level alternatives are less expensive than elevated alternatives and significantly less expensive than underground alternatives. LRT alternatives are also more expensive than BRT alternatives. This is primarily due to the greater cost of the transitway, stations, vehicles, and systems associated with LRT technology compared to BRT technology. There is also a significant difference between LRT maintenance facility capital costs and BRT facility costs. Sitework and ROW costs are more dependent on the transitway assumption rather than the mode. A description of the costing process and outcomes is included in the Orange Line Corridor Capital Cost Technical Memorandum (Capital Metro, 2019a).

4.3 O&M Costs

4.3.1 Assumptions

The Orange Line Corridor O&M cost estimates were developed based on running time estimates, service plan assumptions, and cost variables to produce the estimates. Service plan assumptions accommodate forecasted ridership based on a capacity analysis completed for Build Alternative. O&M costs include all costs associated with the day-to-day operation, maintenance, and administration of a transit service after all capital infrastructure is in place. O&M costs account for employee earnings and fringe benefits, contract services, materials and supplies, utilities, fuel or propulsion costs, insurance, advertising, and other administrative costs. Although capital bond repayment is a recurring expense, it is not considered an operating expense.

Cost calculations are mode-specific and presented in 2028 dollars reflecting the anticipated opening year for the Orange Line Corridor. Unit costs were inflated at three percent annually to 2040. 2040 O&M cost estimates were based on escalated unit costs and service planning assumptions reflecting a similar capacity analysis for the forecasted 2040 demand.

The Build Alternative assumed O&M unit cost assumptions consistent with the National Transit Database (NTD) for LRT and with the Capital Metro's forecasted contractual agreements for BRT. NTD annually tracks and analyzes audited financial statements of transit agencies, a federal mandate for receiving federal funding, and is used as the mechanism to oversee the expenditure of federal dollars. Generally, LRT costs are higher on a unit cost basis because of the complexity to maintain rail cars (additional and more specialized equipment), more infrastructure (overhead catenary), and additional compliance to regulations.

Table 4-3: Orange Line Capital Cost Estimates (\$2025 in millions)

FTA Standard Cost Categories	Street Level				Elevated		Cut-and-Cover		Tunnel	
	Couplet		Non-Couplet		BRT	LRT	BRT	LRT	BRT	LRT
	BRT	LRT	BRT	LRT						
10 Guideway	\$507.9	\$750.3	\$474.9	\$716.6	\$1,108.9	\$1,370.0	\$1,791.2	\$2,056.8	\$3,180.6	\$3,446.1
20 Stations/Stops	\$100.2	\$224.0	\$98.1	\$212.5	\$514.2	\$577.5	\$1,388.0	\$1,437.0	\$1,388.0	\$1,437.0
30 Support Facilities	\$34.3	\$246.1	\$34.3	\$246.1	\$28.4	\$201.4	\$28.4	\$201.4	\$28.4	\$201.4
40 Sitework and Special Conditions	\$412.2	\$511.3	\$410.3	\$508.3	\$508.0	\$604.3	\$668.3	\$763.5	\$792.0	\$887.3
50 Systems	\$42.5	\$497.0	\$41.3	\$495.2	\$35.7	\$489.7	\$33.2	\$487.2	\$33.2	\$487.2
60 Right-of-Way	\$314.4	\$367.5	\$314.4	\$367.5	\$326.2	\$326.2	\$278.0	\$278.0	\$278.0	\$278.0
70 Vehicles *	\$112.8	\$268.3	\$112.8	\$268.3	\$93.4	\$219.6	\$93.4	\$219.6	\$93.4	\$219.6
80 Professional Services	\$302.8	\$615.0	\$292.2	\$601.3	\$605.8	\$894.9	\$1,078.7	\$1,364.9	\$1,496.3	\$1,782.4
90 Unallocated Contingencies	\$145.6	\$281.5	\$141.7	\$276.3	\$258.6	\$379.4	\$433.4	\$553.1	\$590.5	\$710.2
100 Finance Charges	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Total	\$1,972.6	\$3,761.0	\$1,919.8	\$3,692.1	\$3,479.1	\$5,062.7	\$5,792.4	\$7,361.4	\$7,880.2	\$9,449.2

Overall, BRT Build Alternatives have a lower estimated annual O&M cost. However, not all O&M cost estimates are intuitive as the primary driver for O&M costs is revenue hours which is driven by the service plan (to meet capacity) and cycle time. For example, one may assume that a mostly elevated Build Alternative has a lower O&M cost due to a shorter cycle time (driven by running time); however, this alternative forecasts higher ridership forecasts which requires additional service in order to meet demand. As such, the service plan for each alternative varies based on forecasted demand. Therefore, to meet forecasted demand, additional capacity was necessary either in the form of increased headways (BRT) or increased vehicles/cars (LRT). A complete description of the service plan (cycle time, frequency, and number of vehicles) and O&M costing process and outcomes for each alternative is included in the Orange Line Corridor O&M Costs Technical Memorandum (Capital Metro, 2019b).

4.3.2 O&M Cost Results

Cost estimates for each Build Alternative are shown in Tables 4-4 and 4-5. Cost estimates are presented in 2028 dollars reflecting the anticipated opening year for the Orange Line Corridor.

4.4 Station Area Analysis

4.4.1 Assumptions

The evaluation assesses existing conditions and projected conditions presented in the CAMPO 2040 model used for ridership forecasting. The 2015 base year and 2040 projected population and employment numbers for the Traffic Analysis Zones (TAZs) are used to derive the residential and employment densities surrounding the transit stations, as each station area was calculated using a half-mile radius. Station areas with higher numbers of residents and employees are typically more transit supportive.

The population and employment densities within each half-mile station area were compared to the following thresholds:

Population Density

- High = 15,000+ persons per square mile
- Medium High = 9,600 – 15,000 persons per square mile
- Medium = 5,760 – 9,599 persons per square mile
- Medium Low = 2,560 – 5,759 persons per square mile
- Low = Less than 2,560 persons per square mile

Employment Density

- High = 7,100+ employees per square mile
- Medium = 2,500 – 7,099 employees per square mile
- Low = Less than 2,500 employees per square mile

The Orange Line Corridor analysis also gathered data from the U.S. Census Bureau's 2015 American Community Survey (ACS) population characteristics to identify stations where there may be higher concentrations of transit-dependent populations as part of an Environmental Justice (EJ) evaluation. The analysis summarized percentage of whole block groups intersecting a half-mile buffer around each potential Orange Line station to evaluate transit access for Minority Populations, Low-Income Populations, and Zero-Car Households.

Table 4-4: Orange Line Corridor Operating and Maintenance Costs (\$2028)

Mode	Supply Variable	2028 Unit Cost	BRT Mostly Elevated	BRT Mostly Street Level	LRT Mostly Elevated	LRT Mostly Street Level
Bus	Vehicle Revenue Hour	\$138	-110,000	-110,000	-110,000	-110,000
	Incremental Bus Costs		-\$15,151,000	-\$15,151,000	-\$15,151,000	-\$15,151,000
New MetroRapid	Vehicle Revenue Hour	\$157	0	0	0	0
	Incremental Bus Costs		\$0	\$0	\$0	\$0
MetroRail (Red Line)	Passenger Car Revenue Hour	\$2,366	0	0	0	0
	Incremental Bus Costs		\$0	\$0	\$0	\$0
BRT	Vehicle Revenue Hour	\$157	173,000	148,000	0	0
	Fixed guideway lane-mile (Street-level Options)	\$30,000	0	38	0	0
	Fixed guideway lane-mile (Elevated)	\$80,000	38	0	0	0
	BRT Costs		\$30,249,000	\$24,399,000	\$0	\$0
LRT	Passenger Car Revenue Hour	\$393	0	0	141,000	128,000
	LRT Costs		\$0	\$0	\$55,618,000	\$50,209,000

O&M projections do not include fare revenue

Table 4-5: Orange Line Corridor Operating and Maintenance Costs (2040)

Mode	Supply Variable	2040 Unit Cost ²	BRT ³ Mostly Elevated	BRT Mostly Street Level	LRT Mostly Elevated	LRT Mostly Street Level
Bus	Vehicle Revenue Hour	\$197	-110,000	-110,000	-110,000	-110,000
	Incremental Bus Costs		-\$21,601,000	-\$21,601,000	-\$21,601,000	-\$21,601,000
New MetroRapid	Vehicle Revenue Hour	\$224	\$0	\$0	0	0
	Incremental Bus Costs		\$0	\$0	\$0	\$0
MetroRail (Red Line)	Passenger Car Revenue Hour	\$3,373	\$0	\$0	0	0
	Incremental Bus Costs		\$0	\$0	\$0	\$0
BRT	Vehicle Revenue Hour	\$224	191,000	185,000	0	0
	Fixed guideway lane-mile (Street-level Options)	\$42,773	0	38	0	0
	Fixed guideway lane-mile (Elevated)	\$114,061	38	0	0	0
	BRT Costs		\$46,979,000	\$43,071,000	\$0	\$0
LRT	Passenger Car Revenue Hour	\$561	0	0	170,000	182,000
	LRT Costs		\$0	\$0	\$95,502,000	\$102,121,000

¹ O&M projections do not include fare revenue

² 2040 unit costs assume 3% escalation

³ Costs assume no more than 2 vehicles per 5-minute headways; this results in demand in excess of capacity of approximately 45 trips/peak hour.

4.4.2 Results

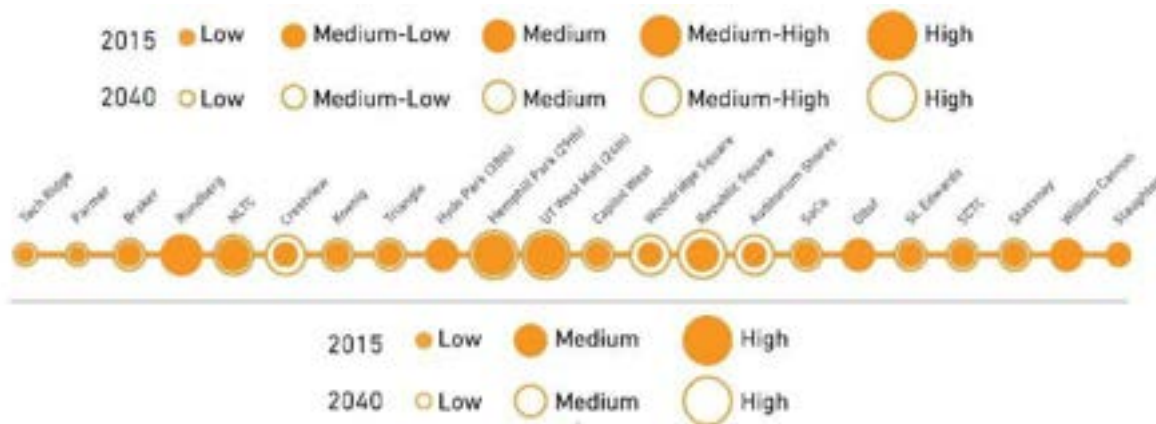
Table 4-6 shows the overall population, employment, and EJ characteristics of the build alternative alignment studied for the Orange Line. The Orange Line Corridor would serve a high number of jobs (over 150,000) and population (almost 90,000), and a higher percentage of the corridor's residents identify as minority, low-income, or belonging to a zero-car household than citywide and regional averages.

Table 4-6: Corridor-Level Demographic Summary

	Population (2015)	Employment (2015)	% Population Minority	% Households Below Poverty	% Zero Car Households
Orange Line Corridor	86,270	150,082	47.7%	19.5%	7.3%
City of Austin	851,846	603,036	51.3%	18.0%	6.6%
Five-County Area	1,978,341	944,538	46.4%	14.2%	4.8%

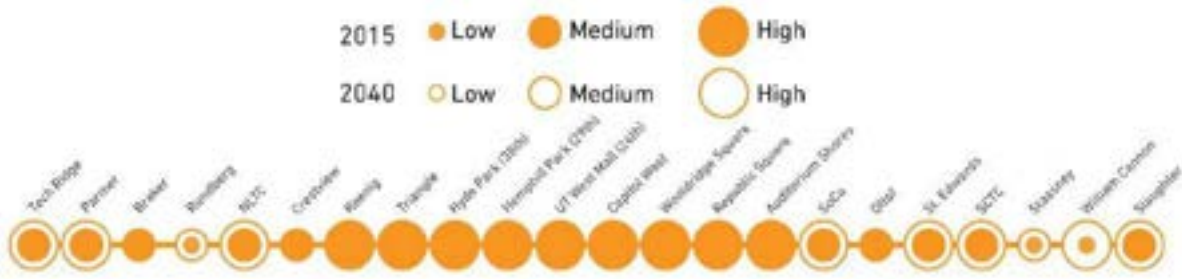
The assessment shows that about one third of the station areas along the Orange Line Corridor (7 of 22 station areas studied) score Medium to High in population density. Unsurprisingly, downtown through UT and Hempstead Park are the densest sections of the Orange Line corridor and the places where population density is expected to increase the most through 2040. Figure 4-2 shows population density by station for 2015 and 2040.

Figure 4-2: Population Density by Station



Almost 50% (9 of 22 station areas studied) scored High in the metric of employment density. By 2040, 17 station areas are projected to score High in employment density while all the remaining station areas score Medium. Figure 4-3 shows employment density by station for 2015 and 2040.

Figure 4-3: Employment Density by Station



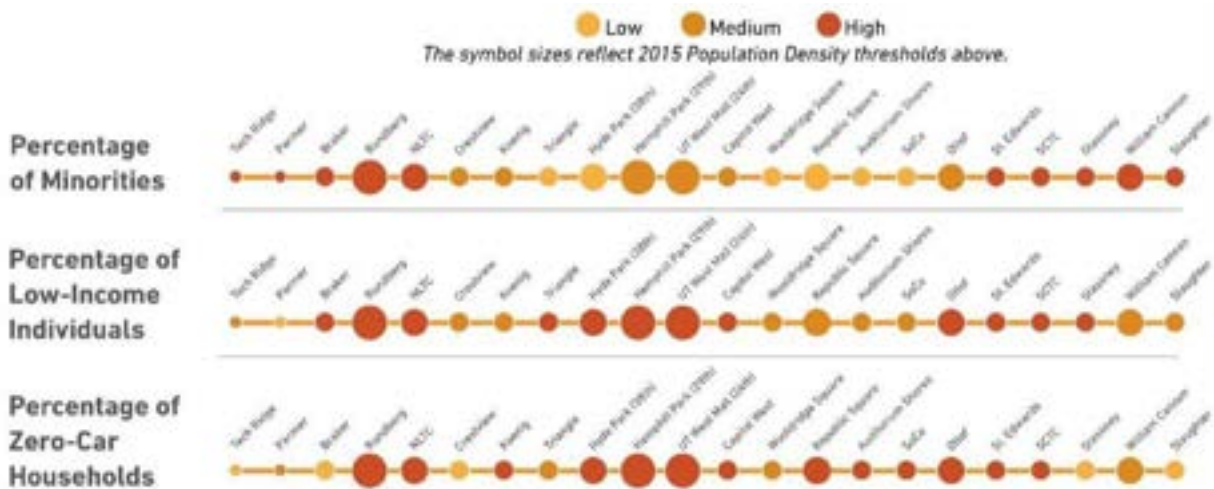
The station areas with the highest EJ population concentration are both in the northern and the southern portions of the proposed alignment. The Rundberg station has high concentrations of EJ populations and has the highest percentage of zero-car households and has the largest number of affordable housing units. Figure 4-4 shows the relative percentage of EJ population within each station area compared to citywide averages.

4.5 Environmental Analysis

4.5.1 Assumptions

Step 2 of the alternatives analysis process is intended to provide a basis of comparison for a variety of environmental parameters for the alternatives under consideration and to identify potential adverse effects on environmental resources within the defined study areas for each resource. The analysis was solely based on alignment and station locations and did not consider mitigation efforts that could mitigate impacts to resources.

Figure 4-4: Environmental Justice Populations and Transit-Dependent Households



The environmental screening gathered the following data:

- Natural and Ecological Resources
- Section 4(f)/6(f) Resources
- Hazardous Materials
- Transitways and Right-of-Way
- Air Quality
- Cultural and Historic Resources
- Community Resources
- Environmental Justice
- Noise- and Vibration-Sensitive Land Uses
- Visual and Aesthetics

4.5.2 Results

Overall, there would be environmental constraints or environmental benefits for each segment and option along the Orange Line Corridor as summarized in Figure 4-5. Elevated transitway could have the potential for indirect adverse effects regarding Section 4(f) resources and historic structures. EJ communities and community resources could benefit from any Build Alternative if adverse direct effects are avoided, minimized, or mitigated. The extent of adverse impacts to EJ communities will be fully investigated during the NEPA phase. At this time, no fatal flaws or significant impacts to socioeconomic resources are anticipated for any of the HCT alternatives. However, detailed design is required to assess any alternative that would disproportionately limit or remove access to community facilities, displace minority or low-income communities, or segregate minority or low-income communities. These critical socioeconomic resources and potential effects will be considered and documented within the AA and EIS.

4.6 Transportation Network Analysis

The Orange Line Corridor alignment alternative was evaluated for the potential impact on the transportation network in terms of transit travel times, intersection delay and LOS, parking impacts and effects on active transportation (self-propelled or human-powered transportation, such as walking or bicycling).

4.6.1 Transit Travel Times

The proposed service plan was used to report transit travel times (or running times) between a number of locations (Table 4-7). The reported travel times only include the amount of time spent riding the transit vehicle, and not the time spent traveling to the transitway or from the transit vehicle to the final destination.

Table 4-7: Travel Times Between Stations for LPA Build Options

	Mostly Aerial LPA Build Option	Mostly At-Grade LPA Build Option
Average End to End	43	52
Slaughter to Auditorium Shores	13	16
Slaughter to Republic Square	15	19
Slaughter to Crestview	30	39
St. Edwards to Republic Square	7	11
St. Edwards to Tech Ridge	34	44
Auditorium Shores to Lamar & Rundberg	21	28
Republic Square to Lamar & Rundberg	19	25
Republic Square to Tech Ridge	27	33
Crestview to Tech Ridge	13	13

Source: Orange Line Corridor Running Time Model

Figure 4-5: Environmental Considerations

	<p>Habitats & Species Based on U.S. Fish and Wildlife (USFWS) data (1) there are no designated critical habitat for any federally-listed species in the study area; and (2) there are potential habitats including Lady Bird Lake, and Karst Zones 1, 2, and 3.</p>	
	<p>Floodways & Waters of the U.S. The Orange Line Corridor contains crossings of Waters of the U.S., including Lady Bird Lake (Colorado River) and 100-year floodplains; the Orange Line Corridor intersects the Edwards Aquifer Transition Zone in Segment 1 along N. Lamar Blvd.</p>	
	<p>Capitol View Corridors Capitol View Corridors exist along the Orange Line Corridor. The Capitol View Corridors will be examined further under NEPA and the Section 106 process of the National Historic Preservation Act.</p>	
	<p>Historic and Archaeological Resources Numerous historic and archeological resources exist throughout the Orange Line Corridor. Direct impacts to National Register of Historic Places will be avoided to the extent possible. Section 106 compliance concerns for direct and indirect impacts may be highest for new right-of-way, above-ground, or below-ground construction.</p>	
	<p>Parks There will be impacts along Lady Bird Lake (Colorado River) and associated parkland. The Orange Line Corridor will minimize impacts to park resources in compliance with environmental regulations found in Section 4(f) of the U.S. Department of Transportation Act of 1966 and Section 6(f) of the Land and Water Conservation Fund Act.</p>	
	<p>Air Quality No significant negative impacts to air quality are anticipated to result from any of the alternatives.</p>	
	<p>Community Resources All Orange Line Corridor alternatives serve community resources including health care and government services, schools, places of worship, and cultural institutions.</p>	
	<p>Environmental Justice All Orange Line Corridor alternatives serve Minority and Low-Income persons as well as Zero-Car Households. Positive impacts (benefits) could include improved access to transit options and improved travel times. Adverse impacts would be avoided, minimized, or mitigated during the NEPA process.</p>	

4.6.2 Intersection Delay and Level of Service

Existing delays are as reported in the 2019 Guadalupe Street Corridor Mobility Program Report (CoA 2019b). Both center-running options and the couplet option increase intersection delays at most intersections. Delays are higher in the PM for the existing and alternative configurations. Guadalupe Street in this segment operates with the least delay for the Guadalupe-Nueces Couplet option. However, the true delay experienced on the Nueces/San Antonio SB arm of the couplet could be considerably worse than presented in this report due to the lack of data.

4.6.3 Active Transportation

For the Active Transportation analysis, the approach taken was to compile facilities in and around the potential Orange Line alignment and identify opportunities and constraints with a high-capacity transitway. In the next phase, the analysis will go further to recommend strategies for implementation to the build alternative.

4.6.4 Parking Impacts

The parking impacts analysis was a preliminary inventory of on-street parking spaces impacted by the potential Orange Line alignment. The total number of available parking spaces would be reduced by the addition of an HCT guideway; however, the exact impact is unknown until a locally preferred alternative has been selected. There is a possible under-utilization of parking in the Orange Line Corridor based on the data presented in this report and the previous Downtown Austin Alliance Parking Strategy Report (Downtown Austin Alliance 2019). Downtown parking especially appears to be underutilized outside of normal business hours. Further analysis of the location and design of parking spaces that would not be impacted by the HCT guideway will be addressed in the subsequent phase of this project.

A complete description of the transportation network impacts analysis process and outcomes for each alternative is included in Appendix E.

5.0 Agency Coordination

Communication and collaboration efforts with local agencies and stakeholders were ongoing throughout the Project duration and provided a regular resource for feedback and participation in PEL decision-making. This collaboration was formalized through meetings with Project Connect’s Technical Advisory Committee (TAC), Project Connect Ambassador Network (PCAN), as well as working sessions with Austin City Council. Many members of the TAC and PCAN are anticipated to become cooperating and participating agencies during the NEPA process.

The PCAN was developed to provide input and feedback on program milestones and community engagement processes to ensure an effective process. Previously part of the Project Connect/Austin Strategic Mobility Plan Multimodal Community Advisory Committee (MCAC), group members met in October 2018 to discuss the future of the committee. To reflect the aspiration to continuously grow the network of organizations, interest groups and individuals participating in the committee, the group recommended PCAN as the new name for the committee. PCAN members represent various interest areas and backgrounds across Central Texas, encourage and facilitate the engagement and input of other community members, and consider input in program discussions. They serve two-year terms and meet monthly.

The agencies and stakeholder groups included within the TAC and PCAN are listed in Tables 5-1 and 5-2, respectively.

Table 5-1: TAC Members

Austin Independent School District	CoA Planning and Zoning Department
Bastrop County	CoA Transportation Department
CAMPO	Lower Colorado River Authority
Central Texas Regional Mobility Authority	TxDOT
City of Leander	Texas Historical Commission
CoA Corridor Program Office	Travis County
CoA Parks and Recreation Department	Williamson County

Table 5-2: PCAN Members

African American Resource Advisory Commission	Friends of Austin Neighborhoods
Alliance for Public Transportation	Go Austin/Vamos Austin
American Association of Retired Persons (AARP), South Austin Chapter	Greater Austin Black Chamber of Commerce
AARP Texas State Office	Greater Austin Chamber of Commerce
American Automobile Association	Hispanic Advocates Business Leaders of Austin
Americans Disabled for Accessible Public Transit of Texas	Hispanic Quality of Life Commission
Asian American Quality of Life Advisory Commission	Justice for our Neighbors - Austin Region
Austin Area Research Organization	Leander Chamber of Commerce
Austin Area Urban League	Lost Creek Civic Organization
Austin Independent Business Alliance	Meadows at Double Creek Property Owners' Association
Austinites for Urban Rail Action	Measure Austin

Austin Neighborhoods Council	National Alliance on Mental Illness, Central Texas Chapter
Austin Sierra Club	Network of Asian American Organizations
Bicycle Advisory Committee	North Austin Civic Association
Capital Metro Access Advisory Group	North Lamar/Georgian Acres Neighborhood
Central Austin Community Development Corporation	One Voice Central Texas c/o Sustainable Food Center
Central Health	Onion Creek Neighborhood Planning Commission
City of Austin	Pedestrian Advisory Council
Climate Buddies	Public Safety Commission
Code Next	Reconnect Austin /BV
Congress for the New Urbanism Central Texas Chapter	Save Our Springs Alliance
Customer Satisfaction Advisory Committee	Texas State University
Downtown Austin Alliance	Urban Transportation
Downtown Austin Neighborhood Association	Vison Zero ATX

Meetings with the TAC and PCAN were coordinated through Capital Metro and the Project Connect program management team. E-mail invitations and calendar appointments were distributed, and attendance and minutes were taken at each meeting (Appendix C). The PCAN and TAC meetings were held to discuss the Project Connect program as a whole (i.e., presentations and discussions were not limited to Orange Line). Meetings were structured to allow committee members to provide feedback and buy-in on key project decisions. Specifically, the TAC and PCAN meetings covered the information as listed in Table 5-3.

Table 5-3: Project Connect TAC and PCAN Meetings

Date	Information Presented
TAC Meetings	
May 14, 2019	Presented report-out on public feedback on purpose and need and discussed approach to breaking up corridor into segments to isolate key differentiators and define alternative that may be a mix of four different profiles.
June 25, 2019	Presented public involvement dashboard and an overview of the alternatives analysis process. Introduced guideway and station area evaluations (conceptual alternatives evaluation) and discussed the establishment of the PCAN.
July 24, 2019	Discussed process of alternatives evaluations and reported out on working groups with South Congress stakeholders.
August 27, 2019	Discussed feedback from public events and the upcoming detailed definition of alternatives process which includes review of FTA evaluation criteria, development of typical sections, development of station configuration options, and making service planning assumptions in order to model ridership.
September 24, 2019	Presented working group feedback and shared information regarding upcoming public open houses.
October 22, 2019	Discussed the process of linking goals and the evaluation process in measurable ways in order to develop an LPA. Presented some of these measurable categories, including travel times and capital costs.
November 12, 2019	Discussion followed similar topics as October meeting but provided additional time to ask questions.
December 10, 2019	Presented more detailed information on technical analysis including ridership forecasting, methodology for understanding operations and maintenance costs,

Date	Information Presented
	and breakdown of capital costs. Discussed early responses to recent public outreach.
January 13, 2020	Discussed detailed information on funding, financing and revenue generation options.
February 11, 2020	Provided updates from other transportation providers including the City of Austin, CAMPO, and TxDOT.
March 12, 2020	Reviewed the project timeline, engagement to date and the system plan. Discussed the development of information around a downtown tunnel, and reviewed recommendations on mode. Presented renderings of park and rides, a regional transit center, vehicles, the street environment and an underground station concept for the tunnel. Presented a financial analysis, program costs, and phasing.
PCAN Meetings	
August 21, 2019	Presented information on conceptual alternatives including transitway profiles by segment and the evaluation process for determining which profiles are applicable in each segment. Presentation included discussion of finetuning routes.
September 26, 2019	Shared that Orange Line segments North Austin, South Central Austin, and South Austin would not be going forward with elevated, cut and cover, and tunnel options as these segments have enough right-of-way to run the transitway at street-level.
October 28, 2019	General question-and-answer about the Project Connect plan and the current and future analysis of the major projects.
December 11, 2019	Presented details of the second phase alternative analysis process, including: <ul style="list-style-type: none"> • Methodology for Ridership, O&M and Capital costs developed through a concerted effort between the Orange and Blue line teams, Program Manager Owner's Representative (PMOR) and the Capital Metro Project Connect leadership team • Coordination ensured teams working with same basis for data analysis throughout the process
January 15, 2020	Presented information on the cost of alternatives and funding options, including new starts, core capacity, small starts, and FTA grants, as well as other options for increasing revenue.
February 12, 2020	Presentations from community groups that represent affordable housing, social, environmental and community justice advocates.

In addition, joint working sessions with the Project Connect Board and Austin City Council were held. The Capital Metro Board of Directors and the City of Austin Council are the primary decision-making bodies for the adoption of the LPA. Information on these work sessions is included in Table 5-4 below.

Table 5-4: Joint Capital Metro Board and Austin City Council Working Sessions

Date	Information Presented
March 2019	<ul style="list-style-type: none"> • Vision plan and regional service map • Dedicated space for transit on some lines • Right-of-way constraints • BRT light • ASMP integration • Community engagement plans
October 2019	<ul style="list-style-type: none"> • Program objectives

Date	Information Presented
	<ul style="list-style-type: none"> • Community engagement • Peer city research • HCT on Orange and Blue Lines • Alternatives analysis
January 2020	<ul style="list-style-type: none"> • Progress recap • Investment opportunities – federal, Capital Metro and potential partners, CoA • Transit system analysis
March 2020	<ul style="list-style-type: none"> • Progress recap • Project Connect Recommended System Plan • Imagining the future (renderings of concepts at multiple locations) • Funding and governance • Next steps
June 2020	<ul style="list-style-type: none"> • Community engagement update • Presentation of survey results • Recap of Project Connect history • Overview of projects in Recommended System Plan • Capital Metro Board approval of Project Connect System Plan and Locally Preferred Alternatives for the Orange Line • Austin City Council support of Project Connect System Plan and Locally Preferred Alternatives for the Orange Line

In addition, in October 2019 meetings were held in person with the CoA PARD and THC to obtain their preliminary feedback on the Orange Line Project. The focus of these meetings was to ensure agency representatives were familiar with the project, its status and schedule, and had the opportunity to discuss potential fatal flaws pertaining to their areas of interest. In addition, next steps of the project were discussed as well as the importance of their continual involvement as the project moves into NEPA.

The only formal coordination with a Federal agency was the development of the Orange Line PEL Study with FTA guidance through periodic meetings with FTA Region 6.

No formal coordination with tribal agencies has occurred.

6.0 Public Coordination

Though many tools for public coordination are available at all times, such as the website and social media, active public coordination for the Orange Line project during the PEL Study was structured around the technical project development schedule in order to provide public updates and receive public feedback around logical milestones in the project schedule. These milestones and relevant information for each outreach milestone are included below and details of these efforts are provided in Appendix C.

6.1 Milestone 1: April 8, 2019 – May 16, 2019

- Introduced the project study area, alternatives being considered, relevant environmental benefits and impacts being considered, and the overall schedule and public participation process
- Allowed the public an opportunity to review and provide comments to the project's Purpose and Need statements
- Included one large-format, centrally located open house and six smaller-scale meetings held along the corridor and designed as "corridor conversations." A concurrent Virtual Open House was also held for the duration of the outreach timeframe
- Advertised events through an e-blast to an extensive agency contact database established by Capital Metro, paid newspaper ads, paid radio ads, an e-newsletter to the established agency contact database, follow-up calls to key stakeholders, social media, and earned media
- Included the following event materials: sign-in sheets, 14 exhibit boards, a fact sheet in English and Spanish, and a survey
- Developed a formal event summary and included copies of all notifications and meeting materials, as well as a summary of feedback, event photos and other documentation

The overall sentiment from all event comments was concurrence with the Orange Line purpose and need statements. Agreement with each statement was higher than 65% in all cases, with some rising to more than 90%. Event attendees were also asked to provide a personal story or narrative from the Orange Line corridor. These were tagged for sentiment and largely positive, expressing excitement for the Project and/or prompting Capital Metro to move through project development as quickly as possible.

6.2 Milestone 2: June 10 – July 30, 2019

- Informed the public about the process deployed for the Step One (conceptual) analysis
- Received feedback on the results of this phase of analysis
- Focused on transitway types (street-level, elevated, cut and cover, and tunnel), station locations, and Orange Line Question & Answer
- Included a series of 19 one-on-one meetings with key stakeholders and presentations to neighborhood associations located along the Orange Line corridor
- Designed the engagements to drive participation in three, large-scale workshop-style events held along the corridor
- Held a concurrent Virtual Open House for a month within the outreach timeframe
- In addition to advertising through the 19 stakeholder meetings, advertised the events through an e-blast to Capital Metro's established agency contact database, paid newspaper ads, paid radio ads, an e-newsletter to the established agency contact database and social media
- Included the following event materials: a sign-in sheet, a fact sheet in English and Spanish, 17 exhibits, flip charts, other notetaking supplies at each workshop table, and community surveys
- Developed a formal event summary which included copies of all notifications and meeting materials, as well as a summary of feedback, event photos and other documentation

Through the workshop discussions, community survey, and the online survey, a shared understanding was evident from the public regarding the large scale of the program and Project, and how it would require trade-offs. Based on the comments received during the workshops, the public:

- Overwhelmingly agreed that the Orange Line would need dedicated space to operate
- Mostly agreed with the conceptual analysis approach
- Strongly agreed that the Project should connect with other projects in the Project Connect System Plan
- Agreed that construction and maintenance costs should be evaluated

In addition to this general public outreach, key stakeholder outreach was conducted through the facilitation of three invitation-only working groups with representatives of business and neighborhood groups in the Guadalupe, Downtown and South Congress project areas. These meetings covered the same general information as the public meetings but also allowed these highly involved stakeholders to ask specific questions of the project team outside of the general public setting.

- South Congress Working Group: Met on July 12, 2019 and September 16, 2019 to introduce the project, right-of-way allocations, parking, pedestrian accommodations, and construction impacts.
- Guadalupe Working Group: Met on July 15, 2019 and August 29, 2019 to discuss the project development process, alternatives analysis, transitway options, the existing built environment and parking/curbspace concerns.
- Downtown Working Group: Met on July 31, 2019 and September 3, 2019 to introduce the project and project specifics like grade separation options, station access, costs, ridership, community engagement, and ballot measures.

6.3 Milestone 3: November 4 – December 6, 2019

- Informed the public about the detailed evaluation of alternatives process, which analyzed different combinations of alignment, transitway type, and mode to meet the Orange Line corridor's purpose and need, as well as goals and objectives
- Allowed the public an opportunity to review and comment on the detailed evaluation of the alternatives analysis which provided preliminary information on travel time, potential ridership, costs to build, and costs to operate
- Included three museum-style, guided open houses and 10 neighborhood and organization meetings during the duration of the outreach
- Held a concurrent Virtual Open House for the duration of the outreach timeframe
- Advertised the events through an e-blast to Capital Metro's established agency contact database, paid newspaper ads, paid radio ads, an e-newsletter to the established agency contact database, follow-up calls to key stakeholders, social media, and earned media
- Included the following event materials: sign in sheets, 22 exhibit boards, a fact sheet in English and Spanish, a survey, and back up materials to assist subject-matter experts in responding to specific questions and feedback from participants
- Developed a formal event summary which included copies of all notifications and meeting materials, as well as a summary of feedback, event photos and other documentation

Feedback gathered through the event and online surveys suggested that the community felt a large-scale investment needed in the Orange Line corridor and that most would prefer LRT over BRT, though many mode-neutral community members also responded. In addition, many community members were not deterred from an interest in a tunnel option by early cost estimates.

In addition to this general public outreach, key stakeholder outreach was conducted through the facilitation of three invitation-only working groups with representatives of business and neighborhood groups in the Guadalupe, Downtown and South Congress project areas. These meetings covered the same general information as the public meetings but also allowed these highly-involved stakeholders to ask specific questions of the project team outside of the general public setting.

- Downtown Working Group: Met on November 15, 2019 and March 3, 2020 to discuss the environmental review process, the connection between Orange Line and Blue Line, vehicle capacity, costs, feasibility of a tunnel, and the referendum.
- South Congress Working Group: Met on November 14, 2019 and February 21, 2020 to introduce the project, right-of-way allocations, parking, pedestrian accommodations, and construction impacts.
- Guadalupe Working Group: Met on November 13, 2019 and March 3, 2020 to discuss differences between business interests and residential interests, distance between stations, benefits of LRT versus BRT, ridership, the referendum, vehicle power supply, and project timelines.

6.4 Milestone 4: May – June 2020

- Inform the public about the draft Project Connect Recommended System Plan. Materials included Orange Line-specific information on the project's proposed Locally Preferred Alternative alignment, cost, ridership, environmental benefits, and travel times.
- Allow the public an opportunity to review and comment on Project Connect System Plan prior to its adoption.

Because of COVID-related restrictions on in-person events and meetings, outreach at this milestone included eight remote virtual community meetings and a month-long virtual open house. The virtual community meetings, hosted on Zoom and/or Facebook Live, included an overview of Project Connect and a 30-minute Q&A session with Capital Metro Board Members and City of Austin leadership. The virtual open house featured the same information, plus exhibit boards, and included a feedback survey.

The events were advertised through an e-blast to the established Agency contact database, paid newspaper ads, paid radio ads, a press release, an e-newsletter to the established Agency contact database, e-mails to key stakeholders, social media, and earned media.

Orange Line-specific event materials included a slide in the overall presentation, four exhibit boards in English and in Spanish, a fact sheet in English and in Spanish, a 15-page LPA summary report in English and in Spanish, and two survey questions, available in English and in Spanish. A formal event summary was developed and is included in Appendix C. This summary includes copies of all notifications and meeting materials, as well as a summary of feedback and other documentation.

Most of the feedback gathered through the virtual open house was related to general project support and better connectivity needs. The virtual open house survey asked participants to report their level of agreement with the statement "Austin should build the Orange Line Light Rail that would operate in a 20-mile dedicated transitway and include 22 stations from Tech Ridge on the northern end of the corridor to the South Park Meadows on the southern end of the corridor." Ninety-two percent of respondents agreed that the Orange Line should be built. On the open-ended question, stakeholders expressed general enthusiasm for the Orange Line. Commenters shared thoughts on project phasing at the programmatic level between Orange, Blue and Gold Lines and voiced support for infrastructure that would enhance the use of the Orange Line through bus and bicycle/pedestrian connections as well as parking for vehicles at major hubs. Related to the Orange Line, 89% of respondents agreed that we should construct a downtown tunnel that benefits the entire by improving speed, reliability and safety, and should include various social features.

The feedback gathered through the virtual community meetings was primarily related to the Recommended System Plan details and opportunities; equity, access and affordability; and governance and finance.

Key stakeholder outreach through the three Orange Line working groups was not conducted during this timeframe.

7.0 Environmental Resources Reviewed

This section summarizes the potential environmental effects of the Orange Line LPA. A summary of existing conditions of each resource within the Orange Line Corridor is included, along with references to the Corridor Conditions Report (Appendix D) which contains a detailed existing conditions assessment and constraints map, which were used as the basis for this impact evaluation. The resources analyzed were considered “fatal flaw” environmental resources with separate regulatory drivers, such as the Endangered Species Act or Clean Water Act, or typically resources of concern for the general public, such as noise. The following sections present each evaluated environmental resource:

- Environmental Consequences – Discusses the potential impacts on the resource that would be anticipated under the LPA. The environmental consequences identified should be regarded as preliminary to be further assessed during NEPA analysis.
- Mitigation Strategies and Next Steps – Describes the next steps that will be necessary for assessment of this environmental resource for NEPA as well as potential mitigation strategies, where applicable, to address adverse impacts that may be anticipated as a result of the LPA.

7.1 Transportation

The approximately 20-mile HCT corridor mirrors Capital Metro’s existing high frequency bus route MetroRapid 801 and lies within some of the densest portion of the CoA’s transportation network. Capital Metro is the primary transit service provider within the Orange Line Corridor, operating local and rapid bus service and crosses a commuter rail line (MetroRail). Currently, there are 62 Capital Metro transit routes within the Orange Line Corridor as described in Table 3.1-2 in the Corridor Conditions Report (Appendix D).

The Orange Line LPA was evaluated to ascertain potential impacts to the existing transportation network in terms of transit travel times, traffic/level of service (LOS), parking, and active transportation facilities, as described below. A more detailed description of the transportation network impacts analysis process and select outcomes as a result of the LPA is included in the Orange Line Corridor Transportation Network Impacts Analysis Technical Memorandum (Appendix E).

7.1.1 Environmental Consequences

7.1.1.1 Transit

Changes to the underlying bus network, including elimination of MetroRapid 801, would result in a reduction in revenue hours and miles. Modifications to roadway cross sections to accommodate the Orange Line LPA would have impacts on the transit system in the corridor, including bus routes changed to other corridors.

Capital Metro’s proposed service plan was used to report transit travel times (or running times) between several locations. The reported travel times only include the amount of time that would be spent riding the transit vehicle, and not the time spent traveling to the transitway or from the transit vehicle to the final destination. In almost every case, LRT travel time is faster than the automobile travelling the same route during peak times. This is primarily due to the reliability of a dedicated transitway (Appendix B).

7.1.1.2 Level of Service (LOS) / Traffic

As discussed in the Corridor Conditions Report (Appendix D), population and employment growth in Austin has resulted in a corresponding increase in traffic. According to a report from INRIX, Austin drivers spend approximately 104 hours stuck in traffic every year, which is more than any other Texas city (INRIX, 2018). In addition, as shown in Table 3.1-1 of the Corridor Conditions Report (Appendix D), several roadways are currently designated at a LOS of E and F, with more forecasted by 2040, which is an indicator of congestion and delay. LOS is a term used to qualitatively describe the operating conditions of

a roadway based on factors such as speed, travel time, maneuverability, delay, and safety. The LOS of a facility is designated with a letter, A to F, with A representing the best operating conditions and F the worst. Specifically, LOS E is defined as severe congestion with some long-standing queues on critical approaches and LOS F is defined as total breakdown, stop-and-go operation generating excessive delay and queuing (FHWA, 2017).

A macro-level analysis of traffic under existing traffic control conditions (signalization and signal timings) was conducted. To be conservative, this analysis assumed that the current traffic volume demand would remain even with the high capacity transit in place. Synchro models were developed for the AM and PM peaks for two key areas: The Drag (Martin Luther King, Jr. [MLK] Boulevard to 29th Street) and Downtown (Cesar Chavez Street to Martin Luther King, Jr. Boulevard). Detailed analyses of areas outside of The Drag and Downtown will be conducted during the NEPA phase.

Introduction of street-level HCT would degrade LOS for most intersections along the Orange Line Corridor. Anticipated traffic delays presented in seconds per vehicle for the LPA in both AM and PM peak hours are presented in Orange Line Corridor Transportation Network Impacts Analysis Technical Memorandum (Appendix E). Without mitigation, the LPA would increase intersection delays at most intersections. For example, Guadalupe & 29th and Guadalupe & Dean Keeton would be substantially delayed by the addition of the at-grade HCT guideway for both LPA options.

Current conditions attributed to COVID-19 prevent the collection of traffic data at locations where existing traffic counts are not current or unavailable. As a result, a model was developed with the City of Austin to interpolate traffic and turning count movements at intersections where traffic data was old (pre-2018) or non-existent. This model will serve as the basis to measure impacts from the introduction of the street-level HCT.

7.1.1.3 Parking

The parking impacts analysis consisted of a preliminary inventory of on-street parking spaces potentially impacted by the LPA. On-street parking along the Orange Line Corridor was counted to determine the supply of parking spaces that could be impacted by the addition of an HCT Guideway. Occupancy data was also collected.

The impact of an HCT guideway on on-street parking depends upon the alignment and grade level of the HCT guideway. In most cases, street-level HCT would require the conversion of many on-street parking spaces within the same ROW. Per the analysis conducted, the conversion of up to 173 of 6,405 on-street downtown parking spaces, or about 2.7%, would be required. For HCT alignments that only utilize Guadalupe Street downtown and do not change the ROW of Lavaca Street, 72 on-street spaces would be impacted, or about 1.1% of downtown on-street spaces. Due to data limitations, the proportion of spaces impacted on Guadalupe Street north of MLK and in the South Congress area are not available. The maximum number of spaces of on-street parking on Guadalupe Street between MLK and 29th Street impacted is 50. In the South Congress Area, up to 267 on-street parking spaces could be impacted.

It could be possible that an aerial build option for the LPA would maintain some on-street spaces between columns, but the number is not clear. The overall supply of on-street parking spaces impacted by the LPA would be slightly reduced by the addition of an HCT guideway. There is a possible under-utilization of parking in the Orange Line Corridor based on the data presented in this report and the previous Downtown Austin Alliance Parking Report. Downtown parking especially appears to be underutilized outside of normal business hours. Further analysis of the location and design of parking spaces that would not be impacted by the HCT guideway will be addressed during design.

7.1.1.4 Active Transportation Facilities

The active transportation assessment is documented in the Orange Line Corridor Transportation Network Impacts Analysis Technical Memorandum (Appendix E) and provides an analysis of the existing and

proposed active transportation and supporting facilities as it relates to accessing Orange Line station areas.

For the analysis of active transportation facilities, the approach taken was to compile facilities in and around the LPA, and identify opportunities and constraints with HCT. In the next phase, the analysis will go further to recommend strategies for implementation of the LPA.

7.1.2 Next Steps / Mitigation Strategies

7.1.2.1 Transit

Existing bus-only lanes on Guadalupe Street and Lavaca Street downtown could be shifted to other roadways – the impacts of this have not been studied in this report and should be analyzed further in the next phase, if considered.

7.1.2.2 LOS/Traffic

Introduction of street-level HCT would degrade LOS for most intersections in both areas investigated; however, no mitigation has been considered or developed to address these potential impacts. The introduction of at-grade HCT through the Orange Line Corridor would require trade-offs and efforts to mitigate the impact to vehicular traffic and other modes. Capital Metro is working closely the CoA Transportation Department to develop mitigation during the NEPA process. In the case that at-grade HCT is added, the following mitigation strategies could be implemented:

- Where possible, ROW expansion or a limited conversion of sidewalk and bicycle lanes could alleviate traffic impacts. Expanded ROW space is not possible in all locations but could accommodate HCT guideway and preservation of vehicular travel lanes in some areas.
- The impact on parallel routes to the corridor will be studied to determine whether underutilized capacity (e.g. on Colorado Street, Congress Avenue, S 1st Street, Lamar Avenue) could accommodate some traffic shifting from the LPA to other routes as drivers adjust to longer travel times on Guadalupe and Lavaca Street with addition of stations and HCT guideway.
- Congestion pricing for vehicles, especially in the downtown zone, could mitigate traffic impact as drivers unwilling to pay a fee to enter the Orange Line Corridor during peak hours could choose alternative routes or mode shift to transit or other options.
- Based on the likely operating scenario of the LPA, the headways for HCT could be adjusted, which is to be reflected in subsequent modeling. Signal timing would be adjusted to accommodate the frequency of HCT.
- Predictive signal timing and coordination based on HCT operations could be implemented. Adaptive signal timing could be implemented in some areas to adjust cycle lengths to demand.
- Business access mitigation could be necessary should left turns need to be removed, driveways closed, parking is removed, or other ROW changes impact customer access to businesses on the corridor.

During the next phase, the following analyses will be conducted to ascertain potential impacts and where mitigation may be required:

- Microsimulation analysis using VISSIM to include an existing model, a future year 2045 “no-build” model and build alternative models will be assessed.
- Microsimulation model will include the corridor along the alignment and the Lavaca Street from Cesar Chavez Street to MLK Boulevard.
- AM and PM peak turning movement counts will be collected for all existing signalized intersections, these locations include intersection where signalization is in the process of being constructed.

- Travel times for several routes passing through the network and queue lengths at most congested areas (Downtown, SOCO, The Drag) will be collected and used for model calibration.
- Model calibration will be necessary to ensure that the existing model accurately reflects traffic patterns.
- Model will include transit vehicle dwell times, ridership, proposed transit stop locations, and transit schedule to accurately model future transit services.
- Future modeling will utilize Metropolitan Planning Organization (MPO) 2045 travel demand model for future volume projections, future geometry, and origin-destination pairings.
- Synchro will be used to prepare coordinated traffic signal timings along the corridor based on the projected volume.

7.1.2.3 Parking

- To accommodate a station, at-grade HCT guideway, or elevated HCT guideway, on street parking lanes in the corridor may be utilized so existing travel lanes are not taken.

7.1.2.4 Active Transportation Facilities

- In areas with constrained ROW, pedestrian and bicycle facilities may be moved to parallel facilities.
- Pedestrian and bicycle facilities will be enhanced in and around station areas.

In summary, the selection and application of mitigation strategies could vary based upon the station locations, grade of the LPA, and other factors. For example, if the project is at-grade, the necessary mitigation could be substantially different from the mitigation required for an above-grade or below-grade option. An at-grade option would have much greater impact on travel lanes than one built below grade. In the design phase, the mitigation strategies discussed above, and others will be identified and applied to specific areas where they may be required. Capital Metro is working closely with the CoA Transportation Department to identify the extent of the potential impacts and will collaborate to develop mitigation during the NEPA process.

7.2 Land Use and Economic Development

The Orange Line Corridor is within the limits of the CoA, which is the municipal agency responsible for land use planning within the corridor. Other agencies involved with local land use planning recommendations within the corridor include CAMPO and numerous Neighborhood Planning Associations (NPAs). The predominant land uses surrounding the Orange Line LPA are primarily single family residential (30 percent), commercial (14 percent), and multifamily or civic (each 13 percent), as shown in the Corridor Conditions Report, Table 3.2-1 and Figure 3.2-1 in the Corridor Conditions Report (Appendix D). Some of the significant civic land uses in the Orange Line Corridor include the University Texas at Austin (UT), the State of Texas Capitol complex, the Long Center for the Performing Arts, St. Edward's University, and several parks and recreational trail systems along the Colorado River (Lady Bird Lake). Downtown Austin is a mix of several land use types, but primarily composed of office land uses.

Land use development within the Orange Line Corridor is significantly and constantly growing, with over 160 emerging projects (including office, mixed use, residential multi-family, residential single family, and commercial developments) planned within the corridor. The CoA's Comprehensive Plan, Imagine Austin, identified 50 Activity Centers and 25 Activity Corridors to focus economic development (Appendix D, Tables 3.2-2 and 3.2-3). The LPA would connect some of the largest and most substantial Activity Centers in the greater Austin region. Not only does the corridor extend through downtown Austin, with the highest concentration of jobs in the region, but it is directly adjacent to both the State Capitol of Texas and UT, which are among the top employment centers in the region. As the population of the CoA increases, additional Activity Centers will continue to emerge along the corridor.

7.2.1 Environmental Consequences

For the land use impact evaluation, numerous local and regional land use plans were reviewed including those listed in Table 7-1 below.

Table 7-1: Local and Regional Land Use Plans

Planning Study	Year of Publication
Capital Metro	
All Systems Go	2004
Central Austin Transit Study	2010
Connections 2025	2016
Project Connect: Central Texas HCT System Plan	Adopted 2012; revised 2014
Project Connect: Central Corridor HCT Study	2014
Project Connect: North Corridor LPA	2014
MetroRail Long-Range Feasibility Study	2016
City of Austin	
Downtown Austin Plan	2011
Imagine Austin	2012
Airport Boulevard Corridor	2014
Austin Strategic Mobility Plan	2019
Smart City Challenge Proposal	2016
Other Agency Planning Efforts	
CAMPO 2045	Ongoing
TxDOT Mobility35 Program	Ongoing
Travis County Land, Water & Transportation Plan 7.	2014
Other Community Planning Efforts	
Downtown Austin Alliance – Downtown Austin Vision	2018
Central Austin Community Development Corporation – Light Rail Proposal	2015

The Orange Line LPA would support local land use plans by reducing congestion, improving multimodal transportation, and improving regional access to existing and future activity centers within the corridor; however, implementation of the LPA would result in the permanent conversion of current land uses to transportation use. Throughout the Orange Line Corridor, most of the land that would be converted by the LPA consists of commercial land use. However, while the LPA would require acquisition of new ROW in these areas, the LPA would not likely result in widespread land use changes or change current land use trends in the corridor.

7.2.2 Next Steps / Mitigation Strategies

The Orange Line LPA would be compatible with local land uses; any inconsistencies found with local comprehensive and land use plans would be resolved through the typical planning processes at the local government level. These processes could include public involvement and visioning, amendments to comprehensive plans, and zoning changes. In addition, during the NEPA and design phase, the properties and acreages in the corridor affected by the LPA will be determined. NEPA studies will also evaluate station compatibility with surrounding land uses when the exact station locations and sizes are known.

7.3 Displacements and Relocations

Additional ROW would be anticipated as a result of the Orange Line LPA. It is important to note; however, that existing ROW limits were not surveyed for the entire Orange Line corridor; ROW information was obtained from ground survey performed as part of the MetroRapid Bus Stop design project (2010) and select locations were surveyed. Since this ground survey only covered discrete station locations and areas

of constraint, the assumed ROW limits were estimated by extending the lines of the known ROW along the Orange Line Corridor. Additionally, ROW widths were taken from site development plans along the corridor where this information was available as a supplemental resource in areas where ROW was unverified.

7.3.1 Environmental Consequences

Additional ROW would be required for the Orange Line LPA. The existing roadway ROW widths within the corridor would be widened to accommodate the LRT guideway within the existing street while maintaining existing roadway traffic lanes and implementing the CoA's Complete Street Concept with bike lanes, tree zones, sidewalks, and other amenities. Slivers of ROW would be required along the corridor and, in the station areas, additional ROW would be needed to allow for the station platforms. It is anticipated most of the potential ROW acquisitions associated with the Orange Line LPA would consist of partial acquisitions; however, full acquisition of some parcels is also anticipated due to access and/or space considerations. As previously stated, most property types currently anticipated to be partially and/or fully acquired include commercial facilities. However, civic, industrial, mixed use, residential, open space/parks, transportation/parking, undeveloped, and utility properties have the potential to be affected, as well.

7.3.2 Next Steps / Mitigation Strategies

Property acquisition for ROW would conform to the requirements set forth in the Uniform Relocation Assistance and Real Property Acquisitions Policies Act of 1970 (Public Law 91-646, as amended). For all property acquired, Capital Metro must offer the property owner just compensation.

Except in certain cases discussed below, an FTA grant applicant may not acquire (by any means, including through donation) real property or real property rights for a transit project until the NEPA process has been completed with a ROD, FONSI, or CE determination by FTA (23 CFR Part 771.113[a]). The reason for this prohibition is that the acquisition of property would prejudice the consideration of alternatives. Even if the property in question is needed for all the "build" alternatives under consideration, the CEQ regulations require that the No Action (or No Build) alternative be given fair consideration throughout the process. Property acquisition could bias consideration of the No Action alternative (40 CFR Part 1506.1).

Relocation and property acquisition impacts are mitigated by avoidance to the extent feasible. When that is not possible, just compensation must be issued in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (42 USC § 4601) (also known as the "Uniform Act"). The Uniform Act establishes a policy for the fair and equitable treatment of persons displaced as a result of federal and federally assisted programs. Federal regulations implementing the Uniform Act are contained in 49 CFR Part 24. Guidance on the Uniform Act as it pertains to FTA programs and projects is contained in Chapter II, Management of Real Property, Equipment and Supplies, of FTA Circular 5010.1C, Grant Management Guidelines (October 1, 1998).

Where applicable, Capital Metro would prepare a relocation analysis that would enable the relocation activities to be planned so that the problems associated with the displacement of individuals, families, and businesses would be recognized, and solutions developed to minimize the adverse impacts of displacement. The scope of planning would be based on the complexity and nature of the anticipated displacing activity, including the evaluation of program resources available to carry out timely and orderly relocations.

7.4 Neighborhoods

The population within the Orange Line Corridor is projected to increase 65 percent from 2010 to 2040 and employment is projected to increase 93 percent over the same time period with the greatest increases in downtown. As discussed in the Corridor Conditions Report (Appendix D), the Orange Line Corridor contains numerous neighborhood and community facilities including 30 K-12 schools (including the Texas School for the Deaf, the Texas School for the Blind, various academies, preparatory schools, and charter schools), 2 universities (UT at Austin and St. Edward's University), 4 hospitals, the Austin Recreation Center,

11 museums, and nearly 100 churches or religious establishments. In addition, the Orange Line Corridor has higher percentages of zero-car households than the CoA and Travis County. Most zero-car households are located near US 183, UT, and St. Edwards University. Other areas are located near downtown; North Lamar north of US 183; surrounding Rundberg Lane; and south of SH 71 bounded by I-35, South Congress Avenue, and William Cannon Drive.

7.4.1 Environmental Justice

Environmental justice (EJ) is the fair treatment and meaningful involvement of all people in decision-making for transportation programs and projects as defined in EO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations. The guiding principle of EJ is that everyone, regardless of race, color, national origin or income is entitled to equal protection from environmental harms and risks. EJ communities are located throughout the Orange Line Corridor and the corridor has a significantly higher percentage of minority residents than the CoA or Travis County, as well as a slightly higher percentage of Limited English Proficiency (LEP) households. In addition, the Orange Line Corridor has a higher percentage of residents living below the federal poverty level than the CoA or Travis County. As shown on Figures 3.3-5 and 3.3-6 in the Corridor Conditions Report (Appendix D), minority block groups are located near the northern terminus of the corridor, south of SH 71, north of Lady Bird Lake, and generally south of US 183. Hispanic block groups are primarily located between Lady Bird Lake and US 183 in the central portion of the corridor; and low-income block groups are located from US 183 to the northern terminus of the corridor, and between MLK Boulevard and US 290.

7.4.2 Environmental Consequences

“Community cohesion” is the term that describes the social network and actions that provide satisfaction, security, camaraderie, support, and identity to members of a community or neighborhood. For many people, community cohesion is essential to the success of family life, contributes to feelings of satisfaction and fulfillment in community life, and provides a sense of security. An adverse impact to community cohesion is simply any change the community defines as important and unique to its quality of life. That might include the displacement of homes or businesses, community cohesion, mobility, safety, noise, or air quality impacts.

Potential impacts to community cohesion within and adjacent to the corridor include both adverse and beneficial impacts associated with changes in traffic and accessibility. Conceptual design of the LPA indicates that the areas of potential disturbance would be primarily located within existing roadway ROW, specifically on existing roadway infrastructure. As presented in Section 7.3, while ROW acquisitions are anticipated for the LPA, it is assumed the majority of these would consist of commercial properties.

The use of community facilities surrounding the Orange Line Corridor would be expected to increase as they become more accessible. These types of indirect impacts would be similar in nature to existing conditions and limited to the neighborhoods and communities immediately surrounding or adjacent to the corridor. The Orange Line is anticipated to benefit the surrounding neighborhoods and communities by limiting vehicular traffic congestion and improving mobility as a result of increased access to public transit. As a result of the LPA being constructed primarily within existing ROW already designated as transportation, the LPA is not anticipated to divide neighborhoods or communities or adversely affect community cohesion.

As the project advances, Capital Metro, in coordination with City, may undertake mitigation measures for the secondary impact of gentrification. The City may choose to adopt affordable housing measures which, if implemented, would be discussed in the EIS.

Environmental Justice

One of the goals of the Project is to evaluate equitable access to this transit investment in accordance with federal laws and regulations, including Title VI of the 1964 Civil Rights Act and Executive Order (EO)

12898, Environmental Justice for Low Income & Minority Populations. In accordance with EO 12898, the project must ensure that minority and low-income communities receive an equitable distribution of the benefits of transportation activities without suffering disproportionately high and adverse effects. In addition, the project must maintain the ability for communities and neighborhoods to easily participate in community activities. To evaluate potential impacts to EJ communities, communities immediately surrounding the LPA, including the station locations, were identified.

The determination of the potential for disproportionately high and adverse effects on minority or low-income populations begins with comparing the impacts on EJ populations to those on the general population. A disproportionately high and adverse effect would be:

- Predominantly borne by minority and/or low-income populations; or
- Suffered by minority and/or low-income populations and is appreciably more severe or greater in magnitude than the adverse effect suffered by the non-minority population and/or non-low-income population.

Overall, adverse impacts to neighborhoods, community cohesion, or EJ populations are not anticipated as a result of the LPA. Rather, it is anticipated the Project would positively benefit nearby communities and EJ populations by increasing access to public transit. However, during design should access to community facilities be limited or removed, minority or low-income communities be displaced, or minority or low-income communities become segregated, disproportionately high and adverse effects to socioeconomic resources may result. All reasonably foreseeable social, economic, and environmental effects on minority populations and low-income populations will be identified and addressed as part of NEPA.

7.4.3 Next Steps / Mitigation Strategies

As part of future design decisions and NEPA studies, potentially affected census blocks or census block groups with identified EJ populations would be evaluated for disproportionately high and adverse effects and selected for outreach. Potential mitigation strategies could include specialized outreach to EJ populations and measures to reduce construction-related impacts and/or permanent impacts on environmental justice populations. Any ROW acquisition would comply with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. The purpose of this act is to provide fair and equitable treatment for all persons displaced from their homes, businesses, or farms (see Section 7.3).

As the NEPA process and design continues, an analysis of the potential for disproportionately high and adverse effects on EJ populations will be conducted. A disproportionately high and adverse effect would be that the project impacts are predominantly borne by minority and/or low-income populations or impacts suffered by minority and/or low-income populations is appreciably more severe or greater in magnitude than the adverse effect suffered by the EJ populations. In addition, as part of the NEPA process and design, an analysis of the accessibility and functionality of community facilities will be conducted to determine potential social and community cohesion impacts as well as an analysis of the potential adverse and beneficial impacts to economic development within and surrounding the corridor. These assessments will be completed in accordance with the DOT Order 5610.2 (a), Actions to Address Environmental Justice in Minority Populations and Low-Income Populations and 2012 Updated Final Order on Environmental Justice and the FTA Circular 4703.1, Environmental Justice Policy Guidance for Federal Transit Administration.

As part of NEPA process and development of the final design, all actions and anticipated impacts will comply with applicable federal regulations including EO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations; EO 13166, Improving Access to Services for Persons with LEP; and EO 13045, Title VI of the Civil Rights Act of 1964.

Mitigation strategies will be developed to reduce impacts to affected census block groups with identified EJ populations. As part of the mitigation strategy, census block groups with identified EJ populations will be selected for outreach. Specialized outreach to EJ populations and measures to reduce construction-related impacts and/or permanent impacts on these populations may occur. Any ROW acquisition would comply with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. Owners of acquired property would be compensated at fair market value for their property.

7.5 Visual Quality

As discussed in the Corridor Conditions Report (Appendix D), the visual quality assessment used seven segments to describe the visual quality within the corridor. The visual characteristics of a segment depend on the existing natural environment, as well as the built environment, such as changes in development patterns and unique natural environment characteristics. The visual segments are described in detail in the Corridor Conditions Report (Appendix D).

Visual impacts are the result of changes to existing visual attributes associated with construction and operation of the Project and viewers' responses to those changes. In the environmental assessment phase, visual impacts will be assigned a degree of impact from low, moderate, or high for each segment. Visual impacts will also be assigned a degree of impact as beneficial, neutral, or adverse. Beneficial impacts may improve viewer experiences, enhance visual resources, or create improved views of those resources. Neutral impacts would occur when the existing visual quality is not perceived to be enhanced or degraded. These impacts could result in a change to the existing visual quality if viewer responses are low to moderate and the project would be compatible with the existing environment. Therefore, neutral impacts could occur in an environment where viewer responses are moderate or lower, which would result in most viewers not perceiving visual enhancements or degradation. Adverse impacts degrade the quality of the visual resources, obstruct sensitive views or change desirable views.

Viewer Sensitivity

An initial assessment of viewer sensitivity indicates a range from low to moderate. Although some segments may have visual quality ratings categorized as moderately high and high, many viewers' in these areas are currently witnessing and adapting to several changes to the visual environment, including new high-rise buildings and mixed-use developments, and roadway construction for multimodal improvements. Additionally, viewers are accustomed to seeing Capital Metro's MetroRapid vehicles and stations from Routes 801 and 803, which have been in operation since 2014.

To begin evaluating potential visual impacts, the viewer sensitivity of the primary viewers or viewer groups within each segment would determine the viewers' response to the proposed changes. Careful consideration of any changes to the view would be especially important where there are viewers with high exposure and high sensitivity.

Next, visual changes as a result of the project would be considered. These changes would be a result of the compatibility of the project within a certain area. Visual changes could be temporary or permanent. Temporary changes typically occur during construction and could include fencing, lighting, tree clearing, grading, stockpiling materials, and construction equipment. Permanent visual changes may include structural components of the system, such as the vehicles, changes to the roadway, bridges, and retaining walls, as well as lighting, fencing, stations, and other operational facilities.

7.5.1 Environmental Consequences

The LPA would require the greatest amount of ROW near stations, while some parts of the corridor would require minimal ROW or remain within existing ROW. The Orange Line ROW will define the visual impacts within the corridor. A cursory look at each segment follows; however, a detailed visual assessment of the project will be developed once engineering has defined the type and location of critical infrastructure.

Segment 1

Segment 1 of the LPA is surrounded by a mix of land use types. The northern portion of the segment is generally surrounded by large commercial strip centers and industrial development with some parks and recreational areas to the west. The southern portion of the segment is generally surrounded by residential (single-family and multifamily) neighborhoods with small areas of associated commercial and industrial developments. Viewer response in this area would be low while the visual change would be low to moderate for portions of the LPA that are potentially elevated, specifically in areas that don't have existing elevated structures. For areas where the LPA would be at-grade, visual change would be low. Proposed stations for the LPA that are elevated would create a new visual element resulting in a moderate visual change in this area. Overall visual impacts would be neutral with the degree of impact being low to moderate depending on number and location of elevated structures along the LPA within this segment.

Segment 2

Segment 2 of the LPA is largely surrounded by single-family residential and civic land use types with some sections of commercial land use types along the LPA. In addition, some parks are located on the west side of the corridor in the southern portion of the segment. Viewer response in this area would be low to moderate while the visual change would be high for portions of the LPA and proposed stations that are potentially elevated, specifically in areas that don't have existing elevated structures. For areas where the LPA is at-grade, visual change would be low. Overall visual impacts would be neutral to adverse with the degree of impact being low to moderate depending on the number and location of elevated structures along the LPA within this segment.

Segment 3

Segment 3 of the LPA includes a large portion of the area dedicated to the UT campus, located east of the LPA along Guadalupe Street. West of the campus consists of several multifamily residential developments and to the north are single family residences. Areas of commercial, civic, and industrial land use types are spaced along this segment of the LPA. Portions of this segment of the LPA were informed by the *Guadalupe Street Corridor and West Campus Development Report* produced by the CoA. Therefore, the visual changes as a result of the project would complement plans already viewed by the public.

Viewer response in this area would be low to moderate while the visual change would be moderate to high. Overall visual impacts would be neutral to adverse with the degree of impact being low to moderate depending on number and location of potential elevated structures along the LPA within this segment.

Segment 4

Segment 4 of the LPA contains the downtown area largely made up of office and residential high-rise buildings, as well as the Capitol View Corridor. This corridor contains regulations pertaining to visual characteristics. Therefore, changes to visual quality would create higher awareness than other segments. In addition, the LPA in this segment would cross Lady Bird Lake. As previously stated, through downtown, tunneled transitway would be implemented. Viewer response and visual change in this area would be low to moderate. Overall visual impacts would be neutral with the degree of impact being moderate.

Segment 5

The northern portion of Segment 5 of the LPA includes the area to the south of Lady Bird Lake which contains several parks, civic, and commercial land use types. In other areas of the northern portion of the segment, there are new residential high-rise buildings. In the central and southern portions of the segment, the surrounding area is largely made up of smaller commercial and some residential land uses. Viewer response in this area would be moderate while the visual change would be low in areas where the LPA is underground and moderate in areas where the LPA is at-grade. Overall visual impacts would be neutral

with a low to moderate degree of impact. The highest degree of impacts would occur in the elevated portions of the LPA near parks around Lady Bird Lake. The LPA would include a tree furnishing zone along much of the alignment in this segment, which would help enhance visual quality and minimize adverse visual impacts.

Segment 6

Segment 6 of the LPA is bisected by SH 71 which is surrounded by larger commercial, industrial, and civic land use types. The northern portion of this segment includes St. Edwards University and residential (single-family and multifamily) land use types surrounding the university with some small commercial land use types. The southern portion of this segment is surrounded by residential (single-family and multifamily) with a large industrial park near SH 71 and some long linear parks. Viewer response in this area would be low to moderate while the visual change would be moderate. Areas where construction of new structures would be required would result in a higher viewer response. Overall visual impacts would be neutral with the degree of impact being low to moderate. The LPA would include a tree furnishing zone along much of the alignment in this segment, which would help enhance visual quality and minimize adverse visual impacts.

Segment 7

Segment 7 of the LPA is largely surrounded by single-family residential land use types west of South Congress Avenue. A mix of land use types including multifamily residential and commercial are densely located to the east. The southern portion of this segment is surrounded by industrial land use types as well as a large commercial park. Viewer response and visual change in this area would be low. Overall visual impacts would be neutral with a low degree of impact. The LPA would include a tree furnishing zone along much of the alignment in this segment, which would help enhance visual quality and minimize adverse visual impacts.

Summary

A summary of the visual impacts and degree of visual impact change is presented in Table 7-2.

Table 7-2: Visual Impact Summary

Segment	Visual Impact / Degree of Impact
1	Neutral / Low to Moderate
2	Neutral to Adverse / Low to Moderate
3	Neutral to Adverse / Moderate to High
4	Neutral / Moderate
5	Neutral / Low to Moderate
6	Neutral / Low to Moderate
7	Neutral / Low

7.5.2 Next Steps / Mitigation Strategies

The following bullets summarize next steps to consider as well as potential mitigation measures.

Next Steps

- Identify key viewpoints including historic resources, parks, designated scenic viewpoints, or views typical of a segment.
- Conduct visual simulations of the LPA at key viewpoints, including the Capitol View Corridor
- Determine locations of noise walls, as applicable
- Investigate viewer responses through NPA meetings
- Develop potential mitigation measures, as appropriate

Potential Mitigation Measures

Potential mitigation measures will be determined during the EIS through coordination with the affected public and Capital Metro. Measures could include, but not be limited to:

- Screening where practicable through visual barriers such as vegetation (including trees and shrubs), or walls
- Lighting during construction (in areas where nighttime construction activities could occur)
- Lighting for Permanent Operations

7.6 Air Quality

The Clean Air Act (CAA) of 1970 (as amended) establishes federal policy to protect and enhance the quality of the nation's air resources to protect human health and the environment. The CAA requires that adequate steps be taken to control the release of air pollutants and prevent significant deterioration in air quality. The 1990 amendments to the CAA require federal agencies to determine the conformity of proposed actions with respect to SIPs for attainment of air quality goals.

Regulations implementing the CAA established primary and secondary National Ambient Air Quality Standards (NAAQS) as a basis for assessing air quality. The United States Environmental Protection Agency (U.S. EPA) regulates air quality in accordance with the NAAQS. The NAAQS currently regulate six criteria pollutants under the primary standards. These are carbon monoxide (CO), nitrogen dioxide (NO₂), ozone (O₃), lead (Pb), particulate matter (PM) and sulfur dioxide (SO₂). PM standards are further defined into a standard for PM₁₀, regulating particulate matter smaller than 10 microns in diameter and PM_{2.5} regulating particulate matter smaller than 2.5 microns in diameter.

The CAA requires that all states attain compliance by adhering to the NAAQS, as demonstrated by the comparison of measured pollutant concentrations with the NAAQS. The NAAQS represent the maximum levels of background pollution considered acceptable with an adequate margin of safety to protect public health and welfare. These pollutants are typically quantified in units of milligrams per cubic meter (mg/m³), parts per million (ppm), parts per billion (ppb) or micrograms per cubic meter (µg/m³). Table 7-3 shows the NAAQS for the six criteria pollutants.

Table 7-3: National Ambient Air Quality Standards for Criteria Pollutants

Pollutant	Primary Standards	Averaging Times ¹	Secondary Standards
CO	9 ppm (10 mg/m ³)	8-hour ²	None
	35 ppm (40 mg/m ³)	1-hour ²	None
Pb	0.15 µg/m ³	Rolling 3-Month Average	Same as Primary
NO ₂	100 ppb (0.100 ppm)	1-hour ^{3v}	None
	53 ppb (0.053 ppm)	Annual (Arithmetic Mean)	Same as Primary
PM ₁₀	150 µg/m ³	24-hour ⁴	Same as Primary
PM _{2.5}	12 µg/m ³	Annual ⁵	15 µg/m ³
	35 µg/m ³	24-hour ³	Same as Primary
O ₃	0.070 ppm	8-hour ⁶	Same as Primary
SO ₂	75 ppb (0.075 ppm)	1-hour ⁷	None
	None	3-hour ²	0.5 ppm (1300 µg/m ³)

Source: EPA National Ambient Air Quality Standards Table, 2020

Notes:

¹ – The time period for which compliance with the standard is measured

² – Not to exceed more than once a year

³ – 98th percentile, averaged over 3 years

⁴ – Not to be exceeded more than once per year on average over 3 years

⁵ – Annual mean, averaged over 3 years

⁶ – The 3-year average of the fourth-highest daily maximum 8-hour average ozone concentrations measured at each monitor within an area over each year must not exceed 0.070 ppm

⁷ – 99th percentile of 1-hour daily maximum concentrations, averaged over 3 years

7.6.1 Environmental Consequences

Potential air quality impacts for the LPA were developed by reviewing the current attainment status of the Austin-Round Rock-Georgetown Metropolitan Statistical Area (MSA) with respect to the NAAQS pollutants, reviewing the latest air quality planning information for the region, and summarizing air quality trends within the Orange Line Corridor. The main air quality consideration is the regulatory status of the corridor which primarily determines the needs and requirements for air quality regional planning purposes.

The Orange Line Corridor is located within Travis County and the Austin metropolitan area and is part of the Greater Austin MSA airshed. The Greater Austin MSA is currently in attainment or unclassifiable with respect to all NAAQS pollutants; therefore, the transportation conformity rules do not apply to the project.

According to the most recent Air Quality Report for the Greater Austin MSA (Capital Area Council of Governments [CAPCOG], 2019), air pollution levels have remained in compliance with all NAAQS, although the region's 2016-2018 O₃ levels were just 3 percent below the 2015 O₃ NAAQS. However, since 1999, the region's ozone design value shows a downward trend with an average ozone decrease of approximately 0.75 ppb per year. The design value for all other NAAQS pollutants is well below the respective NAAQS for the pollutant.

The LRT mode for the LPA would consist of zero emissions electric vehicle technology. No air pollutants or greenhouse gases would be directly emitted into the local air quality airshed. Renewable electric energy sources and/or regional power plants would provide electrical power to the project and emissions from regional power plants would be controlled through air permits issued through the Texas Commission on Environmental Quality (TCEQ).

No adverse air quality impacts would occur under the LPA operational scenario as all-electric vehicle technology would be used. The Project could instead have a beneficial impact to local air quality as users of the Orange Line would opt for this HCT system versus drive personal vehicles and therefore lessen congestion on area roadways.

7.6.2 Next Steps / Mitigation Strategies

Localized short-term emission increases would occur during the construction period of the project. Implementation of the following mitigation measures during construction period would reduce localized PM₁₀ and PM_{2.5} emissions by reducing fugitive dust and exhaust from construction and on-road vehicles. These mitigation measures could also reduce the quantity of other criteria pollutants (nitrogen oxides [NO_x], volatile organic compounds [VOC] and CO) and Greenhouse Gas (GHG) emissions by limiting idling or otherwise controlling exhaust emissions from construction and on-road vehicles.

- Adhere to the Texas Low Emission Diesel Fuel Program for all diesel fuel on-road motor vehicles and non-road construction equipment.
- Keep engines and exhaust systems on construction equipment in good working order. Limit idling of construction equipment during periods when the equipment is inactive, and properly maintain construction equipment in accordance with the manufacturer's specifications.
- Cover and/or treat disturbed areas where practicable with dust suppression techniques, including but not limited to soil binders, sprinkling, watering and/or chemical stabilizer/suppressants.
- Control fugitive dust emissions by the application of water, presoaking, or other dust suppression technique during all clearing, grubbing, scraping, excavation, grading, cut and fill, and demolition activities.

- Phase ground disturbing activities to the greatest extent possible to reduce the number of disturbed surfaces at any one time.
- Locate stationary equipment as far from sensitive receivers as possible (when conditions allow).

Planned transit projects must meet certain air quality requirements before they can proceed. If the Greater Austin MSA remains in attainment or unclassifiable with respect to all NAAQS pollutants; then a conformity analysis will not be required for the project and a qualitative air quality assessment will need to be prepared during the NEPA process. If the Greater Austin MSA becomes nonattainment for one or more NAAQS pollutants including O₃; then a conformity analysis for the nonattainment pollutant(s) may be required as part of the air quality assessment for the project.

7.7 Noise and Vibration

The potential for noise and vibration impacts to sensitive properties located adjacent to transit projects are among the major concerns regarding the effects of a transit project on surrounding communities and are key elements of the environmental impact assessment process for public transportation projects. A transit system is often placed near population centers by necessity and may cause noise and vibration at nearby residences and other sensitive types of land uses. Noise may be produced by transit vehicles in motion, stationary transit vehicles, auxiliary equipment, and fixed-transit facilities. While vibration from transit projects can be a major concern in underground operations, it is less of concern for cut and cover, at-grade and elevated operations.

Criteria for determining potential noise and vibration impacts for CMTA the Orange Line transit project were developed following guidance contained within the FTA’s September 2018 Transit Noise and Vibration Impact Assessment Manual (FTA Manual).

The FTA Manual defines the types of land uses that may be sensitive to noise and vibration impacts. Land uses where quiet is an essential element of its intended purpose are the most sensitive (Category 1) receptors. Example land uses include preserved land for serenity and quiet, outdoor amphitheaters and concert pavilions, and national historic landmarks with considerable outdoor use. Residential land uses and buildings where people normally sleep, such as hotels and hospitals present the greatest number of noise and vibration sensitive land uses (Category 2). The last category of noise sensitive properties are institutional land uses (Category 3) with primarily daytime and evening use. Example land uses include schools, libraries, theaters, and churches where it is important to avoid interference with such activities as speech, meditation, and concentration on reading material. Places for meditation or study associated with cemeteries, monuments, museums, campgrounds, and recreational facilities are also included in this category. In addition, vibration from transit projects has the potential to impact architectural elements of historic structures located adjacent to a transit project.

The FTA Manual establishes a maximum noise impact screening distance for operation of Light Rail Transit systems, as outlined in Table 7-4. If sensitive land uses are located beyond these distances, potential noise impacts do not need to be evaluated.

Table 7-4: Screening Distance for Noise Assessments

LRT System Elements	Screening Distance, ft*	
	Unobstructed	Intervening Buildings
Light Rail Transit vehicles	700	350
Vehicle Storage and Maintenance Facilities	125	75
Station Parking Facilities	1000	650

Source: FTA Transit Noise and Vibration Impact Assessment Manual, September 2018

Vibration impact screening distances are a function of land use. General screening distances for LRT projects, such as the CMTA Orange Line project, include up to 450 feet for category 1 land uses, 150 feet for category 2 land uses, and 100 feet for category 3 land uses.

For projects that include multiple land uses within the noise and vibration screening distances, then additional refined noise and vibration assessments may be necessary. For noise, additional noise analysis options include a General Noise Assessment or a Detailed Noise Assessment. The General Noise Assessment is used to examine potentially impacted areas identified in the screening step by examining the location and estimated severity of noise impacts. This procedure considers noise source and land use information and transit-specific noise and adjustment data (in tabular and graphical form) for noise computations. A Detailed Noise Assessment may be warranted if the project is located near noise-sensitive sites and potentially severe impacts have been identified at an early stage of the project or costly mitigation measures may be necessary. The Detailed Noise Assessment procedure is a comprehensive assessment that includes project-specific components including location, alignment, transit mode, hourly operation schedules, speed profiles, and plan and profile information.

If one or more of the vibration-sensitive land uses are within the vibration screening distance, then a more refined vibration assessment is necessary. As for noise, either a General Vibration Assessment or a Detailed Vibration Assessment will be performed. The General Vibration Assessment defines a curve that predicts the overall ground-borne vibration as a function of distance from the source, then applies adjustments based on project-specific factors and components. The goal of a Detailed Vibration Assessment is to use all available tools and project information to develop accurate projections of potential ground-borne vibration impact and when necessary, to design mitigation measures.

As documented within the Corridor Conditions Report (Appendix B), many noise and vibration sensitive properties are located within the screening distances of the LPA, including over 3,200 single family homes, 1,000 apartment buildings/units, 50 religious institutions, 11 parks and cemeteries, and over 2 dozen schools, colleges and libraries. During the Project’s next phase of design and NEPA, a detailed noise and vibration analysis will be conducted that fully evaluates each component identified in the preliminary engineering plans, identifying impacts to sensitive land uses and potential mitigation measures and their effectiveness.

The FTA Manual establishes a methodology for evaluating potential noise and vibration impacts through a series of logarithmic functions that evaluate each project component and the operating conditions under which it occurs. Tables 7-5 and 7-6 provide the expected project details that will be evaluated in the detailed noise and vibration impact assessment.

Table 7-5: Noise Impact Evaluation Inputs

Noise Impact Analysis	Impact Considerations
LRT System	Vehicle Noise Specifications (SEL)
	Distance to Receptor
	Vehicle Speed
	Number of cars
	Number of LRT trains/hr. (7:00 a.m. – 10:00 p.m.)
	Number of LRT trains/hr. (10:00 p.m. – 7:00 a.m.)
	Running on Elevated Track
	Running on embedded track
Vehicle Bells	Bell Noise Specifications (SEL)
	Operation parameters (when are bells used)
	Number of LRT trains/hr. (7:00 a.m. – 10: p.m.)
Vehicle Horns	Number of LRT trains/hr. (10:00 p.m. – 7:00 a.m.)
	Horn Noise Specifications (SEL)

Noise Impact Analysis	Impact Considerations
	Location of horn on LRT vehicle
	Operation parameters (when are bells used)
	Number of LRT trains/hr. (7:00 a.m. – 10:00 p.m.)
	Number of LRT trains/hr. (10:00 p.m. – 7:00 a.m.)
Park and Ride Stations	# Cars per hour
	# Buses per hour
LRT Vehicle Storage and Maintenance Facility	# Vehicles per hour
	Type of maintenance enclosure
Traction Power Substations	Track design
Tight Curve Radii Track	Vehicle Speed
Special Trackwork (Crossovers)	Number of LRT trains/hr. (7:00 a.m. – 10:00 p.m.)
	Number of LRT trains/hr. (10:00 p.m. – 7:00 a.m.)

Source: FTA Transit Noise and Vibration Impact Assessment Manual, May 2020

Table 7-6: Vibration Impact Evaluation Inputs

Vibration Impact Analysis	Impact Considerations
LRT System	Vehicle Speed
	Distance to Receptor
	Number of LRT trains/hr. (7:00 a.m. – 10:00 p.m.)
	Number of LRT trains/hr. (10:00 p.m. – 7:00 a.m.)
	Special Trackwork
	Running on Elevated Track
	Efficiency of Soils (depth to bedrock)
	Building Construction Type
	Building Age

Source: FTA Transit Noise and Vibration Impact Assessment Manual, May 2020

In addition to the analysis of the Project components, the noise analysis will include a comprehensive noise monitoring program consisting of cluster-based noise measurements of noise sensitive land uses within the impact screening areas. Noise measurement sites will be identified based on representative locations within the Project area that are located similar distances to the project noise source and have similar project operating characteristics. Noise measurement will be conducted with a Type I Sound Meter for approximately 20-minute periods at each site during the morning peak hours (6:00 a.m. to 9:00 a.m.), midday (10:00 a.m. to 3:00 p.m.), evening peak hours (3:30 p.m. to 6:30 p.m.), and late night (10:00 p.m. to 2:00 a.m.) periods during the week. This will be extrapolated to 1-hour and 24-hour periods for institutional and residential land uses. As the FTA Manual recommends that a full 24-hour measurement be done to determine ambient noise for residential receivers of interest, such measurements will be conducted during the Final EIS phase once all alignment modifications have been finalized.

7.7.1 Environmental Consequences

Noise and vibration impacts from LRT projects typically result from the following alignment and operational characteristics:

- Track alignments very close to noise sensitive land uses
- Track alignments within residential neighborhoods
- High frequency of tight curve tracks (wheel squeal)
- Use of horns or bells for crossing at-grade roadways
- Numerous track crossovers and switches

The LPA generally follows the centerline of Lamar Boulevard/Guadalupe Street/Congress Avenue, each of which are high travel urban corridors, and therefore have higher than average existing noise levels. While an LRT vehicle on elevated track increases the perceptible noise levels by approximately 4 decibels over at-grade track operations, significant impacts that cannot be mitigated in either elevated or at-grade options are not anticipated because of the expected elevated existing noise levels. Furthermore, due to limited variability in the north-south alignment, with no more than 6-8 sections of tight curve radii track along the 20-mile corridor, noise impacts from wheel squeal are not expected. Similarly, given the general alignment within the center of multi-lane roadways, significant vibration impacts are not likely, with the exception of where bedrock geography may lie near the surface.

7.7.2 Mitigation Strategies and Next Steps

Noise and vibration impacts could occur during construction and operation of the project. If applicable, noise and vibration impacts should detail potential mitigation strategies, along with the feasibility of implementation. Severe impacts, as identified in the methodology, require mitigation measures to be implemented. The mitigation strategies as outlined in Table 7-7 and further described below for in-road transit alignment projects should be considered during the planning, preliminary and final engineering stages to reduce potential noise and vibration impacts from a project.

Table 7-7: Noise and Vibration Mitigation Strategies

Mitigation Measure	Effectiveness	
	Noise	Vibration
Stringent Vehicle and Equipment Noise Specifications	Varies	Varies
Vehicle Skirts	6-10 dBA	
Undercar Absorption	5 dBA	
Noise Barriers at the property line	3-15 dBA	
Special Track Support Systems		Varies

Source: FTA Transit Noise and Vibration Impact Assessment Manual, May 2020

Stringent Vehicle and Equipment Noise Specifications – Among the most effective noise mitigation treatments is noise control during the specification and design of the transit vehicle. By developing and enforcing stringent but achievable noise specifications, the transit property takes a major step in controlling noise everywhere on the system. It is important to ensure that the noise levels quoted in the specifications are achievable with the application of best available technology during the development of the vehicle and reasonable considering the noise reduction benefits and costs.

Vehicle skirts and undercar absorption – The vehicle body design can provide shielding and absorption of the noise generated by the vehicle components. Acoustical absorption under the car has been demonstrated to provide up to 5 dB of mitigation for wheel/rail noise and propulsion-system noise on rapid transit trains. Similarly, vehicle skirts over the wheels can provide more than 5 dB of mitigation. By carrying their own noise barriers, vehicles with these features can provide cost-effective noise reduction.

Noise Barriers – Noise barriers are effective in mitigating noise when they break the line-of-sight between source and receiver. The necessary height of a barrier depends on the source height and the distance from the source to the barrier. Within an in-road transit alignment, barriers constructed at the noise receptor right of way line can, if tall enough, effectively reduce noise levels from 3-15 decibels. Furthermore, barrier effectiveness can be increased by as much as 5 dB by applying sound-absorbing material to the inner surface of the barrier.

Special Track Support Systems – When the vibration assessment indicates excessive vibration levels, the track support system would typically be modified to reduce the vibration levels. Floating slabs, resiliently

supported ties, high-resilience fasteners, and ballast mats can be used to reduce the levels of ground-borne vibration. To be effective, these measures must be optimized for the frequency spectrum of the vibration. Given the high degree of design required to effectively mitigate vibration, any significant vibration impacts that result from a transit project require a detailed vibration assessment during the final design phase of the project, coupled with a commitment to implement mitigation measures during NEPA.

7.8 Ecosystems

The Orange Line LPA was evaluated for potential impacts to ecosystems, including vegetation and wildlife protected under the Endangered Species Act (ESA), the Migratory Bird Treaty Act (MBTA), the Bald and Golden Eagle Protection Act (BGEPA), Sections 65.171-177 and 69.1-9 of the Texas Administrative Code (TAC) (Chapters 67, 68, and 88 of the Texas Parks and Wildlife Department [TPWD] Code), and provisions of the CoA Environmental Criteria Manual. In addition, wildlife corridors within the Orange Line LPA were evaluated.

The Orange Line Corridor is located within the Northern Blackland Prairies Level IV ecoregion (Griffith et al., 2007). Most of the Orange Line Corridor occurs in developed, urbanized environments. However, several stream crossings and associated natural areas are located within and adjacent to the Orange Line Corridor. For more detailed information about vegetation and habitat types along the Orange Line Corridor, see Section 3.7 of the Corridor Conditions Report (Appendix D).

7.8.1 Protected Species

Based on recent revisions to United States Fish and Wildlife Services (USFWS) and TPWD species lists for Travis County (retrieved May 5, 2020), 15 federal- and state-listed threatened, endangered, and candidate species were identified that could occur within the Orange Line Corridor. The Corridor Conditions Report previously identified 22 species (Travis County list retrieved April 24, 2019) that could occur within the Orange Line Corridor (Appendix D). Updated TPWD habitat descriptions indicate that the sharpnose shiner (*Notropis oxyrinchus*) and smallmouth shiner (*Notropis buccula*) are currently restricted to the Brazos River basin and no longer range within the Colorado River basin. At this time, these species are presumed extirpated and currently do not inhabit the Orange Line Corridor. TPWD has also down-listed the bald eagle (*Haliaeetus leucocephalus*) from state-threatened to a Species of Greatest Conservation Need (SGCN). This removes state protection to individual bald eagles; however, this species is still protected under the federal BGEPA and MBTA. In addition, the blue sucker (*Cycleptus elongatus*), western creek chubsucker (*Erimyzon claviformis*), golden orb (*Quadrula aurea*), and smooth pimpleback (*Quadrula houstonensis*) have since been removed from the USFWS and TPWD species lists for Travis County.

According to TPWD, 12 Texas Natural Diversity Database (TXNDD) Element of Occurrence Records (EORs) intersect the Orange Line Corridor (TPWD, 2019). However, no EORs for protected species were recorded within the Orange Line Corridor. All EORs that intersect the Orange Line Corridor were recorded for species considered rare and/or SGCN in Travis County and do not carry state or federal regulatory status. In addition, no critical habitats for federally listed species were mapped within the Orange Line Corridor (USFWS, 2020).

Species with the potential to occur within the Orange Line Corridor based on the most recent species lists are further discussed below.

Avian Species

Suitable nesting habitat for the federal- and state-listed endangered golden-cheeked warbler (*Setophaga chrysoparia*) was identified along the Orange Line Corridor within Walnut Creek Metropolitan Park and the Walnut Creek Greenbelt. Suitable nesting habitat was also identified for the bald eagle within and adjacent to the Orange Line Corridor along Lady Bird Lake (Colorado River).

Aquatic Species

Perennial waterways intersecting the Orange Line Corridor, including Lady Bird Lake, were identified as suitable habitat for the state-threatened and federal-candidate Texas fatmucket (*Lampsilis bracteata*), Texas fawnsfoot (*Truncilla macrodon*), and Texas pimpleback (*Quadrula petrina*), as well as the state-threatened false spike mussel (*Quadrula mitchelli*).

Karst Species

All four Karst Zones are mapped within the Orange Line Corridor. A disjunct portion of Karst Zone 1 (areas known to contain endangered cave fauna) extends into the Orange Line Corridor between Walnut Creek and Braker Lane. Karst Zones 2 and 3 are also mapped in the Orange Line Corridor between 45th Street and Lady Bird Lake. These locations were identified as suitable habitat within the Orange Line Corridor for federal- and state-listed salamanders, including the Austin blind salamander (*Eurycea waterloensis*), Barton Springs salamander (*Eurycea sosorum*), and Jollyville Plateau salamander (*Eurycea tonkawae*). Federal- and/or state-listed karst invertebrate species with suitable habitat within the Orange Line Corridor include the Bee Creek Cave harvestman (*Texella reddelli*), Bone Cave harvestman (*Texella reyesi*), Tooth Cave pseudoscorpion (*Tartarocreagris texana*), Tooth Cave spider (*Tayshaneta myopica*), Kretschmarr Cave mold beetle (*Texamaurops reddelli*), and Tooth Cave ground beetle (*Rhadine persephone*). See Section 3.7 of the Corridor Conditions Report for more information on karst invertebrate and salamander species and their habitats (Appendix D).

7.8.2 Wildlife Corridors

The Orange Line Corridor primarily consists of residential and commercial development with the remaining areas consisting of parks and greenbelts situated along waterways. Wildlife utilize features such as creeks, rivers, and greenbelts for migration, dispersal, and other movements across the landscape. Within the Orange Line Corridor, several wildlife corridors were identified including the Colorado River, Walnut Creek, and the Williamson Creek Greenbelt.

7.8.3 Environmental Consequences

Impacts to ecosystems, including threatened and endangered species suitable habitat, could occur where natural areas, wildlife corridors, and karst features are present within the Orange Line Corridor. However, the Orange Line Corridor is centered over existing roadway infrastructure and all major wildlife crossings (i.e. perennial streams and adjacent riparian habitats) would be elevated for the LPA. In addition, all proposed stations locations would be constructed within previously developed land. Therefore, permanent impacts are not anticipated to adversely affect ecosystems and connectivity via habitat loss and fragmentation as a result of the LPA. Temporary impacts from construction activities, including noise, dust, stormwater pollution, sedimentation, and obstruction could occur.

Protected Species

Avian Species

Golden-cheeked Warbler

Suitable habitat identified for the golden-cheeked warbler within Walnut Creek Metropolitan Park and the Walnut Creek Greenbelt could be impacted by construction activities through habitat loss and fragmentation. Quality of habitat could be indirectly impacted by construction activities. In addition, any actively nesting birds within 300 feet of construction activities could be indirectly impacted by noise, air quality, and visual disturbances along the corridor during the nesting season (March through July). Review of the TPWD TXNDD EORs, the Balcones Canyonlands Conservation Plan (BCCP), and aerial imagery suggests suitable habitat within and adjacent to Walnut Creek Metropolitan Park is likely not occupied by this species. No additional suitable habitat for the golden-cheeked warbler was identified within the Orange Line Corridor. No proposed stations are located near suitable habitat for the golden-cheeked warbler. Therefore, no direct or indirect impacts to this species are anticipated from the proposed stations.

Bald Eagle

According to the National Bald Eagle Management Guidelines, construction activities, including noise, reduced visibility, and habitat degradation that occur within one mile of an active bald eagle nest could impact this species (USFWS, 2007). Suitable nesting habitat for the bald eagle along Lady Bird Lake (Colorado River) could be impacted by construction activities. However, much of this habitat has been converted to manicured parkland and trails. In addition, bald eagles are not known to nest along this section of the river and no known nests are located within one mile of the Orange Line Corridor. No impacts to this species are anticipated; however, if a bald eagle nest is found within one mile of the Orange line Corridor, impacts will be assessed. In addition, six proposed stations are located within one mile of Lady Bird Lake. Republic Square and Auditorium Shores stations are located closest to Lady Bird Lake (approximately ¼ mile).

Migratory Birds

Migratory birds and their nests are federally protected by the MBTA. Several features and natural areas were identified within the Orange Line Corridor as having a high likelihood to support nesting migratory bird habitat, including Walnut Creek Metropolitan Park, the Colorado River corridor, Williamson Creek Greenbelt, and various urban parks and recreation areas. Direct impacts to migratory birds could include any construction activity that disturbs nesting individuals or removes or destroys an active bird nest. Typically, impacts occur from direct clearing of habitat during the nesting season (March through September). Noise and dust from construction activities could inhibit or alter nesting behavior and indirectly affect mortality and reproduction. Impacts to migratory birds could be reduced along elevated transitways as these structures require smaller footprints. The proposed stations are located within existing infrastructure and urbanized environments, resulting in minimal impacts to migratory birds.

Aquatic Species

Construction activities such as dredging and filling within waterways could directly impact listed aquatic species and their habitats. In addition, erosion, sediment deposition, and potential pollutants in stormwater runoff from construction sites could affect water quality and have direct and indirect impacts to listed aquatic species and their habitats. The LPA includes elevated portions over all but one ephemeral stream. Construction of the route at this location would occur within existing ROW on existing roadway infrastructure. In addition, the LPA includes the potential construction of a new bridge over Lady Bird Lake (Colorado River). Therefore, potential impacts to aquatic species and their habitats may as a result of bridge pier placements. No proposed stations intersect waterways; therefore, no direct impacts to listed aquatic species and their habitats are anticipated from the proposed stations.

Karst Species

Direct impacts to karst species and their habitats could include boring or any sub-surface construction activities within or near karst features. Erosion, sediment deposition, hazardous materials, and various activities from construction sites could indirectly impact karst species and their habitats. Specifically, stormwater runoff from construction activities could affect surface and sub-surface water quality, especially near surface point aquifer recharge features. In addition, elevated structures typically require deeper excavations for support structures than at-grade designs. Deeper excavation could increase the risk of impacting karst features.

Wildlife Corridors

Several wildlife corridors were identified that intersect the Orange Line Corridor, including Lady Bird Lake (Colorado River), Walnut Creek, Williamson Creek, and associated greenbelts. Partial land acquisitions are anticipated for areas along Lady Bird Lake and the Walnut Creek Greenbelt. Direct impacts to these corridors by the project, including habitat loss and fragmentation, could impact the quality and use of

these corridors. Furthermore, indirect impacts from construction activities, such as noise, air quality, and temporary placement of machinery and equipment, could affect wildlife movements and quality of habitat in these areas. No proposed stations intersect identified wildlife corridors. Therefore, no impacts to wildlife corridors are anticipated from the proposed stations.

7.8.4 Next Steps / Mitigation Strategies

As part of the NEPA process and future design development, agency coordination, ecological field investigations and biological surveys of federal- and state-listed species, including aquatic species, will be conducted to determine potential impacts to ecosystems. Federal- and state-listed species status are subject to change as new species information becomes available. Prior to construction, listed species status should be periodically reviewed for any changes. Additional consultations with the appropriate agencies may be necessary to make determinations of suitable habitat and presence or absence of a species. Coordination with USFWS, TPWD, and CoA will be required to help determine the need for specific next steps and additional mitigation measures to reduce impacts to ecosystems and protected species, and comply with federal, state, and local laws, regulations, and ordinances.

Protected Species

Avian Species

Habitat assessments and presence-absence surveys for the golden-cheeked warbler and bald eagle will be conducted as necessary. If presence is confirmed, the USFWS will be contacted to help determine appropriate BMPs and mitigation measures to reduce impacts to these species.

If construction activities should occur during the nesting season for migratory birds (March through September), a qualified biologist would survey proposed construction areas as part of the NEPA process. If active migratory bird nests are identified, the USFWS would be contacted to help determine the appropriate action.

Aquatic Species

A habitat assessment and presence-absence surveys for mussel species will be conducted by qualified biologists within perennial waterways. If necessary, the TPWD will be contacted to develop additional BMPs and mitigation measures to protect sensitive mussel habitat.

Karst Species

A Geologic Assessment (GA) and karst habitat assessment led by a professional geologist will be required to determine the presence of sensitive karst features and suitable habitat for listed karst species. If karst habitat is identified within a construction area proposed for sub-surface drilling or boring, the USFWS, and CoA will be contacted to help determine appropriate mitigation measures. Mitigation strategies and BMPs will be implemented to reduce impacts to surface and sub-surface water quality. These strategies include drafting and submitting an Edwards Aquifer Plan, Stormwater Pollution Prevention Plan (SWPPP), obtaining associated permit authorizations, and complying with all water quality standards set forth by the TCEQ and as defined in the SWPPP. CoA requirements for surface point recharge features, rimrock, or other designated critical environmental features, will require additional documentation and compliance with CoA regulations defined in the Environmental Criteria Manual.

Wildlife Corridors

BMPs that reduce impacts to wildlife corridors, including wildlife friendly crossings, and design components that allow for free movement of wildlife, will be incorporated into design elements where significant wildlife crossings are located to maintain ecosystem connectivity. Additional studies and consultations with federal, state, and local agencies will help determine the need, placement, and design of wildlife-friendly crossings throughout the Orange Line Corridor.

7.9 Water Resources

This section discusses potential environmental consequences and next steps/mitigation strategies for floodplain, surface waters, and water quality.

7.9.1 Floodplains

The Federal Emergency Management Administration (FEMA) provides a community with flood hazard information to develop regulations that meet or exceed National Floodplain Insurance Program (NFIP) requirements. These regulations, enforced by Travis County and the CoA for the LPA, ensure that during the development of a project, flood hazards are considered as they relate to land management and use, the ability of the floodplain to convey stormwater flows, and potential encroachment on property and structures.

As identified in the Corridor Conditions Report (Appendix D), several 100-year floodplains (Zones A, AE, and AO) are mapped within ½ mile of the Orange Line Corridor that approximately correspond to mapped hydrological features, including the Colorado River, streams, and other drainages. The remaining areas of the Orange Line Corridor are mapped as 500-year floodplains (Zone X). No floodways are mapped within ½ mile of the Orange Line Corridor.

7.9.2 Surface Waters

The U.S. Army Corps of Engineers (USACE), Fort Worth District, enforces Section 404 of the Clean Water Act regulating discharges of dredged or fill material into waters of the U.S. for the Orange Line Corridor.

As identified in the Corridor Conditions Report, the Orange Line Corridor is located within the Austin-Travis Lake watershed, specifically within the Walnut Creek-Colorado River, Town Lake-Colorado River (Lady Bird Lake), Williamson Creek-Onion Creek, and Slaughter Creek-Onion Creek subwatersheds (12-digit Hydrologic Unit Codes [HUC] 120902050307, 120902050306, 120902050409, and 120902050408, respectively).

As documented in the Corridor Conditions Report (Appendix D), based on National Hydrography Dataset (NHD) data, approximately 37.6 miles of stream features and approximately 116 acres of waterbody features are located within ½ mile of the Orange Line Corridor. Stream features include perennial streams/rivers, intermittent streams/rivers, and artificial paths. Based on National Wetland Inventory (NWI) data, 70 wetland features totaling approximately 203 acres are located within ½ mile of the Orange Line Corridor. The NWI features include Freshwater Emergent Wetland, Freshwater Forested/Shrub Wetland, Freshwater Pond, Lake, and Riverine. For additional information on surface waters, see Subsection 3.8 of the Corridor Conditions Report (Appendix D).

7.9.3 Water Quality

The TCEQ implements the Surface Water Quality Monitoring Program to meet the federal requirements of Sections 303(d) and 305(b) of the Clean Water Act. As part of the program, TCEQ identifies waters that do not meet the federal water quality standards. Waters that do not meet the federal water quality standards or their intended use are listed as impaired waterbodies. The states must develop total maximum daily loads (TMDLs) for pollutants that exceed water quality standards for waterbodies identified as impaired.

The Texas Water Code established provisions to maintain and control water quality in the State of Texas. This code makes it unlawful to discharge pollutants into or adjacent to any water in the state unless authorized by a rule, permit, or order. Under the code, TCEQ's Texas Pollutant Discharge Elimination System (TPDES) program has federal authority over discharges of pollutants to waters in the state in accordance with Section 402 of the Clean Water Act.

As part of Section 404 compliance, Section 401 of the Clean Water Act regulates the discharge of pollutants into waters of the U.S. and is enforced by TCEQ. Tier I projects, as defined by TCEQ, are those

that affect less than 3 acres of waters in the state and/or less than 1,500 linear feet of streams, and Tier II projects are those that affect greater than 3 acres of waters in the state, and/or greater than 1,500 linear feet of streams. Tier I and Tier II projects require the use of TCEQ-approved best management practices, whereas Tier II projects also require an individual certification review by TCEQ.

7.9.4 Environmental Consequences

Floodplains

The Orange Line LPA would cross floodplains at 13 locations. However, these crossings would be primarily elevated with the exception of one at-grade floodplain crossing associated with a tributary to Williamson Creek. The portion of the LPA at this location would be constructed within existing ROW consisting of impervious cover as a result of constructed roadway.

Direct permanent impacts to floodplains would occur as a result of placement of at-grade facilities and supporting structures along elevated portions of the rail. During construction, additional workspace areas would result in temporary impacts to floodplains.

Surface Waters

Table 7-8 identifies the Orange Line LPA surface water crossings (streams, waterbodies, and wetlands) including the type of feature crossed; and name of the feature, if applicable.

Table 7-8: Surface Waters Crossed by the LPA

Feature Name	Feature Type
Streams	
Boggy Creek	Intermittent Stream/River
Unnamed Tributary to Williamson Creek	Intermittent Stream/River
Williamson Creek	Artificial Path
Colorado River	Artificial Path
East Bouldin Creek	Intermittent Stream/River
Little Walnut Creek	Intermittent Stream/River
Walnut Creek	Perennial Stream/River
Unnamed Tributary to Walnut Creek	Intermittent Stream/River
Waterbodies	
Lady Bird Lake	Lake
Wetlands	
NA	PFO1A
NA	PFO1A

NA – Not Applicable; PFO1A – Palustrine (P), Forested (FO), Broad-leaved Deciduous (1), Temporarily Flooded (A)

The LPA at these water crossings is expected to be primarily constructed within existing ROW with existing stream crossing infrastructure (i.e. culvert or bridge) as part of the current roadway system. LPA design options may include an elevated crossing of the Colorado River/Lady Bird Lake for which the existing bridge would be utilized, resulting in minimal impacts. However, should the LPA require a new bridge over the Colorado River/Lady Bird Lake, impacts would be anticipated for the new bridge support structures as well as temporary impacts from the new bridge construction. These design options will be further assessed during the NEPA and design phase.

Temporary impacts to surface waters would be expected during construction and include grading, vegetation removal, and temporary fill from construction access, staging, and laydown areas. Indirect

impacts would occur as a result of an increase in impervious cover associated with the construction of proposed stations and auxiliary facilities.

Water Quality

Table 7-9 identifies the impaired waters on TCEQ's 2018 Texas Integrated Report - Texas 303(d) List within 5 miles of the LPA including assessment unit ID, stream name, impairment, and category. No impaired waters are crossed by the LPA.

Table 7-9: Impaired Waters within 5 miles of LPA

Assessment Unit ID	Stream Name	Impairment	Category*
1427A-01	Slaughter Creek	Impaired Macrobenthic Community	5b
1429C-01	Waller Creek	Bacteria (Recreation Use); Impaired Macrobenthic Community	5a; 5c
1403K-01	Taylor Slough South	Bacteria (Recreation Use)	4a
1403J-01	Spicewood Tributary to Shoal Creek	Bacteria (Recreation Use)	4a
1428B-05	Walnut Creek	Bacteria (Recreation Use)	4a

*Categories are assigned to an impaired waterbody indicating status and management activities at that waterbody.

- Category 4a – All TMDLs have been completed and approved by the Environmental Protection Agency (EPA)
- Category 5a – TMDLs underway, scheduled, or will be scheduled for one or more parameters
- Category 5b – A review of the standards for one or more parameters will be conducted before a management strategy is selected
- Category 5c – Additional data or information will be collected and/or evaluated for one or more parameters before a management strategy is selected

The construction of new infrastructure, such as stations, in areas that do not currently contain impervious cover would influence the surface water flow and potentially slow the recharge of surface water to ground water. Temporary impacts to water quality would occur as stormwater runoff from construction activities could increase total suspended solids that may contain various substances known to contribute to pollutant loading. Waterbodies identified as impaired would be more sensitive to construction stormwater runoff.

7.9.5 Next Steps / Mitigation Strategies

Floodplains

As part of the NEPA process and future design development, assessments to identify floodplain risks associated with the project and impacts on natural and beneficial floodplain values would be conducted. Mitigation strategies would be determined during the ongoing NEPA process and design development to reduce impacts to floodplains. Mitigation strategies may include minimizing increases to the floodplain elevation, fully spanning where possible, and floodplain controls such as vegetative strips. Mitigation strategies would be implemented in accordance with local regulating authorities. The LPA would include construction within regulated floodplains; therefore, a floodplain development permit would be required and obtained.

Surface Waters

As part of the NEPA process and future design development, a delineation of all surface waters within the corridor will be conducted. Utilizing data from the delineation, potential impacts to surface waters as a result of construction and operation of the LPA will be assessed. Prior to construction delineation, impact assessment, and permitting coordination with USACE may be required.

In accordance with Section 404, impacts to waters of the U.S. would be avoided to the maximum extent practicable. For unavoidable impacts to waters of the U.S., a Section 404 permit would be required. A Nationwide Permit (NWP) 14 authorizes impacts to waters of the U.S. as a result of linear transportation projects. A Pre-Construction Notification (PCN) to the USACE would be required if the loss of waters of the

U.S. exceeds 0.1 acre or if impacts to wetlands are anticipated. If cumulative waters of the U.S. impacts would exceed a 0.5 acre, then an Individual Permit (IP) would be required. Compensatory mitigation is required for stream impacts exceeding 300 linear feet and for wetland impacts exceeding a 0.1 acre.

Strategies to avoid, minimize, and mitigate temporary and permanent impacts to surface waters would be incorporated as part of future design development. Best management practices, such as revegetating, would be implemented. All temporary impacts would be returned to pre-existing conditions.

Water Quality

As part of the NEPA process and future design development, potential water quality impacts as a result of construction and operation of the LPA will be assessed. Stormwater runoff mitigation measures will be implemented based on TMDL implementation plans for those waterbodies that they have been developed. Prior to construction, a SWPPP will be developed outlining best management practices to be implemented minimizing impacts to water quality. All activities during construction would adhere to General Construction permit requirements. Mitigation strategies to reduce impacts to water quality will be developed as part of the NEPA process and future design development. These strategies may include measures to keep runoff rates similar to existing conditions; best management practices to collect sediment and contamination from entering surface water features to reduce total suspended solids, soil erosion, and sedimentation; monitor contaminant levels in stormwater discharges; and site restoration and revegetation for areas disturbed by construction. The project is not expected to affect less than 3 acres of waters in the state and/or less than 1,500 linear feet of streams; therefore, would comply with Tier I project requirements as regulated by the TCEQ.

7.10 Historical and Archeological Resources

7.10.1 Historic Resources

The term historic resource refers to any building, structure, object, and historic district that is listed in, or eligible for listing in, the National Register of Historic Places (NRHP). As presented in the Corridor Conditions Report (Appendix D), an online literature review of historic resources was conducted to identify previously recorded and/or designated historic resources within the Orange Line Corridor (wholly or in part) including buildings, structures, objects and districts. The search also included NRHP-listed or eligible resources as well as designated National Historic Landmarks (NHL), Recorded Texas Historic Landmarks (RTHL), Official Texas Historical Markers (OTHM), State Antiquities Landmarks (SAL), and cemeteries. The search also included properties designated by the City of Austin as Historic Landmarks.

7.10.2 Archeological Resources

An archeological site is any land or marine-based place containing evidence of prehistoric or historic human activity. The probability potential for archeological sites is based on the natural setting and any prior disturbances that may have affected the preservation and integrity potential of cultural deposits. Prehistoric archeological sites tend to be concentrated near water sources. As discussed in the Corridor Conditions Report (Appendix D), numerous streams are crossed by the Orange Line Corridor, including Boggy Creek, Williamson Creek, West Bouldin Creek, East Bouldin Creek, Blunn Creek, the Colorado River, Waller Creek, Shoal Creek, Little Walnut Creek, Walnut Creek, and Wells Branch.

7.10.3 Environmental Consequences

Historic Resources

A total of 38 previously documented historic resources were identified within or adjacent to the LPA, three of which are OTHMs identified within the ROW (Fort Magruder, C.S.A., Espinosa-Olivares-Aguirre Expedition, and Texas School for the Deaf). The remaining historic resources were determined to be in proximity to the corridor and include NRHP-listed or eligible properties, RTHLs, CoA Landmarks, and additional OTHMs as listed in Table 7-10 below. Coordination with THC must be initiated if any OTHM

within, or adjacent to, the ROW is temporarily or permanently moved or relocated during project construction.

Table 7-10: Historic Resources in Proximity to the LPA

Resource	Status
J. P. Schneider Store	NRHP-Listed, SAL, OTHM, CoA Landmark
Bremond Block Historic District	NRHP-Listed
Austin History Center / Austin Public Library	NRHP-Listed, RTHL, CoA Landmark
Central Christian Church	NRHP-Listed, OTHM
Royal Arch Masonic Lodge	NRHP-Listed, CoA Landmark
Wooldridge Square Park	NRHP-Listed, SAL, CoA Landmark
Goodman Building	NRHP-Listed, RTHL, CoA Landmark
Westgate Tower	NRHP-Listed, RTHL
John Hancock House	NRHP-Listed
University Baptist Church	NRHP-Listed
Commercial Building at 4113 Guadalupe Street	NRHP-Listed
Bluebonnet Tourist Camp	NRHP-Listed
Wooldridge Park Historic District	NRHP-Listed
Austin's Moonlight Towers	NRHP-Listed, SAL, CoA Landmark
Bertram Building	NRHP-Listed
Hirshfeld House and Cottage	NRHP-Listed, SAL, RTHL, CoA Landmark
B.J. Smith Property (within Bremond Block Historic District)	RTHL, CoA Landmark
Walter Bremond Home (within Bremond Block Historic District)	RTHL
Catherine Robinson House (within Bremond Block Historic District)	RTHL
Houston-Hale Home (within Bremond Block Historic District)	RTHL, CoA Landmark
Mrs. Alfred Robinson, Sr. Home (within Bremond Block Historic District)	RTHL
Pierre Bremond Home (within Bremond Block Historic District)	RTHL, CoA Landmark
Eugene Bremond House (within Bremond Block Historic District)	RTHL, CoA Landmark
Bremond, John, Jr., House (within Bremond Block Historic District)	RTHL
Austin Woman's Club (within Bremond Block Historic District)	RTHL
Walter Tips House	RTHL, CoA Landmark
Adams-Ziller House	RTHL
Buen Retiro	RTHL
Walnut Creek Baptist Church	RTHL
Claudia Taylor Johnson Hall	RTHL
Ira Hobart Evans (within Bremond Block Historic District)	OTHM
Third Site for Travis County Government	OTHM
Zachary Taylor Fulmore	OTHM
First United Methodist Church	OTHM
Fiskville	OTHM

No previously identified NRHP-listed or eligible historic resources have been identified within the Orange Line Corridor. Therefore, based on anticipated ROW limits, at this time no take of or direct impacts to NRHP-listed or known NRHP-eligible historic resources is anticipated for the LPA. However, an analysis of indirect impacts to these resources will be required and documented in the EIS including a reconnaissance survey of all historic-age resources within the APE. This survey may result in the identification of additional

NRHP-eligible historic resources which would require further evaluation. Results of the survey will be coordinated with the THC.

Archeological Resources

Depositional areas adjacent to these drainages and any previously undisturbed locations within the LPA could be considered high probability areas for the presence of prehistoric archeological sites. Approximately 3 percent of the LPA is within areas exhibiting high archeological probability; 34 percent within areas of moderate probability; the remaining 63 percent within areas of low probability. Historic archeological sites are most often located near historic transportation routes in upland settings and may consist of aboveground structures or structural elements and/or buried historic deposits. Review of historic topographic and Sanborn Fire Insurance maps indicates historic archeological resources may be present throughout the corridor, including the remains of residential and commercial structures and roads.

Based on a review of the Texas Archeological Sites Atlas, the LPA would not affect any previously recorded archeological sites; however, it is possible that buried historic foundations, cisterns, wells, middens, and privies could be found beneath the existing pavement within the LPA. Though much of the Orange Line Corridor has been previously disturbed from urban development, most of the area has not been previously surveyed for archeological resources. At-grade segments of the LPA would be more likely to create an adverse impact to shallowly buried prehistoric and historic sites, and tunneled segments would be most likely to adversely affect deeply buried prehistoric sites that may be present in deep depositional settings near stream crossings.

7.10.4 Next Steps / Mitigation Strategies

Historic Resources

The completion of an Historic Resources Reconnaissance Survey will be required in compliance with Section 106 of the National Historic Preservation Act (NHPA). Early coordination with the Texas Historical Commission (THC), the State Historic Preservation Officer (SHPO) for Texas, will be completed prior to the survey to discuss aspects of the project relating to the reconnaissance survey, including the establishment of an Area of Potential Effects (APE). In addition, information gathered during the 2019 Background Survey report of historic resources within 1,300 feet of the ROW will be used to prepare for the survey.

The Historic Resources Reconnaissance Survey report will identify and document all historic resources properties, buildings, sites, and objects, within the established project APE and historic -period cut-off date. An evaluation of NRHP eligibility will be provided for all identified historic-age resources. All eligibility recommendations in the Historic Resource Reconnaissance Survey report will be coordinated with the THC and documented in the EIS. The Historic Resources Reconnaissance Survey Report will also provide analysis of effects to NRHP-listed or NRHP-eligible historic properties identified in the survey and the results will be coordinated with THC.

Due to the complexity of the project, it may be necessary for the historic resources survey to be conducted in a phased approach and a Programmatic Agreement may be required to develop the process for completing any survey of historic resources that could not be evaluated during the initial Reconnaissance Survey. For any identification of historic properties that must be deferred until after the completion of NEPA, a subsequent Programmatic Agreement (PA) would be developed to outline agreed-upon measures to implement post-review identification and avoid, minimize or mitigate any adverse effects to historic properties. The PA would be developed in coordination with the THC, other signatories, and consulting parties.

Archeological Resources

It will be important to identify archeological sites and potential impacts during subsequent project development phases. Therefore, an archeological survey of the LPA will be needed prior to construction. Impacts to any areas of high prehistoric probability and areas in which buried historic and prehistoric sites

may be present would require coordination with the THC / SHPO. If any archaeological historic properties or State Antiquities Landmarks would be affected by the LPA, then a resolution of any potential adverse effects would need to be carried out in consultation with the THC/SHPO, which may include data recovery, avoidance, and/or minimization of impacts.

7.11 Parklands

As documented within the Corridor Conditions Report (Appendix D), there are 58 parks and recreational facilities located within the Orange Line Corridor Study Area (which was defined as ½-mile from the corridor centerline). These resources include parks, trails, greenbelts, and open space areas. Of these, seven were identified adjacent to and/or intersecting the Orange Line Corridor and include: Ann and Roy Butler Hike and Bike Trail system; Auditorium Shores; Payton Gin Pocket Park; South Austin Island; Walnut Creek Greenbelt; Walnut Creek Metropolitan Park; Wooldridge Square. Additionally, three urban trails are proposed in South Austin that would cross the Orange Line Corridor, including the East Ben White Boulevard Corridor, Williamson Creek Trail, and South Boggy Creek Trail. For more additional information on these parks and recreational facilities, see Section 3.10 of the Corridor Conditions Report (Appendix D).

7.11.1 Environmental Consequences

It is anticipated implementation of the LPA would partially or fully acquire portions of parks and recreational facilities. Potential direct impacts would be limited to loss of land due to the partial or full acquisition as well as closure and/or detours. Subsequent indirect impacts could occur and include changes in park and recreational features, access to facilities, increased noise levels, and visual impacts due to construction within the corridor. It is important to note that all findings are subject to change based on further assessment as part of the NEPA process and design.

No future trails or recreational resources were identified within the relevant neighborhood and combined neighborhood plans that would intersect the LPA; however, several plans outline improvements to existing recreational facilities, greenbelts, and trails within the corridor. These areas identified include Bouldin Neighborhood Plan, Brentwood/Highland Combined Neighborhood Plan, Greater South River City Combined Neighborhood Plan, North Loop Neighborhood Plan, and South Congress Neighborhood Plan. The proposed plans are preliminary, and additional information is not currently available. Coordination with jurisdictions will continue throughout the project as these plans develop and updates to neighborhoods and master plans may occur while this project is progressing.

Parks and recreational resources within the corridor may be afforded protection under Section 4(f) as defined in 23 CFR 774. As it is anticipated Section 4(f) properties would be directly and indirectly impacted, coordination with DOT would be required. A Section 4(f) analysis conducted as part of the future NEPA process will assess and summarize impacts to each resource.

Section 6(f) of the Land and Water Conservation Fund (LWCF) Act (36 CFR 59) protects recreational lands planned, acquired, or developed with funds from the LWCF. Once an area has been funded with LWCF assistance, it is continually maintained in public recreation use unless the National Park Service approves substitution property. Section 6(f) applies to all transportation projects involving possible conversions of the LWCF property, whether federal funding is being used for the project. Walnut Creek Metropolitan Park was identified within the Orange Line Corridor and has received LWCF grant assistance (NPS, 2019). This park is in the northern portion of the corridor. Based on anticipated ROW limits, partial acquisition of this property is anticipated as a result of the LPA.

7.11.2 Next Steps / Mitigation Strategies

As part of the NEPA process and development of future design, additional analysis of potential impacts to parks and recreational facilities identified within the LPA will be conducted. Parks and recreational facilities that qualify for protection under Section 4(f) will be evaluated to determine if potential impacts or acquisitions would be considered *de minimis* and coordination with FTA and DOT will be conducted, as

necessary. Coordination with the CoA and the National Park Service to verify status and limits of Walnut Creek Metropolitan Park, identified as Section 6(f) property, will also be conducted, as necessary. Additional analysis to determine the extent of potential impacts to the Section 6(f) property will be conducted. In addition, coordination with local jurisdictions and regulatory agencies pertaining to land impacts, acquisition, and neighborhood planning may be required.

7.12 Hazardous Materials

This analysis identifies sites within or adjacent to the Orange Line Corridor that have the potential to have active or historic soil or groundwater contamination in and adjacent to the corridor and would be considered sites with recognized environmental conditions (RECs), as defined by the American Society for Testing and Materials (ASTM). Sites with RECs are those where “the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property due to a release to the environment; under conditions indicative of a release to the environment; or under conditions that pose a material threat of a future release to the environment” (ASTM, 2013).

7.12.1 Environmental Consequences

Of the initial 218 hazardous materials sites within the Orange Line Study Area identified in the Corridor Conditions Report (Appendix D), 74 sites were determined to be within or adjacent to the corridor (Table 7-11). As part of the study, three databases were analyzed including Industrial Hazardous Waste Corrective Action (IHWCA), Leaking Petroleum Storage Tanks (LPST), and Voluntary Cleanup Program (VCP). These databases were reviewed due to the nature of the database (reporting releases of hazardous materials or wastes into the environment); however, further research may reveal additional RECs with the potential to impact the project. This additional research will be conducted during the NEPA and design phases of the project.

Of the 74 sites considered to be within or adjacent to the Orange Line Corridor, 64 sites were from the LPST database with only one of those sites having a status of active. The IHWCA and VCP database accounted for 10 sites between them with all sites having a status of inactive (Table 7-11).

Table 7-11: Hazardous Material Sites with Potential Recognized Environmental Conditions

Site Name	Address	Regulatory Database	Site Description
Reef Hemphill Park	2810 Hemphill Park	LPST	Site is an inactive LPST with an end date of 2008. Residual soil/groundwater contamination could be present.
Tetco 1144	8911 N. Lamar Blvd.	LPST	Site is an inactive LPST with an end date of 2010. Residual soil/groundwater contamination could be present.
7 Eleven Store 30467	10111 N. Lamar Blvd.	LPST	Site is an inactive LPST with an end date of 2009. Residual soil/groundwater contamination could be present.
Diamond Shamrock 963	3706 Guadalupe St.	LPST	Site is an inactive LPST with two entries ending in 1993 and 2003. Residual soil/groundwater contamination could be present.
S. Food Mart	6301 N. Lamar Blvd.	LPST	Site is an inactive LPST with an end date of 2007. Residual soil/groundwater contamination could be present.
University Texaco	3016 Guadalupe St.	LPST	Site is an inactive LPST with an end date of 2005. Residual soil/groundwater contamination could be present.

Site Name	Address	Regulatory Database	Site Description
Joe Daywood	3512 Guadalupe St.	LPST	Site is an inactive LPST with an end date of 1996. Residual soil/groundwater contamination could be present.
Ballards Drive In Grocery 5	7545 N. Lamar Blvd.	LPST	Site is an inactive LPST with an end date of 1988. Residual soil/groundwater contamination could be present.
Pats Lawnmower Service	7205 N. Lamar Blvd.	LPST	Site is an inactive LPST with an end date of 1994. Residual soil/groundwater contamination could be present.
Diamond Shamrock 964	806 W. Rundberg Ln.	LPST	Site is an inactive LPST with an end date of 1996. Residual soil/groundwater contamination could be present.
Ryder Truck Rental Fac	8305 N Lamar Blvd.	LPST	Site is an inactive LPST with an end date of 1990. Residual soil/groundwater contamination could be present.
Riverside Chevron	400 S. Congress Ave.	LPST	Site is an inactive LPST with an end date of 1994. Residual soil/groundwater contamination could be present.
Laidlaw Transit Inc.	4300 S. Congress Ave.	LPST	Site is an inactive LPST with two entries ending in 1990 and 1991. Residual soil/groundwater contamination could be present.
Dodd Automotive	4227 Guadalupe St.	LPST	Site is an inactive LPST with an end date of 1993. Residual soil/groundwater contamination could be present.
Taco Bell	2801 Guadalupe St.	LPST	Site is an inactive LPST with an end date of 1997. Residual soil/groundwater contamination could be present.
7 Eleven 25445	8900 N. Lamar Blvd.	LPST	Site is an inactive LPST with an end date of 1996. Residual soil/groundwater contamination could be present.
Texan Market 5	2700 S. Congress Ave.	LPST	Site is an inactive LPST with an end date of 1998. Residual soil/groundwater contamination could be present.
Vacant Building	12800 N. Lamar Blvd.	LPST	Site is an inactive LPST with an end date of 1991. Residual soil/groundwater contamination could be present.
7 Eleven 23295	1814 Guadalupe St.	LPST	Site is an inactive LPST with two entries ending in 2002 and 2018. Residual soil/groundwater contamination could be present.
Cen-Tex Nissan	1400 S. Congress Ave.	LPST	Site is an inactive LPST with an end date of 1995. Residual soil/groundwater contamination could be present.
Environmental Impact	3800 S. Congress Ave.	LPST	Site is an inactive LPST with an end date of 2001. Residual soil/groundwater contamination could be present.
Floyds Auto Sales Service	5253 N. Lamar Blvd.	LPST	Site is an inactive LPST with an end date of 1993. Residual soil/groundwater contamination could be present.

Site Name	Address	Regulatory Database	Site Description
Jack Brown Cleaners	2215 S. Congress Ave.	LPST	Site is an inactive LPST with an end date of 1992. Residual soil/groundwater contamination could be present.
Shop N Carry Food Store	8514 S. Congress Ave.	LPST	Site is an inactive LPST with an end date of 1997. Residual soil/groundwater contamination could be present.
7 Eleven 16996	2600 Guadalupe St.	LPST	Site is an inactive LPST with an end date of 1995. Residual soil/groundwater contamination could be present.
Chevron Station 107149	2817 Guadalupe St.	LPST	Site is an inactive LPST with an end date of 2001. Residual soil/groundwater contamination could be present.
Zippy Food Store	6600 N. Lamar Blvd.	LPST	Site is an inactive LPST with an end date of 1987. Residual soil/groundwater contamination could be present.
Mobil SS 12D93	2401 S. Congress Ave.	LPST	Site is an inactive LPST with an end date of 1988. Residual soil/groundwater contamination could be present.
7 Eleven 12683	808 W. Koenig Ln.	LPST	Site is an inactive LPST with an end date of 2003. Residual soil/groundwater contamination could be present.
Former Evans Texaco	4712 S. Congress Ave.	LPST	Site is an inactive LPST with an end date of 2004. Residual soil/groundwater contamination could be present.
Austin Sales	825 Prairie Trail	LPST	Site is an inactive LPST with an end date of 1990. Residual soil/groundwater contamination could be present.
7 Eleven Store 36656	620 W. 29th St.	LPST	Site is an inactive LPST with an inactive date of 2015. Residual soil/groundwater contamination could be present.
Sunbeck Automotive	4139 S. Congress Ave.	LPST	Site is an inactive LPST with an end date of 1996. Residual soil/groundwater contamination could be present.
Thurman Warehouse	4714 S. Congress Ave.	LPST	Site is an inactive LPST with an end date of 1992. Residual soil/groundwater contamination could be present.
Gaskins Real Estate Brokerage	2718 Guadalupe St.	LPST	Site is an inactive LPST with an end date of 1990. Residual soil/groundwater contamination could be present.
Texas Department of Public Safety	5805 N. Lamar Blvd.	LPST	Site is an inactive LPST with an end date of 1990. Residual soil/groundwater contamination could be present.
Cash American Pawn Shop	3402 Guadalupe	LPST	Site is an inactive LPST with an end date of 1994. Residual soil/groundwater contamination could be present.
Fast Stop Store 11	5526 S. Congress Ave.	LPST	Site is an inactive LPST with an end date of 2004. Residual soil/groundwater contamination could be present.
American Tree Co.	4311 S. Congress Ave.	LPST	Site is an inactive LPST with an end date of 1991. Residual soil/groundwater

Site Name	Address	Regulatory Database	Site Description
			contamination could be present.
Austin Homestead 451	819 W. North Loop Blvd.	LPST	Site is an inactive LPST with two entries ending in 1993 and 1995. Residual soil/groundwater contamination could be present.
Giant Food Mart	8700 N. Lamar Blvd.	LPST	Site is an inactive LPST with an end date of 2014. Residual soil/groundwater contamination could be present.
Pacific Southwest Bank Property	907 S. Congress Ave.	LPST	Site is an inactive LPST with an end date of 1992. Residual soil/groundwater contamination could be present.
Diamond Shamrock Station 80	3909 Guadalupe St.	LPST	Site is an inactive LPST with an end date of 1999. Residual soil/groundwater contamination could be present.
3 Star Texaco	5630 N. Lamar Blvd.	LPST	Site is an inactive LPST with two entries ending in 2003 and 2016. Residual soil/groundwater contamination could be present.
7 Eleven 39068	120 W. Slaughter Ln.	LPST	Site is an inactive LPST with an end date of 2010. Residual soil/groundwater contamination could be present.
Texaco	1900 Guadalupe St.	LPST	Site is an inactive LPST with an end date of 1999. Residual soil/groundwater contamination could be present.
Western Auto	9316 N. Lamar Blvd.	LPST	Site is an inactive LPST with an end date of 1991. Residual soil/groundwater contamination could be present.
Austin Four Corners Old Stop N Go	111 W. William Cannon Dr.	LPST	Site is an inactive LPST with an end date of 1993. Residual soil/groundwater contamination could be present.
Circle K 3216	4619 S. Congress Ave.	LPST	Site is an inactive LPST with an end date of 1996. Residual soil/groundwater contamination could be present.
Swanns Garage Radiator	6203 N. Lamar Blvd.	LPST	Site is an inactive LPST with an end date of 1993. Residual soil/groundwater contamination could be present.
7 Eleven Store 24008	5101 N. Lamar Blvd.	LPST	Site is an active LPST with a start date of 2018. This is an active LPST site soil/groundwater contamination has the potential to be present.
A-Aabat Storage Facility	6705 N. Lamar Blvd.	LPST	Site is an inactive LPST with an end date of 2012. Residual soil/groundwater contamination could be present.
Lamar Food Mart	8545 N. Lamar Blvd.	LPST	Site is an inactive LPST with an inactive date of 2017. Residual soil/groundwater contamination could be present.
Vacant Property	11902 N. Lamar Blvd.	LPST	Site is an inactive LPST with an end date of 1992. Residual soil/groundwater contamination could be present.

Site Name	Address	Regulatory Database	Site Description
Shoppers Mart 24	10500 N. Lamar Blvd.	LPST	Site is an inactive LPST with an end date of 1995. Residual soil/groundwater contamination could be present.
Ding Dong Auto Center	6916 N. Lamar Blvd.	LPST	Site is an inactive LPST with an end date of 1993. Residual soil/groundwater contamination could be present.
Woods Honda Fun Center	6509 N. Lamar Blvd.	LPST	Site is an inactive LPST with an end date of 1992. Residual soil/groundwater contamination could be present.
7 Eleven 22245	2103 S. Congress Ave.	LPST	Site is an inactive LPST with an end date of 1992. Residual soil/groundwater contamination could be present.
Houston Convenience Store 901	2105 S. Congress Ave.	LPST	Site is an inactive LPST with an end date of 2003. Residual soil/groundwater contamination could be present.
Former 7 Eleven Store 20079	6702 S. Congress Ave.	LPST	Site is an inactive LPST with an end date of 2008. Residual soil/groundwater contamination could be present.
Exxon 67450	1901 Guadalupe St.	LPST	Site is an inactive LPST with an end date of 2005. Residual soil/groundwater contamination could be present.
Coxville	12600 N. Lamar Blvd.	LPST	Site is an inactive LPST with an end date of 1994. Residual soil/groundwater contamination could be present.
Diamond Shamrock Corner Store 2	3630 S. Congress Ave.	LPST	Site is an inactive LPST with an end date of 1997. Residual soil/groundwater contamination could be present.
Stones Texaco	2300 S. Congress Ave.	LPST	Site is an inactive LPST with an end date of 2008. Residual soil/groundwater contamination could be present.
Texas Dept of Mental Health and Mental Retardation Austin State Hospital	4110 Guadalupe St.	IHWCA	Site is an inactive IHWCA with an end date as of 2004.
Green Water Treatment Plant - City of Austin Pub Works	600 W. Cesar Chavez St.	IHWCA	Site is an inactive IHWCA with an end date as of 2009.
Majestic Products Co. Austin	118 E. Alpine Rd.	IHWCA	Site is an inactive IHWCA with an end date as of 1998.
Proposed CVS Pharmacy	5526 S. Congress Ave.	IHWCA	Site is an inactive IHWCA with an end date as of 2006.
Aarons Auto Parts Austin	8409 S. Congress Ave.	IHWCA	Site is an inactive IHWCA with an end date as of 2005.
American Cleaners Facility	309 W. 5th St.	VCP	Site is an inactive VCP with an end date as of 2006.
Soco Center	3630 S. Congress Ave.	VCP	Site is an inactive VCP with an end date as of 2014.
North Park Shopping Center	9616 N. Lamar Blvd.	VCP	Site is an inactive VCP with an end date as of 1997.

Site Name	Address	Regulatory Database	Site Description
Austin Museum of Art	400 Block W. 3rd St.	VCP	Site is an inactive VCP with an end date as of 2011.
7121 N Lamar Blvd	7121 N Lamar Blvd.	VCP	Site is an inactive VCP with an end date as of 2013.

7.12.2 Next Steps / Mitigation Strategies

It has been determined that hazardous materials have a high potential to be encountered during the construction activities of the proposed Orange Line project. Most of these contaminants would be associated with the previously mentioned potential RECs. Avoidance of these areas would be the most feasible management practice during the future design and construction phases of the project. When avoidance is not possible due to ROW acquisition needs, known hazardous material issues at properties should be investigated further prior to acquisition/construction begins. Knowing what hazardous materials issues exist before construction begins is critical for planning appropriate special materials management, handling, disposal, and worker health, and safety practices.

The full extent of potential contamination at these sites cannot be fully determined until a more comprehensive investigation can be completed including Phase 1 Environmental Site Assessment (ESA), and potential Phase 2 ESA investigations to determine size, status, known contaminants, and effects to groundwater and soils. Such investigations will take place during the NEPA and design phase.

7.13 Public Safety and Security

As identified in the Corridor Conditions Report in Appendix D, eight fire stations, two medical centers, and one Austin Police Department (APD) station are located within the Orange Line Corridor Study Area. In addition, Capital Metro Security officers provide daily 24-hour coverage of the entire Capital Metro service area. In 2018, 90 percent of fire emergency calls were responded to in under 8:07 minutes while 90 percent of medical emergency calls were responded to in under 9:17 minutes.

The most common type of crime reported in 2018 within the Orange Line Corridor study area was burglaries. These included burglary of non-residential sheds, non-residential structures, coin-op machines, residences, and vehicles.

7.13.1 Environmental Consequences

Potential impacts to public safety and security as a result of the LPA are outlined in Table 7-12 below.

Table 7-12: Potential Impacts to Public Safety and Security

Potential Impact	Description
Operational-Related	Operational-related impacts would have the potential to occur from possible derailment or other mechanical failure during normal operations. The potential impact of derailment would be a combination of the likelihood for derailment to occur, the potential for a derailed vehicle to leave the track area or overturn, and the likelihood that a derailed vehicle could leave the ROW. The LPA is proposed to be primarily constructed within existing roadway ROW; therefore, a derailment contained within the ROW could represent an impact primarily to the safety of the passengers, vehicles, and persons on the roadway. If a derailed vehicle left the ROW, additional impacts to persons and property immediately adjacent to the corridor would have the potential to occur. Mechanical failure could also pose a risk to passengers or employees if confined on a non-operational vehicle and may introduce safety hazards for employees performing emergency maintenance.

Potential Impact	Description
Collisions	Collisions would have the potential to occur if an HCT vehicle were to strike a person, animal, vehicle, or other object either on the track or as a result of derailment.
Natural Hazards	Natural hazards, such as tornados and flooding, as well as fire would have the potential to cause impacts to passenger and employee safety.
Increased Traffic	Proposed station areas would have the potential to experience an increase in traffic which could impact the safety of passengers, employees, and others in or around the station areas.
Construction-related	Construction-related impacts would have the potential to occur as a result of construction vehicle and equipment emissions. In addition, the use of construction equipment would potentially create a risk to the physical safety of employees, contractors, and other individuals present on the construction sites. The movement of construction equipment between sites would also present possible hazards to nearby traffic and pedestrian movements. In addition, emergency response times would have the potential to be impacted during construction.
Security Threat	Criminal activity at facilities and vandalism or tampering with the Orange Line rail or HCT vehicles would potentially represent a security threat. This could include passenger safety with regard to harassment, robbery, and person-to-person interactions.
Closure of Left-Turn Lanes	Closures of left-turn lanes could require longer travel routes and create delays in emergency response times.

7.13.2 Next Steps / Mitigation Strategies

During NEPA and design, an analysis of the potential impacts and risks to public safety and security to the surrounding community as well as passengers and employees that would use the Orange Line will be conducted for the LPA. A review of the current safety and security conditions, recent criminal activity and potential vulnerabilities, and emergency response capabilities will be included in the analysis.

As part of NEPA process and development of the final design, all actions, and anticipated impacts and mitigation strategies will comply with applicable federal regulations including Rail Safety Improvement Act, 2008; 49 U.S.C. §§ 20101 et seq., Railroad Safety; 49 C.F.R. 1580, Department of Homeland Security/Transportation Security Administration; and Security Directives for Passenger Rail. Mitigation strategies to reduce impacts to public safety and security may include:

- Preparation of an emergency preparedness plan
- Evaluation of potential delays in emergency response times with the possible mitigation of mountable curbs for emergency vehicles.
- Development of a system safety program to systematically evaluate safety hazards and manage risks
- Preparation of a system security plan to document processes for mitigating and/or eliminating security threats, vulnerabilities, and risks

8.0 Mitigation Strategies Summary

A summary of the mitigation strategies/ next steps as described in Section 7.0 is provided below in Table 8-1.

Table 8-1: Mitigation Strategies Summary

Environmental Resource Area	Impact Evaluation Summary	Mitigation Strategies/Next Steps
Transportation	<ul style="list-style-type: none"> Changes to the underlying bus network, including elimination of MetroRapid 801, would result in a reduction in revenue hours and miles. Modifications to roadway cross sections to accommodate the Orange Line LPA would have impacts on the transit system in the corridor, including bus routes changed to other corridors. Introduction of street-level HCT would degrade LOS and increase intersection delays for most intersections along the Orange Line Corridor. LPA would require the conversion of on-street parking spaces sharing the ROW with the HCT guideway 	<ul style="list-style-type: none"> Impacts of the LPA to the existing bus system will be analyzed further in NEPA and design. Capital Metro will continue to work closely with the CoA Transportation Department to the extent of the potential impacts and collaborate to develop mitigation during NEPA. Where possible, ROW expansion or a limited conversion of sidewalk and bicycle lanes could alleviate traffic impacts. The impact on parallel routes to the corridor will be studied to determine whether underutilized capacity could accommodate some traffic shifting from the LPA to other routes. Congestion pricing for vehicles, especially in the downtown zone, could mitigate traffic impacts as drivers unwilling to pay a fee to enter the Orange Line Corridor during peak hours could choose alternative routes or mode shift to transit or other options. Based on the likely operating scenario of the LPA, the headways for HCT could be adjusted, which will be reflected in subsequent modeling. Predictive signal timing and coordination based on HCT operations could be implemented. Adaptive signal timing could be implemented in some areas to adjust cycle lengths to demand. Business access mitigation could be necessary should left turns need to be removed, driveways closed, parking is removed, or other ROW changes impact customer access to businesses on the corridor. Microsimulation analysis using VISSIM to include an existing model, a future year 2045 “no-build” model and build alternative models will be assessed. Microsimulation model will include the corridor along the alignment and the Lavaca Street from Cesar Chavez Street to MLK Boulevard.

Environmental Resource Area	Impact Evaluation Summary	Mitigation Strategies/Next Steps
		<ul style="list-style-type: none"> • AM and PM peak turning movement counts will be collected for all existing signalized intersections, these locations include intersection where signalization is in the process of being constructed. • Travel times for several routes passing through the network and queue lengths at most congested areas will be collected and used for model calibration. • Model calibration will be necessary to ensure that the existing model accurately reflects traffic patterns. • Model will include transit vehicle dwell times, ridership, proposed transit stop locations, and transit schedule to accurately model future transit services. • Future modeling will utilize MPO 2045 travel demand model for future volume projections, future geometry, and origin-destination pairings. • Synchro will be used to prepare coordinated traffic signal timings along the corridor based on the projected volume. • On-street parking lanes in the corridor may be utilized so existing travel lanes are not taken.
Land Use and Economic Development	<ul style="list-style-type: none"> • The LPA is consistent with local land use plans and policies • Current land uses in areas of potential acquisition would be converted to transportation use 	<ul style="list-style-type: none"> • The properties and acreages in the corridor affected by the LPA will be determined. • NEPA studies will evaluate station compatibility with surrounding land uses when the exact station locations and sizes are known.
Displacements and Relocations	<ul style="list-style-type: none"> • The LPA would result in partial and full acquisitions for additional ROW (primarily affecting commercial facilities) 	<ul style="list-style-type: none"> • During design, acquisitions will be minimized as much as possible. • A mitigation and property relocation plan (including just compensation) will be developed in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (42 USC § 4601)
Neighborhoods	<ul style="list-style-type: none"> • Potential impacts to community cohesion within and adjacent to the corridor include both adverse and beneficial impacts associated with 	<ul style="list-style-type: none"> • All reasonably foreseeable social, economic, and environmental effects on minority populations and low-income populations will be identified and addressed as part of NEPA. • As part of future design decisions and NEPA,

Environmental Resource Area	Impact Evaluation Summary	Mitigation Strategies/Next Steps
	<p>changes in traffic and accessibility.</p> <ul style="list-style-type: none"> • Areas of potential disturbance would be primarily located within existing roadway ROW • LPA is not anticipated to divide neighborhoods or communities or adversely affect community cohesion. • LPA is anticipated to benefit surrounding neighborhoods, communities, and EJ populations by reducing vehicular traffic congestion and improving mobility as a result of increased access to public transit. 	<p>potentially affected census blocks or census block groups with identified EJ populations will be evaluated for disproportionately high and adverse effects and selected for outreach.</p> <ul style="list-style-type: none"> • Any ROW acquisition would comply with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. • An analysis of the potential for disproportionately high and adverse effects on EJ populations will be conducted during NEPA studies. • An analysis of the accessibility and functionality of community facilities will be conducted during design and NEPA studies. • An analysis of the potential adverse and beneficial impacts to economic development within and surrounding the corridor will be conducted during NEPA studies. • Assessments during NEPA studies will be conducted in accordance with the DOT Order 5610.2 (a), Actions to Address Environmental Justice in Minority Populations and Low-Income Populations and 2012 Updated Final Order on Environmental Justice and the FTA Circular 4703.1, Environmental Justice Policy Guidance for Federal Transit Administration. • Capital Metro, in coordination with City, may undertake mitigation measures for the secondary impact of gentrification. The City may choose to adopt affordable housing measures which, if implemented, would be discussed during NEPA studies.
Visual Quality	<ul style="list-style-type: none"> • The Orange Line ROW will define the visual impacts within the corridor. • With the exception of the Lady Bird Lake crossing for which viewer response and visual change would be moderate to high, overall along the Orange Line corridor, visual impacts would be neutral to adverse with the degree of 	<ul style="list-style-type: none"> • During NEPA studies, identify key viewpoints including historic resources, parks, designated scenic viewpoints, or views typical of a segment. • Conduct visual simulations of the LPA at key viewpoints, including the Capitol View Corridor • Determine locations of noise walls, as applicable • Investigate viewer responses through NPA meetings • In areas of potentially higher visual impact, the LPA would include a tree furnishing zone. • Potential mitigation measures will be

Environmental Resource Area	Impact Evaluation Summary	Mitigation Strategies/Next Steps
	<p>impact being low to moderate depending on number and location of potential elevated structures along the LPA.</p>	<p>determined during NEPA through coordination with the affected public and Capital Metro, but may include:</p> <ul style="list-style-type: none"> ○ Screening where practicable through visual barriers such as vegetation (including trees and shrubs), or walls ○ Lighting during construction (in areas where nighttime construction activities could occur) ○ Lighting for permanent operations
Air Quality	<ul style="list-style-type: none"> ● No adverse air quality impacts would occur under the LPA ● Localized short-term emission increases would occur during construction 	<ul style="list-style-type: none"> ● During NEPA studies, a conformity analysis may be required if the Greater Austin MSA becomes nonattainment for one or more NAAQS pollutants. ● For the short-term emission increases, mitigation strategies may include: <ul style="list-style-type: none"> ○ Adhere to the Texas Low Emission Diesel Fuel Program for all diesel fuel on-road motor vehicles and non-road construction equipment. ○ Keep engines and exhaust systems on construction equipment in good working order. Limit idling of construction equipment during periods when the equipment is inactive, and properly maintain construction equipment in accordance with the manufacturer's specifications. ○ Cover and/or treat disturbed areas where practicable with dust suppression techniques, including but not limited to soil binders, sprinkling, watering and/or chemical stabilizer/suppressants. ○ Control fugitive dust emissions by the application of water, presoaking, or other dust suppression technique during all clearing, grubbing, scraping, excavation, grading, cut and fill, and demolition activities. ○ Phase ground disturbing activities to the greatest extent possible to reduce the amount of disturbed surfaces at any one time. ○ Locate stationary equipment as far from sensitive receivers as possible (when conditions allow).
Noise and	<ul style="list-style-type: none"> ● Many noise and vibration 	<ul style="list-style-type: none"> ● During design and NEPA, a detailed noise and

Environmental Resource Area	Impact Evaluation Summary	Mitigation Strategies/Next Steps
Vibration	<p>sensitive properties are located within the screening distances of the LPA, including over 3,200 single family homes, 1,000 apartment buildings/units, 50 religious institutions, 11 parks and cemeteries, and over 2 dozen schools, colleges and libraries.</p> <ul style="list-style-type: none"> • While an LRT vehicle on elevated track increases the perceptible noise levels by approximately 4 decibels over at-grade track operations, significant impacts that cannot be mitigated in either elevated or at-grade options are not anticipated because of the expected elevated existing noise levels within the majority of the existing corridor ROW. • Due to limited variability in the north-south alignment, with no more that 6-8 sections of tight curve radii track along the 20-mile corridor, noise impacts from wheel squeal are not expected. • Given the general alignment within the center of existing multi-lane roadways, significant vibration impacts are not likely, with the exception of where bedrock geography may lie near the surface. 	<p>vibration analysis will be conducted, identifying impacts to sensitive land uses and potential mitigation measures and their effectiveness.</p> <ul style="list-style-type: none"> • The following mitigation strategies for in-road transit alignment projects should be considered during the planning, preliminary and final engineering stages to reduce potential noise and vibration impacts from a project: <ul style="list-style-type: none"> ○ Stringent vehicle and equipment noise specifications ○ Vehicle skirts ○ Undercar absorption ○ Noise barriers at the property line ○ Special track support systems
Ecosystems	<ul style="list-style-type: none"> • Impacts to ecosystems, including threatened and endangered species suitable habitat, could occur where natural areas, wildlife corridors, and karst 	<ul style="list-style-type: none"> • Conduct habitat assessments and presence-absence surveys for the golden-cheeked warbler and bald eagle, as necessary. • Contact the USFWS if presence is confirmed to determine appropriate BMPs and mitigation measures

Environmental Resource Area	Impact Evaluation Summary	Mitigation Strategies/Next Steps
	<p>features are present within the Orange Line Corridor; however, the corridor is centered over existing roadway infrastructure and all major wildlife crossings (i.e. perennial streams and adjacent riparian habitats) would be elevated for the LPA.</p> <ul style="list-style-type: none"> • All proposed stations locations would be constructed within previously developed land, resulting in no adverse impacts to wildlife or fragmentation of habitats. • Temporary impacts from construction activities, including noise, dust, stormwater pollution, sedimentation, and obstruction could occur. • Suitable habitat identified for the golden-cheeked warbler within Walnut Creek Metropolitan Park and the Walnut Creek Greenbelt could be impacted by construction activities. • Any actively nesting birds within 300 feet of construction activities could be indirectly impacted by noise, air quality, and visual disturbances along the corridor during the nesting season (March through July). • No impacts to the bald eagle are anticipated as much of this species' preferred habitat has been converted to manicured 	<ul style="list-style-type: none"> • Complete a GA and karst habitat assessment to determine the presence of sensitive karst features and suitable habitat for listed karst species. • If karst habitat is identified within a construction area proposed for sub-surface drilling or boring, contact the USFWS and CoA to help determine appropriate mitigation measures. • Implement mitigation strategies and BMPs to reduce impacts to surface and sub-surface water quality such as completing an Edwards Aquifer Plan and SWPPP and complying with all water quality standards set forth by the TCEQ. • Complete required CoA documentation for surface point recharge features, rimrock, or other designated critical environmental features in accordance with the CoA Environmental Criteria Manual. • Conduct a habitat assessment and presence-absence surveys for mussel species within perennial waterways. • Contact TPWD to develop additional BMPs and mitigation measures to protect sensitive mussel habitat. • If construction activities should occur during the nesting season for migratory birds (March through September), survey proposed construction areas for active migratory bird nests. • Contact USFWS if migratory bird nests are identified to determine the appropriate action. • Coordinate with USFWS, TPWD, and CoA to help determine the need for specific next steps and additional mitigation measures to reduce impacts to ecosystems and protected species, and comply with federal, state, and local laws, regulations, and ordinances.

Environmental Resource Area	Impact Evaluation Summary	Mitigation Strategies/Next Steps
	<p>parkland and trails within and in proximity to the corridor.</p> <ul style="list-style-type: none"> • Potential impacts to aquatic species and their habitats may as a result of construction and bridge infrastructure. • Impacts to karst species and their habitats could include boring or any sub-surface construction activities within or near karst features. • Direct impacts to migratory birds could include any construction activity that disturbs nesting individuals or removes or destroys an active bird nest. • Indirect and direct impacts to wildlife corridors could impact the quality and use of these corridors. 	
Water Resources	<ul style="list-style-type: none"> • The LPA would cross floodplains at 13 locations. However, these crossings would be primarily elevated with the exception of one at-grade floodplain crossing associated with a tributary to Williamson Creek. • Direct impacts to floodplains would occur as a result of placement of at-grade facilities and supporting structures along elevated portions of the rail. • During construction, additional workspace areas would result in temporary impacts to floodplains. 	<ul style="list-style-type: none"> • Assessments to identify floodplain risks associated with the project and impacts on natural and beneficial floodplain values will be conducted during NEPA. • Mitigation strategies for potential floodplain impacts will be determined during the ongoing NEPA process and design development in coordination with local floodplain authorities, but may include: <ul style="list-style-type: none"> ○ minimizing increases to the floodplain elevation ○ fully spanning where possible ○ floodplain controls such as vegetative strips • A detailed, USACE-compliant waters of the U.S. delineation will be required during NEPA to determine extent of impacts to waters of the U.S. • Coordination with the USACE – Fort Worth District will be necessary for Section 404 Clean Water Act permitting requirements • Strategies to avoid, minimize, and mitigate

Environmental Resource Area	Impact Evaluation Summary	Mitigation Strategies/Next Steps
	<ul style="list-style-type: none"> • The LPA would impact waters of the U.S. within the Orange Line Corridor, including the Colorado River. • Water crossings are expected to be primarily constructed within existing ROW with existing stream crossing infrastructure (i.e. culvert or bridge) as part of the current roadway system. • LPA may include an elevated crossing of the Colorado River/Lady Bird Lake for which the existing bridge would be utilized, resulting in minimal impacts. • Should the LPA require a new bridge over the Colorado River/Lady Bird Lake, impacts would be anticipated for the new bridge support structures as well as temporary impacts from the new bridge construction. • Temporary impacts to surface waters would be expected during construction and include grading, vegetation removal, and temporary fill from construction access, staging, and laydown areas. • The construction of new infrastructure, such as stations, in areas that do not currently contain impervious cover would influence the surface water flow and potentially slow 	<p>temporary and permanent impacts to surface waters will be incorporated as part of future design development.</p> <ul style="list-style-type: none"> • Best management practices, such as revegetating, would be implemented. • All temporary impacts would be returned to pre-existing conditions. • As part of the NEPA process and future design development, potential water quality impacts as a result of construction and operation of the LPA will be assessed. • Stormwater runoff mitigation measures would be implemented based on TMDL implementation plans for those waterbodies that they have been developed. • Prior to construction, a SWPPP would be developed outlining best management practices to be implemented. • Mitigation strategies to reduce impacts to water quality will be developed as part of the NEPA process and future design development, and may include: <ul style="list-style-type: none"> ○ measures to keep runoff rates similar to existing conditions ○ best management practices to collect sediment and contamination from entering surface water features to reduce total suspended solids soil erosion, and sedimentation ○ monitor contaminant levels in stormwater discharges ○ site restoration and revegetation for areas disturbed by construction.

Environmental Resource Area	Impact Evaluation Summary	Mitigation Strategies/Next Steps
	<p>the recharge of surface water to ground water.</p> <ul style="list-style-type: none"> Temporary impacts to water quality would occur as stormwater runoff from construction activities could increase total suspended solids that may contain various substances known to contribute to pollutant loading. 	
Historical and Archeological Resources	<ul style="list-style-type: none"> The LPA would affect three OTHMs identified within the ROW Based on anticipated ROW limits at this time, no take of or direct impacts to NRHP-listed or known NRHP-eligible historic resources is anticipated for the LPA. The LPA would not affect any previously recorded archeological sites; however, it is possible that buried historic foundations, cisterns, wells, middens, and privies could be found beneath the existing pavement within the LPA. The LPA crosses areas of high probability to contain archeological resources. 	<ul style="list-style-type: none"> The completion of an Historic Resources Reconnaissance Survey will be required in compliance with Section 106 of the NHPA. Coordination with the THC will be completed prior to the survey to discuss aspects of the project relating to the reconnaissance survey, including the establishment of an APE. An evaluation of NRHP eligibility will be provided for all identified historic-age resources. All eligibility recommendations will be coordinated with the THC and documented during NEPA studies. For any identification of historic properties that must be deferred until after the completion of NEPA, a subsequent PA would be developed in coordination with the THC to outline agreed-upon measures to implement post-review identification and avoid, minimize or mitigate any adverse effects to historic properties. An archeological survey of the LPA will be needed prior to construction. Impacts to any areas of high prehistoric probability and areas in which buried historic and prehistoric sites may be present would require coordination with the THC. If any archaeological historic properties or State Antiquities Landmarks would be affected by the LPA, a resolution of any potential adverse effects would be carried out in consultation with the THC, which may include data recovery, avoidance, and/or minimization of impacts.
Parklands	<ul style="list-style-type: none"> The LPA would potentially directly and indirectly 	<ul style="list-style-type: none"> As part of the NEPA process and development of future design, additional analysis of potential

Environmental Resource Area	Impact Evaluation Summary	Mitigation Strategies/Next Steps
	<p>impact parkland and recreation areas including the Payton Gin Pocket Park, Walnut Creek Metropolitan Park, Ann Roy Butler Hike-and-Bike Trail, and Auditorium Shores.</p>	<p>impacts to parks and recreational facilities identified within the LPA will be conducted.</p> <ul style="list-style-type: none"> • Parks and recreational facilities that qualify for protection under Section 4(f) will be evaluated to determine if potential impacts or acquisitions would be considered de minimis and coordination with FHWA and DOT would be conducted. • Coordination with the CoA and the National Park Service to verify status and limits of Walnut Creek Metropolitan Park will be conducted. • Coordination with local jurisdictions and regulatory agencies pertaining to land impacts, acquisition, and neighborhood planning may be required. • Section 4(f) and 6(f) evaluations will be prepared as appropriate.
Hazardous Materials	<ul style="list-style-type: none"> • 74 hazardous materials sites with the potential of being RECs are within or adjacent to the corridor, 64 of which are LPSTs, many of which have high potential to be encountered during construction of the LPA. 	<ul style="list-style-type: none"> • During design, avoidance measures of these areas will be determined. • When avoidance is not possible due to ROW acquisition needs, known hazardous material issues will be further investigated to determine size, status, known contaminants, and effects to groundwater and soils of potential RECs. • RECs will be evaluated to determine anticipated impacts to the project. Sites determined to pose a high risk will be further evaluated with a Phase 1 site assessment. Following the Phase 1 investigation, Phase 2 investigations may be conducted to confirm the presence or absence of contamination to develop mitigation strategies.
Public Safety & Security	<ul style="list-style-type: none"> • Operational-related impacts to safety may result from derailment, collision, or other mechanical failure during normal operations; natural hazards; or fire. • Safety impacts around station areas may occur due to increases in traffic. • Construction-related safety impacts may occur as a 	<ul style="list-style-type: none"> • Assess the potential impacts and risks to public safety and security to the surrounding community as well as passengers and employees that would use the proposed service. • Review the current safety and security conditions, recent criminal activity and potential vulnerabilities, and emergency response capabilities. • Develop safety and security plans to systematically evaluate safety hazards and manage risks and document processes for mitigating and/or eliminating security threats,

Environmental Resource Area	Impact Evaluation Summary	Mitigation Strategies/Next Steps
	<p>result of construction vehicle or equipment emissions; use of the vehicles or equipment; or movement of vehicles or equipment between sites.</p> <ul style="list-style-type: none"> • Security risks may occur as a result of criminal activity, vandalism, or tampering. • Closures of left-turn lanes may result in longer travel routes and delays in emergency response times. 	<p>vulnerabilities, and risks.</p> <ul style="list-style-type: none"> • Construct mountable curbs for emergency vehicles.

9.0 Other Issues to be Considered

9.1 Identification of Funding

As summarized in Appendix B, for the AA, capital cost estimates were prepared for each of the Orange Line Corridor Build Alternatives. Unit costs used to develop the capital cost estimates were established in coordination with Capital Metro and the Project Connect consultant team using similar recently completed FTA-funded projects. These unit costs were scaled to the local market. All costs were escalated to a mid-construction year estimate using a 3.5 percent annual inflation rate.

On June 10, 2020 the Austin City Council approved a resolution supporting the Project Connect System Plan and LPA for the Orange Line, and directed the City Manager to amend the Austin Strategic Mobility Plan (Ordinance No. 20190411-033) to add the System Plan Recommendation and LPA for the Orange Line, as adopted by the Capital Metro Board of Directors. Also, on June 10, 2020 the Capital Metro Board of Directors adopted the Project Connect System Plan and LPA for the Orange Line. The signed resolutions are included in Appendix F. With the LPA adopted, the Orange Line is now eligible for Federal funding in line with recent trends in Capital Investment Grant (CIG) authorizations. The CIG program could award up to 50% of the capital cost, although recent trends have seen awards averaging closer to 40%. Other funding would primarily come from local sources, and authorization of new local funding to be directed towards some or all of the Orange Line could be on the November 2020 ballot.

9.2 Recommendations for NEPA

Based on the results of this Orange Line PEL Study and the June 10, 2020 Capital Metro and City of Austin resolutions, it is recommended to carry forward the LPA into the NEPA process. It was determined that these transit improvements would improve system linkage in accordance with the purpose and need and study goals defined by Capital Metro, agencies and the public. As previously stated, the LPA would operate at street-level (center-running) throughout most of the corridor. The Orange Line transitway profile near Crestview Station (Airport Boulevard and North Lamar Boulevard) and the Red Line crossing will be determined during Preliminary Engineering and select locations between MLK, and Crestview Station may use an elevated transitway where feasible. Through downtown, a tunnel would be implemented. These project-specific design options remain to be analyzed and will be decided upon through the NEPA process.

The data gathered for the PEL study will need to be updated to incorporate changes that may have occurred since it was initially accessed. It will also need to be supplemented with field verification during the NEPA phase as described in Section 7.0. Information in the PEL will be made available for analysis to the agencies and public prior to and during NEPA scoping.

9.3 Scoping, Preliminary, and Final Design

After project funding has been identified and the project included in the fiscally constrained long-range transportation plan and the Transportation Improvement Program, a planning level estimate will be prepared to determine how much funding would be needed for each project phase: ROW, Utilities, Environmental, Design, and Construction. The estimated costs for these professional services will be estimated as a percentage of the project's capital cost.

As preliminary design progresses, Capital Metro will determine the project delivery method that is appropriate for the LPA and other elements of Project Connect. To do so, Capital Metro will need to:

- Establish the project delivery objectives
- Identify the design standards, funding sources and amounts, the required resources necessary to complete the project, and the schedule
- Complete the ROW and boundary survey

Once the project goals and constraints are defined, the delivery schedule, complexity, and innovation opportunities can be used to determine the appropriate project delivery method. These methods include Design-Bid-Build (DBB), Design-Build (DB), and Construction Management/General Contractor (CM/GC). A risk assessment would be conducted given each delivery method's opportunities and obstacles. Once the delivery method is selected, the level of design, contractor selection process, and participation can be initiated.

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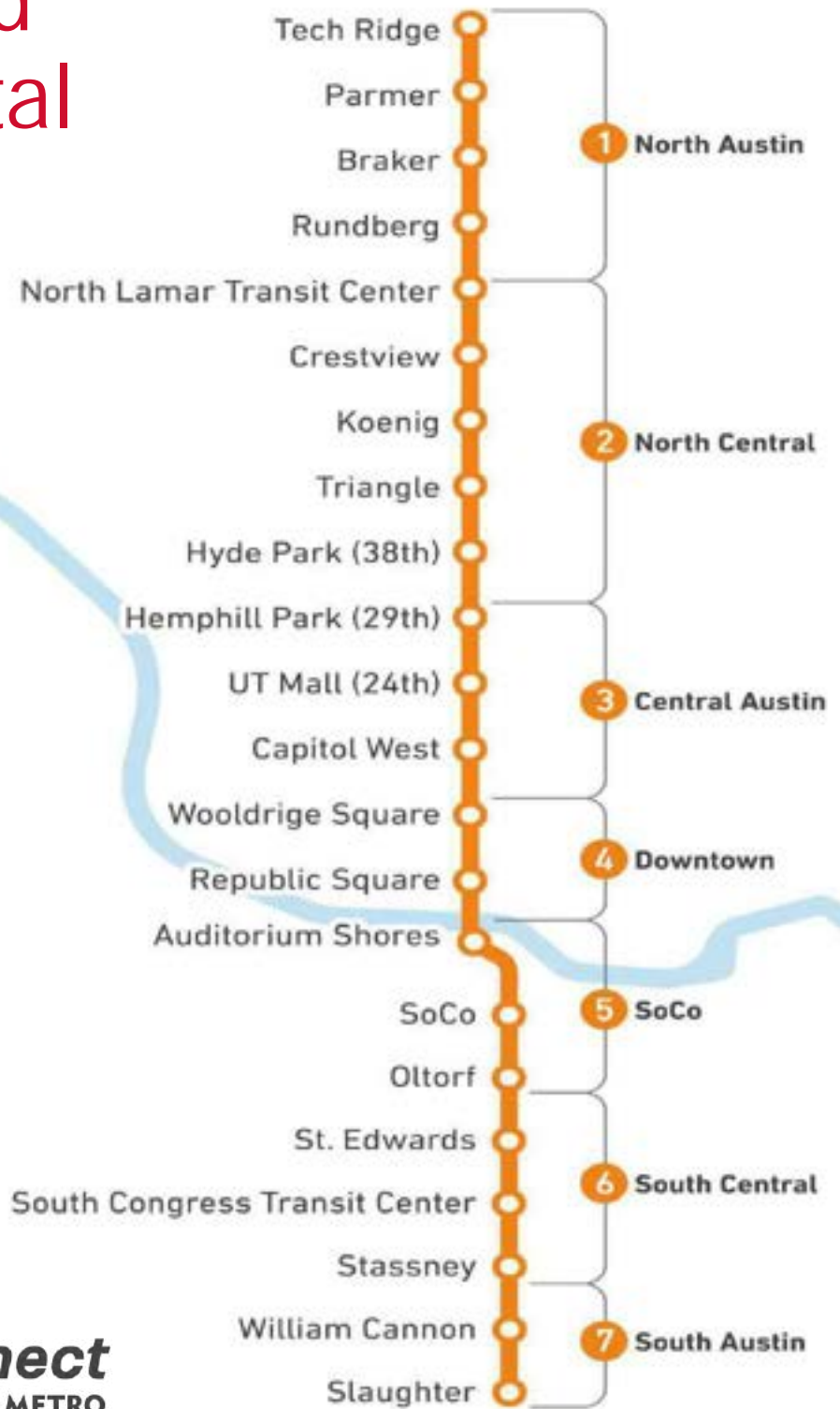
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APPENDIX A: PLANNING/ENVIRONMENTAL LINKAGES QUESTIONNAIRE

Planning and Environmental Linkages Study

Appendix A PEL Questionnaire

July 10, 2020



1.0 Background

- a) Who is the sponsor of the Planning and Environmental Linkages (PEL) study? (state DOT, Local Agency, Other)

The Orange Line PEL Study is sponsored by the Capital Metropolitan Transportation Authority (Capital Metro) which was established in 1985 by referendum and operates based on state legislative authority.

The Orange Line was identified within Capital Metro's Project Connect Long Term Vision Plan, which was adopted by the Capital Metro Board on December 18, 2018. Project Connect is a comprehensive transit vision to improve existing high-capacity transit (HCT) services and develop new, high-capacity public transportation projects that provide efficient travel options into, out of, and around Central Austin from the surrounding region.

The Orange Line, which would connect Tech Ridge in the north, Central Austin, and Southpark Meadows in the south, was identified within Project Connect as the highest ridership HCT corridor. The Orange Line would serve as the spine of a regional HCT network and provide faster, more reliable transit connections.

- b) What is the name of the PEL study document and other identifying project information (e.g. sub-account or STIP numbers, long-range plan, or transportation improvement program years)?

The PEL study document is referred to as the Orange Line PEL Study. The purpose of this document is to inform the selection of the Locally Preferred Alternative (LPA), which is anticipated to be adopted by CAMPO as part of their 2045 Long-Range Transportation Improvement Plan in February 2021.

- c) Who was included on the study team (Name and title of agency representatives, consultants, etc.)?

Capital Metro contracted with AECOM and its subconsultant team in March 2019 to support the Orange Line PEL Study effort. The following representatives from Capital Metro, the Project Connect Project Manager Owner Representative (PMOR), and AECOM team were integral to the Orange Line PEL Study.

- David Couch – Project Connect Director (Capital Metro)
- Jacob Calhoun – Project Manager, Long Range Planning (Capital Metro)
- Jackie Nirenberg – Manager, Community Involvement (Capital Metro)
- Brian Buchanan (Project Connect PMOR)
- Tom Underwood (Project Connect PMOR)
- Gill Saunders (Project Connect PMOR)
- Jerry Smiley – Project Manager (AECOM)
- Melinda Jensen – NEPA Document Manager (AECOM)
- Dan Myers – Project Implementation Manager (AECOM)
- Julia Suprock – Alternatives Analysis Manager (AECOM)
- Abby Tomlinson – Public Involvement Manager (AECOM)
- Peng Zhao – Design Manager (AECOM)
- Meg Merritt – Stakeholder/Liaison Outreach Manager (Nelson Nyygard)

- d) Provide a description of the existing transportation facility within the corridor, including project limits, modes, functional classification, number of lanes, shoulder width, access control and type of surrounding environment (urban vs. rural, residential vs. commercial, etc.).

The study area for the PEL Study extends 1/2 mile from the center line of the Orange Line alignment as documented in Capital Metro's Project Connect Long Term Vision Plan, from the Tech Ridge Park & Ride in north Austin south through downtown and terminating at the intersection of South Congress Avenue and Slaughter Lane in south Austin, approximately 21 miles. This study area, herein referred to as the Orange Line Corridor, contains a mix of residential, commercial and mixed-use properties within its boundaries.

The existing transportation network within the Orange Line Corridor was determined from a review of existing transit networks, stations, park and & ride facilities, and major roadways as presented below and detailed in Appendix D, Corridor Conditions Report.

Capital Metro Transit Routes

Capital Metro is the primary transit service provider in the Orange Line Corridor, operating bus services and 1 commuter rail line (MetroRail). Currently, there are 62 Capital Metro transit routes within the Orange Line Corridor as described below and listed in Appendix D, Corridor Conditions Report, Table 3.1-2:

MetroBus Local Bus Routes: 6 bus routes to and from downtown, with regular stops

MetroBus Flyer Routes: 6 bus routes that provide limited-stop neighborhood level service between suburban neighborhoods and downtown

MetroBus Feeder Routes: 2 bus routes between neighborhoods, transit centers, and Capital Metro park & rides

MetroBus Crosstown Routes: 10 bus routes that bypasses downtown and provides neighborhood level services

University of Texas (UT) Shuttle Routes: 7 frequent shuttle routes that are open to the public but focus on connecting UT riders to campus and residential areas

Round Rock Route: 1 bus route from the Tech Ridge Park & Ride to the Round Rock Transit Center, with limited stops

MetroExpress Routes: 8 bus routes to and from downtown, designed to bring outlying residents into central Austin

High Frequency Routes: 14 bus routes throughout Austin that operate on 15-minute or better frequencies, including 2 MetroRapid bus routes 801 and 803

Entertainment Bus (E-Bus) Routes: 3 bus routes that operate each fall and spring when more UT students are on UT campus

Night Owl Routes: 4 bus routes that operates from midnight until 3 a.m., Monday through Saturday nights

MetroRail: 1 commuter rail route that operates between the Capital Metro Leander Station to the Downtown Station

The Orange Line follows Capital Metro's existing high frequency MetroRapid 801 route. Twenty-two MetroRapid stations are within the Orange Line Corridor (Appendix D, Corridor Conditions Report, Table 3.1-3).

Capital Metro Park & Ride Facilities

Currently 5 Park & Ride facilities are located in the Orange Line Corridor, providing between 49 and 476 parking spaces for commuters at each station (Appendix D, Corridor Conditions Report, Table 3.1-4). Multiple bus routes connect to the Park & Ride facilities and are currently served by the MetroRapid 801.

Existing Roadway Network

Beginning at the Tech Ridge Park & Ride in north Austin, the proposed Orange Line alignment travels for approximately 8 miles along North Lamar Boulevard, approximately 4 miles along Guadalupe Street, 0.3 mile along South 1st Street, 0.25 mile along Riverside Drive, and 7 miles along South Congress Avenue in south Austin and terminates at the intersection of South Congress Avenue and Slaughter Lane. Due to the Orange Line's length and its travel through high density and urbanized areas of Austin, the corridor crosses many major arterials, including:

Parmer Lane
Braker Lane
Rundberg Lane
US 183/Anderson Lane
Koenig Lane
North Lamar Boulevard
West 38th Street
West 24th Street
MLK Jr. Boulevard
15th Street
11th Street
Cesar Chavez Street
Riverside Drive
Oltorf Street
US Highway 290/State Highway 71/Ben White Boulevard
Stassney Lane
William Cannon Drive
Slaughter Lane

- e) Provide a brief chronology of the planning activities (PEL study) including the year(s) the studies were completed.

The Orange Line consultant team contract was approved by the Capital Metro Board in March 2019. Activity on the project began in earnest in January 2019 and is anticipated to conclude in June 2020. A brief chronology of the PEL Study activities is provided in Table 1 below.

Table 1. Chronology of Orange Line PEL Study Activities

DATE	DESCRIPTION
January 2019	Established the purpose, need and goals of the Orange Line Project
February 28, 2019	FTA Published Notice of Intent of Early Scoping
April 2019	Held Orange Line kick off meetings
April 2019	Defined the Orange Line Corridor segments and focus areas
April – May 2019	Conducted a series of early scoping meetings at 7 locations throughout the Orange Line Corridor
May 2019	Refined purpose and need statement based on public and stakeholder input
June 2019	Developed corridor existing conditions
July 2019	Finalized methodology memoranda for the Alternatives Analyses
July 2019	Finalized Detailed Definition of Alternatives and Alternative Evaluation Plan
September 2019	Finalized detailed evaluation of alternatives
October 2019	Presented detailed alternatives to Capital Metro Board and Austin City Council
January 2020	Presented preliminary technical recommendation for LPA to Capital Metro Board and Austin City Council
January – February 2020	Public and stakeholder comment period on the technical recommendation for LPA
March 2020	Presented preliminary LPA recommendation to Capital Metro Board and Austin City Council
June 2020	Finalized LPA and documentation to present to Capital Metro Board and Austin City Council. Capital Metro Board adopts System Plan and LPA.

- f) Are there recent, current, or near future planning studies or projects in the vicinity?
What is the relationship of this project to those studies/projects?

Locally adopted, community-supported, or agency-produced transportation plans were reviewed to ascertain recent, current, or future planning studies or projects near the Orange Line (Table 2).

Table 2. Recent Planning Studies in Vicinity of the Orange Line

PLANNING STUDY	YEAR OF PUBLICATION
Capital Metro	
All Systems Go	2004
Central Austin Transit Study	2010
Connections 2025	2016
Project Connect: Central Texas HCT System Plan	Adopted 2012; revised 2014
Project Connect: Central Corridor HCT Study	2014
Project Connect: North Corridor LPA	2014
MetroRail Long-Range Feasibility Study	2016
City of Austin	
Downtown Austin Plan	2011
Imagine Austin	2012
Airport Boulevard Corridor	2014
Austin Strategic Mobility Plan	2019
Smart City Challenge Proposal	2016
Other Agency Planning Efforts	
CAMPO 2045	2020
TxDOT Mobility35 Program	Ongoing
Travis County Land, Water & Transportation Plan	2014
Other Community Planning Efforts	
Downtown Austin Alliance – Downtown Austin Vision	2018
CACDC – Light Rail Proposal	2015

In addition, several future infrastructure improvement projects are planned within the Orange Line

Corridor. A review of planned TxDOT and CoA roadway infrastructure projects is provided below and detailed in Appendix D, Corridor Conditions Report.

TxDOT Construction Projects

Infrastructure improvements to 7 TxDOT roadways are proposed within the Orange Line Corridor as provided in Appendix D, Corridor Conditions Report, Table 3.1-5. Improvements to these roadways generally consist of drainage and safety enhancements, rehabilitation improvements, and roadway widening to accommodate increases in traffic. These TxDOT projects are currently either in the final stages of planning or being finalized for construction.

CoA Planned Projects

The CoA has multiple transportation improvement projects planned within the Orange Line Corridor. In 2016, Austin City Council initiated a public engagement effort to determine the community's highest priorities for improving mobility around the city. According to the COA's 2016 Community Survey Findings, 72 percent of Austinites were dissatisfied with traffic flow on major city streets. In November 2016, Austin voters approved \$720 million for the local, corridor, and regional mobility improvements. A large portion is for the Corridor Mobility Program, which defines the development, design, and construction of improvements along key Austin corridors that will enhance mobility, safety, and connectivity for all users—whether you drive, bike, or take transit. Within this program, 4 projects are within the Corridor Mobility Program's Corridor Construction Program, which includes projects currently planned for construction, as well as 4 additional projects currently in the preliminary engineering and design phase (Appendix D, PEL Corridor Conditions Report, Table 3.1.-6).

2.0 Methodology Used

a) What was the scope of the PEL study and the reason for completing it?

Project Connect Long Term System Plan was initiated as a 30-month project led by Capital Metro to identify, analyze and prioritize a set of potential HCT solutions to facilitate travel into, out of and within Central Austin. The System Plan process examined corridors that may be suitable for the implementation of future HCT transit solutions, including the Orange Line.

The purpose of the Orange Line PEL Study is to inform the selection of the Locally Preferred Alternative. It is designed to inform the NEPA scoping process, document stakeholder input, identify and evaluate reasonable and feasible alternatives, and dismiss Orange Line alternatives from further consideration. Capital Metro intends to sponsor an Environmental Impact Statement (EIS) for the No Build Alternative and the LPA.

b) Did you use NEPA-like language? Why or why not?

Yes, NEPA-like language was used to provide the framework for the identification, analysis, and dismissal of alternatives and the selection of the LPA and be used as a resource for future NEPA documentation. The use of Purpose and Need and other NEPA-like language provides an opportunity to build upon decisions made in the PEL Study.

c) What were the actual terms used and how did you define them? (Provide examples or list)

Terms used consistently include:

- Purpose and Need: Identifies the rationale for development of project alternatives and ways to measure those alternatives. Purpose and Need statements were included in Phase 1 outreach materials and in technical memoranda.
- LPA: The locally preferred alternative to be adopted by Capital Metro and by CAMPO and carried forward into NEPA.
- Environmental Consequences: The potential impacts on environmental resources as a result of the Orange Line alternatives considered.
- Mitigation Strategies: The possible mitigation measures to address adverse impacts that may occur as a result of implementing the project.
- Cooperating Agencies: According to Council on Environmental Quality regulation (40 CFR 1508.5), "cooperating agency" means any Federal agency, other than a lead agency, that has jurisdiction by law or special expertise with respect to any environmental impact involved in a proposed project or project alternative. A State or local agency of similar qualifications or, when the effects are on lands of tribal interest, a Native American tribe may, by agreement with the lead agency(s), also become a cooperating agency.
- Participating Agencies: Participating agencies, as defined by the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), are those Federal, State, tribal, regional, and local government agencies that may have an interest in the project. Non-governmental organizations and private entities cannot serve as participating agencies. The lead agency(s) decide which agencies to invite to serve as participating agencies.

d) How do you see these terms being used in NEPA documents?

These terms will be used in NEPA documents in the same fashion as they were used in the Orange Line PEL Study.

e) What were the key steps and coordination points in the PEL decision-making process? Who were the decision-makers and who else participated in those key steps? For example, for the corridor vision, the decision was made by state DOT and the local agency, with buy-in from FHWA, the USACE, and USFWS and other resource/regulatory agencies.

Key steps in the Orange Line PEL Study process include:

- Identifying the Orange Line purpose and need
- Developing Orange Line alternatives and screening criteria
- Identifying the Orange Line LPA through evaluation processes
- Developing a phasing and implementation plan

The Capital Metro Board of Directors and the City of Austin Council are the primary decision-making bodies for the adoption of the LPA. Additional input and feedback came from stakeholder groups, neighborhood associations, property owners, and the general public through the public involvement process. Early coordination with potential cooperating agencies also occurred.

Communication and collaboration with local stakeholders were ongoing throughout the project and provided a regular resource for feedback and participation in PEL decision-making. This collaboration was formalized through meetings with Project Connect's Technical Advisory Committee (TAC) and Project Connect Ambassador Network (PCAN). Many members of the TAC and PCAN will become cooperating and participating agencies.

The PCAN was developed to provide input and feedback on program milestones and community engagement processes to ensure an effective process. Previously part of the Project Connect/Austin Strategic Mobility Plan Multimodal Community Advisory Committee (MCAC), group members met in October 2018 to discuss the future of the committee. To reflect the aspiration to continuously grow the network of organizations, interest groups and individuals participating in the committee, the group recommended PCAN as the new name for the committee. PCAN members represent various interest areas and backgrounds across Central Texas, encourage and facilitate the engagement and input of other community members, and consider input in program discussions. They serve two-year terms and meet monthly.

The TAC included the following potential cooperating and participating agencies as well as stakeholder groups:

- Austin Independent School District
- CAMPO
- CTRMA
- CoA Planning and Zoning Department
- CoA Corridor Program Office
- CoA Parks and Recreation Department
- CoA Transportation Department
- TxDOT
- Texas Historical Commission
- Travis County
- Williamson County
- Bastrop County
- City of Leander
- Lower Colorado River Authority

The PCAN members included:

- American Automobile Association
- Austin Area Research Organization
- American Association of Retired Persons (AARP), South Austin Chapter
- AARP Texas State Office
- Americans Disabled for Accessible Public Transit of Texas
- African American Resource Advisory Commission
- Alliance for Public Transportation
- Asian American Quality of Life Advisory Commission
- Austinites for Urban Rail Action
- Austin Area Urban League
- Austin Independent Business Alliance
- Austin Neighborhoods Council
- Austin Sierra Club
- Bicycle Advisory Committee
- Capital Metro Access Advisory Group
- Central Austin Community Development Corporation
- Central Health
- City of Austin
- Climate Buddies
- Code Next
- Congress for the New Urbanism Central Texas Chapter
- Customer Satisfaction Advisory Committee

- Downtown Austin Alliance
- Downtown Austin Neighborhood Association
- Friends of Austin Neighborhoods
- Go Austin/Vamos Austin
- Greater Austin Black Chamber of Commerce
- Greater Austin Chamber of Commerce
- Hispanic Advocates Business Leaders of Austin
- Hispanic Quality of Life Commission
- Justice for our Neighbors - Austin Region
- Leander Chamber of Commerce
- Lost Creek Civic Org
- Meadows at Double Creek Property Owners' Association
- Measure Austin
- National Alliance on Mental Illness, Central Texas Chapter
- Network of Asian American Organizations
- North Austin Civic Association
- North Lamar/Georgian Acres Neighborhood
- One Voice Central Texas c/o Sustainable Food Center
- Onion Creek Neighborhood
- Pedestrian Advisory Council
- Planning Commission
- Public Safety Commission
- Reconnect Austin /BV
- Save Our Springs
- Texas State University
- Urban Transportation
- Vision Zero ATX

Regular meetings with the TAC and PCAN were held during each of the project's milestone phases and additional one-on-one meetings were held, by request, between large group meetings. Meetings were structured to allow committee members to provide feedback and buy-in on key project decisions. Meetings covered the information as presented below in Table 2:

Table 2. Project Connect TAC and PCAN Meetings

Date	Information Presented
TAC Meetings	
May 14, 2019	Presented report-out on public feedback on purpose and need, and discussed approach to breaking up corridor into segments to isolate key differentiators and define alternative that may be a mix of four different profiles.
June 25, 2019	Presented public involvement dashboard and an overview of the alternatives analysis process. Introduced guideway and station area evaluations (conceptual alternatives evaluation) and discussed the establishment of the PCAN.
July 24, 2019	Discussed process of alternatives evaluations and reported out on working groups with South Congress stakeholders.
August 27, 2019	Discussed feedback from public events and the upcoming detailed definition of alternatives process which includes review of FTA evaluation criteria, development of typical sections, development of station configuration options, and making service planning assumptions in order to model ridership.
September 24, 2019	Presented working group feedback and shared information regarding upcoming public open houses.
October 22, 2019	Discussed the process of linking goals and the evaluation process in measurable ways in order to develop an LPA. Presented some of these measurable categories, including

	travel times and capital costs.
November 12, 2019	Discussion followed similar topics as October meeting but provided additional time to ask questions.
December 10, 2019	Presented more detailed information on technical analysis including ridership forecasting, methodology for understanding operations and maintenance costs, and breakdown of capital costs. Discussed early responses to recent public outreach.
January 13, 2020	Discussed detailed information on funding, financing and revenue generation options.
February 11, 2020	Provided updates from other transportation providers including the City of Austin, CAMPO, and TxDOT.
March 12, 2020	Reviewed the project timeline, engagement to date and the system plan. Discussed the development of information around a downtown tunnel, and reviewed recommendations on mode. Presented renderings of park and rides, a regional transit center, vehicles, the street environment and an underground station for the tunnel. Presented a financial analysis, program costs, and phasing.
PCAN Meetings	
August 21, 2019	Presented information on conceptual alternatives including transitway profiles by segment and the evaluation process for determining which profiles are applicable in each segment. Presentation included discussion of finetuning routes.
September 26, 2019	Shared that Orange Line segments North Austin, South Central Austin, and South Austin will not be going forward with elevated, cut and cover, and tunnel options as these segments have enough right-of-way to run the transitway at street-level.
October 28, 2019	General question-and-answer about the Project Connect plan and the current and future analysis of the major projects.
December 11, 2019	Presented details of the second phase alternative analysis process, including: <ul style="list-style-type: none"> • Methodology for Ridership, O&M and Capital costs developed through a concerted effort between the Orange and Blue line teams, Program Manager Owner's Representative (PMOR) and the Capital Metro Project Connect leadership team • Coordination ensured teams working with same basis for data analysis throughout the process
January 15, 2020	Presented information on the cost of alternatives and funding options, including new starts, core capacity, small starts, and FTA grants, as well as other options for increasing revenue.
February 12, 2020	Presentations from community groups that represent affordable housing, social, environmental and community justice advocates.

In addition, joint working sessions with the Project Connect Board and Austin City Council were held. Information on these work sessions is included in Table 3 below.

Table 3. Joint Capital Metro Board and Austin City Council Working Sessions

Date	Information Presented
March 2019	<ul style="list-style-type: none"> • Vision plan and regional service map • Dedicated space for transit on some lines • Right-of-way constraints • BRT light • ASMP integration • Community engagement plans
October 2019	<ul style="list-style-type: none"> • Program objectives • Community engagement • Peer city research • HCT on Orange and Blue Lines • Alternatives analysis

January 2020	<ul style="list-style-type: none"> • Progress recap • Investment opportunities – federal, Capital Metro and potential partners, CoA • Transit system analysis
March 2020	<ul style="list-style-type: none"> • Progress recap • Project Connect Recommended System Plan • Imagining the future (renderings of concepts at multiple locations) • Funding and governance • Next steps
June 2020	<ul style="list-style-type: none"> • TBD

f) How should the PEL information be presented in NEPA?

Within the NEPA process, the Orange Line PEL Study information will be used to support the selection of the LPA to move forward in engineering and environmental analysis and serve as a starting point for the project-specific analysis. Additionally, the information gained through the Orange Line PEL Study will be used to inform the scope of the NEPA process. Furthermore, the public feedback gained through the Orange Line PEL Study will be used to inform future project development efforts within the NEPA framework.

The technical and environmental reports produced during the Orange Line PEL Study will be incorporated in future NEPA documents as appendices, referenced in the text, included as part of the Administrative Record, and serve as part of the history of the decision-making process. The summary reports generated from the public and stakeholder outreach activities will provide context for the public's role in the decision-making process and be incorporated into future NEPA studies in the same manner.

3.0 Agency Coordination

a) Provide a synopsis of coordination with Federal, tribal, state and local environmental, regulatory and resource agencies. Describe their level of participation and how you coordinated with them.

Regulatory and resource agency coordination were formalized through monthly meetings with the TAC (membership list included in Section 2.0). Dates and subject matter covered during these TAC meetings are provided in Section 2.0.

In addition, in October 2019 meetings were held in person with the CoA PARD and THC to obtain their preliminary feedback on the Orange Line Project. The focus of these meetings was to ensure agency representatives were familiar with the project, its status and schedule, and had the opportunity to discuss potential fatal flaws pertaining to their areas of interest. In addition, next steps of the project were discussed as well as the importance of their continual involvement as the project moves into NEPA.

The only formal coordination with a Federal agency was the development of the Orange Line PEL Study with FTA guidance through quarterly meetings with FTA Region 6.

No formal coordination with tribal agencies occurred.

b) What transportation agencies (e.g. for adjacent jurisdictions) did you coordinate with or were involved during the PEL study?

Transportation agencies were included as cooperating and participating agencies for the Orange Line effort and formal coordination with these agencies has been conducted through the TAC. Agencies included:

- CoA Transportation Department
- Capital Area Rural Transportation System
- CAMPO
- TxDOT
- CTRMA

c) What steps will need to be taken with each agency during NEPA scoping?

To be determined on a case-by-case basis in NEPA.

4.0 Public Coordination

a) Provide a synopsis of your coordination efforts with the public and stakeholders.

Public

Though many tools for public coordination are available at all times, like the website and social media, active public coordination for the Orange Line project during the PEL Study was structured around the technical project development schedule in order to provide public updates and receive public feedback around logical milestones in the project schedule. The goals of the first phase of public engagement were to:

- Introduce the project study area, alternatives being considered, relevant environmental benefits and impacts being considered, and the overall schedule and public participation process.
- Allow the public an opportunity to review and provide comments to the project's Purpose and Need statements.

To accomplish this outreach, between April 8 and May 16, 2019 the project team conducted a first phase of public outreach which included seven early scoping (open house) meetings to correspond with the seven segments identified in the project's Public Involvement Plan. With the exception of the April 8 event which included longer hours, partner tables, and more extensive staffing, each meeting was set up similarly and held from 4:30 p.m. – 6:30 p.m. between May 8 and May 16. In addition, a virtual open house (VOH) was made available April 8 – May 24. The VOH was designed to reflect this set-up as closely as possible, however, the VOH survey questions differed slightly from the in-person survey.

The FTA published a formal Notice of Intent for Early Scoping on February 28, 2019. Notifications to key stakeholders and neighborhood associations included e-mail blasts, newspaper ads, radio ads, e-newsletters, follow-up calls, social media, the project website, and earned media.

A total of 3,163 individuals participated (252 in person and 2,911 virtual) in the first phase outreach activities, and the project team received a total of 667 comments (180 received at in person events and 487 virtual). In addition to these open house meetings, the stakeholder engagement team began the process of setting up one-on-one meetings with key stakeholders and stakeholder groups as part of an ongoing outreach effort identified to continue through the Conceptual Alternatives phase.

The second public outreach phase, conducted June-July 2019, was designed to share information and get feedback on the following aspects of the alternative analysis process:

- Conceptual alternatives for the transitway
- High-level cost comparisons
- Summary of the alternative evaluation process

This engagement consisted of three organized events that functioned as workshops and drove participation using paid media coverage and neighborhood/advocacy group primers. The events took place in North Austin, Central Austin, and South Austin. These primers were presented to neighborhood and advocacy groups identified through coordination with Capital Metro and ranged from tabling at existing events to half-hour introduction presentations with Q/A during regularly scheduled neighborhood association meetings. The format varied based on the organizations' availability. As part of this process, a total of 19 presentations were made between Monday, July 10 and Tuesday, July 30, 2019. This change in outreach approach from the first phase was designed to increase interest in the events-based format, allow attendees to interact with each other, drive attendance through increased advanced outreach, and glean conversational-style feedback from attendees. Capital Metro also hosted a second VOH from July 18 – August 1, 2019. A total of 1,317 individuals participated (134 in person and 1,183 virtual) in the three organized events that took place during the second outreach phase and the project team received a total of 394 comments (96 received at in person events and 298 virtual).

The third public outreach phase, conducted November 2019, consisted of a series of three public open houses at the Bullock State History Museum, St. Elmo Elementary School, and YMCA North Austin to solicit public feedback on the various design options for the Orange Line and provide information on current alternative cost estimates. During this phase, Capital Metro also hosted a VOH from Monday, November 4 – Friday, December 6, 2019 to provide an opportunity for the public to review the detailed evaluation of alternatives and provide input. A total of 356 individuals participated (87 in person and 269 virtual) in this outreach phase and the project team received a total of 171 comments (51 received at in person events and 120 virtual). Other engagement activity during this phase included presentations to organizations, tabling at community events and outreach at transit stops.

The fourth public outreach phase took place in May – June 2020 and was conducted in a completely virtual format due to the coronavirus pandemic and associated restrictions on large gatherings. Outreach at this milestone included eight remote virtual community meetings and a month-long virtual open house. The virtual community meetings, hosted on Zoom and/or Facebook Live, included an overview of Project Connect and a 30-minute Q&A session with Capital Metro Board Members and City of Austin leadership. The virtual open house featured the same information, plus exhibit boards, and included a feedback survey. Key stakeholder outreach through the three Orange Line working groups was not conducted during this timeframe.

Stakeholders

To date, several one-on-one meetings have been held with key stakeholders for the Orange Line project. These meetings have been designed to provide tailored information to stakeholders regarding their interests and will continue as needed to keep key stakeholders up to date on project developments and solicit feedback. Stakeholders briefed to date include:

- South Congress Merchants Association
- Greater Austin Asian Chamber of Commerce
- Shopcore Properties
- St. Edwards University
- Urban Land Institute
- Texas School for the Blind

Key stakeholders are also being engaged through the PCAN. This, similar to the TAC, is an overarching outreach tool that is not project-specific, however, the Orange Line project team has provided and will continue to provide information and solicit feedback from this group at each of its meetings. The first PCAN meeting that featured a discussion on Orange Line was held on May 29, 2019, and the presentation included a kick-off meeting for the PCAN members and information on the LPA process.

General

As mentioned, many public and stakeholder communication avenues are available at all times. These include:

- Project website: <https://capmetro.org/projectconnect/>
- Twitter: @CapMetroATX
- Project Connect Community Office at 607 Congress Avenue
- Via email to Feedback@ProjectConnect.com

Please see Sections 5.0 and 6.0, and Appendix C of the Orange Line PEL Study for additional details on agency and public coordination.

5.0 Purpose and Need for the PEL Study

- a) Provide the purpose and need statement, or the corridor vision and transportation goals and objectives to realize that vision.

The Purpose of the Orange Line HCT Investment

The purpose of the Orange Line HCT investment is to meet growing corridor travel demand with a reliable, safe, cost effective, time competitive, state-of-the-art HCT option that is congestion proof.

The Need for the Orange Line HCT Investment

The need for Orange Line HCT is demonstrated by increasing congestion within the Orange Line Corridor and parallel roadways, which is exacerbated by the inability to sufficiently expand roadway capacity to accommodate the projected demand while maintaining reliable travel speeds or levels of service. Orange Line HCT will efficiently expand mobility capacity by leveraging the existing transportation network infrastructure. Sustaining Austin's strong economy relies upon ongoing population and employment growth, which will increase travel demand and corresponding congestion without an efficient means to move more people. Failure to accommodate this increased demand for efficient mobility is a threat to continued community and economic growth. Specific needs for the Orange Line HCT investment are listed below and further detailed in Section 2.0 of the Orange Line PEL Study:

- Need #1: Sustainably Support Austin's Population and Economic Growth: Significant population and employment growth are affecting all travel modes and travel times.
- Need #2: Increase Transportation Network Capacity to Meet Increasing Travel Demand: CAMPO estimates that while the region's population doubles by 2040, new roadway capacity will grow by 15 percent between 2010 and 2040.
- Need #3: Improve Transit Access between Affordable Housing and Jobs: Employment opportunities continue to increase within and adjacent to the Orange Line Corridor. However, access to those jobs is challenged by the lack of affordable housing and reliable mobility options.
- Need #4: Support Growth of and Connectivity to Regional Activity Centers: Capital Metro would provide better transit service along the Orange Line Corridor to connect existing activity centers and future growth along the corridor.

- b) What steps will need to be taken during the NEPA process to make this a project-level purpose and need statement?

Please see Section 2.0 of the Orange Line PEL Study which includes a detailed discussion of the Orange Line project's purpose and need. Minimal additional effort is expected to make this a NEPA-level purpose and need statement. The purpose and need statement will be updated as new data becomes available.

6.0 Range of alternatives: Planning teams need to be cautious during the alternative screen process; alternative screening should focus on purpose and need/corridor vision, fatal flaw analysis and possibly mode selection. This may help minimize problems during discussions with resource agencies. Alternatives that have fatal flaws or do not meet the purpose and need/corridor vision cannot be considered viable alternatives, even if they reduce impacts to a particular resource. Detail the range of alternatives considered, screening criteria and screening process, including:

- a) What types of alternatives were looked at? (Provide a one or two sentence summary and reference document.)

The Orange Line alternatives evaluated during the PEL Study are described in Section 3.0 of the Orange Line PEL Study and summarized below:

- Orange Line Corridor segments
 - North Austin
 - North Central Austin
 - The Drag
 - Downtown
 - South Congress (SoCo)
 - South Central
 - South Austin
- Modes
 - No Build (continuation of existing service – no changes)
 - Improvements to the MetroRapid 801 (infrastructure and service investments to improve speed and reliability)
 - Dedicated Transitway Bus Rapid Transit (BRT)
 - Dedicated Transitway Light Rail Transit (LRT)
 - Dedicated Transitway Autonomous Rapid Transit (ART)
- Transitway Types
 - Elevated
 - At-grade
 - Cut-and-cover tunnel
 - Bore tunnel

- b) How did you select the screening criteria and screening process?

The process of developing and screening Orange Line Project alternatives considered the following: Federal and State requirements, the purpose and needs for the project, goals and objectives for the project, ability to avoid or minimize environmental impacts, and public and stakeholder input. The process was developed with input during the TAC and PCAN meetings to sufficiently address the identified needs of the Orange Line Corridor.

- c) For alternative(s) that were screened out, briefly summarize the reasons for eliminating the alternative(s). (During the initial screenings, this generally will focus on fatal flaws)

In general, the alternatives eliminated were removed based on their lack of ability to meet the project's purpose and need to meet growing corridor travel demand with a reliable, safe, cost effective, time competitive, state-of-the-art high capacity transit option that is congestion proof. See Subsection 3.4 of the PEL Study to review screened alternatives and the reasons why these alternatives were screened.

d) Which alternatives should be brought forward into NEPA and why?

The PEL process resulted in a single Locally Preferred Alternative (LPA) to be carried forward into NEPA, along with a No Build Alternative. The LPA is expected to meet the needs and purpose of the Orange Line HCT investment which is to meet growing corridor travel demand with a reliable, safe, cost effective, time competitive, state-of-the-art HCT option that is congestion proof.

e) Did the public, stakeholders, and agencies have an opportunity to comment during this process?

The TAC and PCAN were coordinated and given the opportunity to comment at all major milestones/decision points. The public had the opportunity to provide comments and feedback during the alternatives development process and on the LPA as discussed above in Section 5.0 Agency Coordination and 6.0 Public Coordination.

f) Were there unresolved issues with the public, stakeholders and/or agencies?

There were no unresolved issues with the public, stakeholders, or agencies.

7.0 Planning Assumptions and Analytical Methods

a) What is the forecast year used in the PEL study?

Year 2040

b) What method was used for forecasting transit ridership?

The ridership forecast methodology for the Orange Line Project employed the complementary use of both the CAMPO Travel Demand Model (CAMPO model) and the Capital Metro STOPS-based model. This "dual modeling" approach provided a comprehensive analysis of travel behavior and travel markets at varying levels of detail. It also ensured a range of forecast results that supported both local decision-making and a potential FTA Capital Investment Grant (CIG) application. The in-depth understanding gained from this process provided decision makers with thorough information on the possible outcomes and tradeoffs associated with scenario performance.

c) Are the planning assumptions and the corridor vision/purpose and need statement consistent with the long-range transportation plan?

Project Connect is the long-range HCT system plan within which the Orange Line was identified as a priority investment corridor. Per Project Connect, priority investment corridors are to advance to NEPA and will be consistent with the vision/purpose of the plan. The Orange Line planning assumptions, and purpose and need statements are consistent with the long-range transportation plan and other planning efforts in the region. The Orange Line LPA is anticipated to be adopted by CAMPO and included within CAMPO's 2045 Long-Range Transportation Improvement Plan.

d) What were the future year policy and/or data assumptions used in the transportation planning process related to land use, economic development, transportation costs and network expansion?

CAMPO is in the process of developing the updated 2045 Transportation Improvement Plan. This will not be available until after May 2020. For the PEL Study, the existing 2040 CAMPO model was used as a base.

8.0 Environmental resources (wetlands, cultural, etc.) reviewed. For each resource or group of resources reviewed, provide the following:

- a) In the PEL study, at what level of detail was the resource reviewed and what was the method of review?

Resource	Level of Detail and Method of Review
Transportation	Evaluated current transportation conditions within the Orange Line Corridor through the identification of data from multiple sources including Capital Metro, City of Austin, and TxDOT. Evaluated the potential impact of the Orange Line on the transportation network in terms of transit travel times, intersection delay and Level of Service, parking impacts and effects on active transportation.
Land Use and Economic Development	Obtained existing land use data from the City of Austin to provide land use classifications within the Orange Line Corridor and document land use patterns. Economic development data was obtained from the City of Austin to document key economic development areas within the Orange Line Corridor, as identified in the CoA Imagine Austin Comprehensive Plan. Estimated land use conversions and associated economic impacts as a result of the LPA.
Displacement and Relocation	Obtained Travis County Appraisal District parcel data to determine extent of possible acquisitions and displacements (whole or in-part) as a result of the LPA.
Neighborhoods	Reviewed demographics, community characteristics, and Environmental Justice (EJ) communities within the Orange Line Corridor based on data obtained from CAMPO, the City of Austin, and the American Community Survey, among others. Evaluated potential adverse, disproportional, and beneficial impacts to EJ communities as a result of the LPA.
Visual Quality	Defined the visual quality of the Orange Line Corridor by dividing the corridor into segments which had similar visual characteristics (natural as well as built environments) and assigning a viewer sensitivity rating to each. Evaluated potential impacts to these visual segments as a result of the LPA.
Air Quality	Determined existing air quality conditions for the Austin – Round Rock Metropolitan Statistical Area (ARR MSA) airshed and reviewed the current attainment status of the ARR MSA with respect to the National Ambient Air Quality Standards pollutants, reviewing metrological conditions affecting local air quality, and summarizing air quality trends within the Orange Line Corridor. Evaluated potential impacts to air quality based on the mode and construction of the LPA.
Noise and Vibration	Developed existing noise and vibration conditions based on the Orange Line Corridor generally following the Lamar Boulevard, Guadalupe Street, and Congress Avenue corridor. The noise and vibration conditions analysis focused on the Lamar/Guadalupe/Congress roadways and a 1,000-foot buffer on each side of the alignment.
Ecosystems	Identified and characterized ecoregions, vegetation and habitat types, threatened, endangered and other protected species habitats, and wildlife corridors in the Orange Line Corridor upon obtaining data from sources including U.S. Fish and Wildlife Services (USFWS) and Texas Parks and Wildlife Department, among others. Evaluated potential direct and indirect impacts on ecosystems as a result of the LPA based on data obtained.
Water Resources	Determined floodplains and general hydrology within the Orange Line Corridor (wholly or in part), including waterbodies and wetlands from various data sources including U.S. Geological Survey, Federal Emergency Management Agency, and USFWS, among others. Evaluated crossings of and potential impacts to water sources as a result of the LPA.
Historical and Archeological	Conducted literature review from the Texas Historical Commission and Texas

Resource	Level of Detail and Method of Review
Resources	Archeological Research Library to identify previously recorded and/or designated historic and archeological resources within the Orange Line Corridor (wholly or in part). Evaluated potential impacts and acquisitions to known historic resources as a result of the LPA.
Parklands	Identified and evaluated existing and future or planned parks and recreational resources in the Orange Line Corridor through data obtained from the City of Austin. Evaluated potential Section 4(f) and 6(f) impacts as a result of the LPA.
Hazardous Materials	Identified sites with the potential for recognized hazardous material issues within the Orange Line Corridor from review of data obtained from the Texas Commission on Environmental Quality. Determined which sites have the potential to be impacted by construction of the LPA.
Public Safety & Security	Identified existing safety and security conditions for pedestrians, motorists and for the community at large within the Orange Line Corridor via data obtained from the City of Austin and Austin Police Department.

b) Is this resource present in the area and what is the existing environmental condition for this resource?

Please see Appendix D, PEL Corridor Conditions Report.

c) What are the issues that need to be considered during NEPA, including potential resource impacts and potential mitigation requirements (if known)?

A comprehensive environmental analysis will be conducted after the selection of the LPA during the EIS phase of this project. The EIS will fully assess the benefits and impacts of the project on the social, natural, cultural, and physical environment and be conducted in accordance with NEPA and FTA guidance. Some of the elements that will be studied in greater detail during the EIS include, but are not limited to:

- d) Visual and aesthetic resources, including an assessment of the Capitol viewshed
- e) Detailed assessments of the river crossing
- f) Environmental Justice (EJ) concerns
- g) Threatened & Endangered (T&E) Species
- h) Noise and vibration impacts
- i) Electromagnetic interference
- j) Air quality, including greenhouse gas emissions
- k) Water quality
- l) Floodplain hazards and management
- m) Public safety and security
- n) Community cohesion
- o) Impacts during construction

Section 7.0 of the PEL Study presents next steps and preliminary mitigation strategies where applicable for each of the resources analyzed in the PEL.

p) How will the data provided need to be supplemented during NEPA?

Data collected during the PEL Study will be supplemented by detailed surveys of the LPA during NEPA including for a refined assessment of impacts to cultural resources, waters of the U.S., and T&E species. Data will also be supplemented through continual coordination efforts with local, state, and federal regulatory agencies.

9.0 List environmental resources you are aware of that were not reviewed in the PEL study and why? Indicate whether or not they will need to be reviewed in NEPA and explain why.

- Soils and Geology
- Electromagnetic Interference
- Cumulative and Indirect Impacts

The above subject areas will be addressed in the EIS. The Orange Line PEL Study focuses on the resources considered to be “fatal flaws” with separate regulatory drivers, such as the Endangered Species Act or Clean Water Act, or are typically resources of concern for the general public.

10.0 Were cumulative impacts considered in the PEL study? If yes, provide the information or reference where it can be found.

No. Analysis on cumulative impacts will be completed for the EIS.

11.0 Describe any mitigation strategies discussed at the planning level that should be analyzed during NEPA.

Section 7.0 of the PEL Study presents next steps and preliminary mitigation strategies where applicable for each of the resources analyzed. These resource-specific mitigation strategies will be considered and further evaluated for applicability during the EIS.

12.0 What needs to be done during NEPA to make information from the PEL study available to the agencies and the public? Are there PEL study products which can be used or provided to agencies or the public during the NEPA scoping process?

Information in the PEL will be made available for analysis to the agencies (TAC/PCAN) and public prior to and during NEPA scoping (as outlined in Section 1.0).

13.0 Are there any other issues a future project team should be aware of? Examples: Controversy, utility problems, access or ROW issues, encroachments into ROW, problematic landowners and/or groups, contact information for stakeholders, special or unique resources in the area, etc.

The Orange Line PEL Study provides a summary of issues and evaluations that should be considered during future project development. Right-of-way needs are preliminary and will require further detailed evaluation during project development.

APPENDIX B: ALTERNATIVES ANALYSIS REPORT

Orange Line Alternatives Analysis Report

Final Report
June 12, 2020

North Lamar Transit Center

Tech Ridge
Parmer
Braker
Rundberg

1 North Austin

Crestview
Koenig
Triangle

2 North Central

Hyde Park (38th)
Hemphill Park (29th)
UT Mall (24th)

3 Central Austin

Capitol West
Wooldrige Square
Republic Square

4 Downtown

Auditorium Shores

5 SoCo

SoCo
Oltorf
St. Edwards

6 South Central

South Congress Transit Center

Stassney
William Cannon

7 South Austin

Slaughter



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Executive Summary

The Orange Line Corridor Alternatives Analysis Report (Orange Line AA Report) provides an overview of the process used to evaluate high-capacity transit (HCT) in Austin, Texas and the path to develop a proposed Locally Preferred Alternative (LPA), including how public and agency input was used to craft the LPA. The analysis and future actions on the path toward implementation are outlined within this document. This document considers the Orange Line Corridor both as a single investment (to attract federal funds) and as a part of the Capital Metropolitan Transportation Authority's (Capital Metro) proposed Long-Term Vision Plan. The Purpose of the Orange Line Corridor HCT investment is to meet growing travel demand with a reliable, safe, cost-effective, time-competitive, state-of-the-art high-capacity transit option that serves multiple Central Texas destinations located in the City of Austin including existing and proposed regional activity centers and residential areas. The Orange Line Corridor is made up of seven segments (**Figure 1**).

Capital Metro began developing the Project Connect System Plan in 2016 to create a system of HCT options along with enhancing and expanding existing services that will connect people, places, and opportunities in an efficient, affordable, and sustainable way. The Project Connect area includes the five-county metropolitan statistical area of Bastrop, Caldwell, Hays, Travis, and Williamson counties (Central Texas). In 2018, the Capital Metro Board of Directors approved the Long-Term Vision Plan (2018), which identified the Orange Line Corridor for potential investment in HCT as a tool to address growth pressures, improve mobility, and connect Central Texans to their travel destinations. It has since been refined to reflect Capital Metro's response to growth challenges and the alternatives analysis process (**Figure 2**). It is projected Central Texas population of 2 million will double by 2040. In that same time, road capacity is expected to increase by only 15 percent. This growth will cause additional strain on the roadway network, result in increased travel times and travel costs, decrease mobility, hinder the region's economic health, and threaten air quality.

On April 19, 2019, Capital Metro and the Federal Transit Administration (FTA) published a Notice of Early Scoping in the Federal Register to initiate early scoping for the Orange Line Corridor. Early scoping allows the scoping process to begin as soon as there is enough information to describe the proposal so that the public and relevant agencies can participate effectively. Through this notice, Capital Metro invited public and agency involvement with ongoing planning activities and studies for the Orange Line Corridor, including review of the (a) purpose and need, (b) the proposed alternatives, and (c) the potential environmental, transportation, and community impacts and benefits to consider during the National Environmental Policy Act (NEPA) phase.

This Orange Line AA Report documents the project's purpose and need, analyzes a range of reasonable, feasible, and prudent HCT alternatives, and identifies an LPA in accordance with the Council on Environmental Quality's (CEQ's) and the FTA's regulations and guidance for implementing NEPA (40 Code of Federal Regulations [CFR] 1501.2 through 1501.8 and 23 CFR 771.111, respectively).

This Orange Line AA Report represents the step before Preliminary Engineering (PE) and NEPA phases. The adoption of an LPA would allow Capital Metro to proceed to PE and NEPA phases, and construction of the LPA. The sections of the Orange Line AA Report are summarized on the following page.

Section 1 | Public Engagement: This section examines the framework and process to receive and incorporate feedback from community leaders, partner agencies, stakeholders, and the public across Central Texas throughout the AA process of the Orange Line Corridor. Results of public engagement are incorporated within this Orange Line AA Report.

Section 2 | Purpose & Need: This section describes the development of defining the need for the project and how the project would address the transportation-related problems or challenges. It also describes how leaders, partner agencies, stakeholders, and the public across Central Texas were involved in the process of developing the Purpose and Need.

Section 3 | Alternatives Analysis Process Development: This section describes the development of the two-step process developed to evaluate the No Build and Build Alternatives for the Orange Line Corridor. A Build Alternative is made up of an alignment, transitway, vehicle, service plan, and any required support infrastructure (tracks, stations, and maintenance facilities).

Section 4 | Detailed Alternatives Definition: This section provides an overview of the alternatives presented during engagement with community leaders, partner agencies, stakeholders, and the public across Central Texas. The Build Alternatives are compared to the No Build and Transportation Systems Management Alternatives in order to understand the benefit of transportation investments and to fulfill FTA's requirements for Capital Investment Grant (CIG) funding.

Section 5 | Evaluation Results: This section provides an overview of the results from the alternative analysis process and the presentation of these results to community leaders, partner agencies, stakeholders, and the public across Central Texas.

Section 6 | Engineering Considerations: Describes the distinguishing factors that eliminate options within the alternatives and summarizes other known baseline conditions known to-date that could be refined in later project development phases as the LPA advances.

Section 7 | The LPA – Your Plan, Your Orange Line: This section describes the community-selected transit investment that is advancing as the LPA.

Section 8 | Implementation and Next Steps: This section describes how Capital Metro will advance the Orange Line project towards a competitive FTA Capital Investment Grant.

Orange Line Corridor Overview

The proposed Orange Line Corridor (the “Project”) would extend from the Tech Ridge Park and Ride, along the western side of the University of Texas at Austin campus, through Downtown Austin to Slaughter Lane at the southern end of the corridor. The Orange Line Corridor is approximately 20 miles long and comprised of 22 stations organized into the seven defined segments listed below.

- **Segment 1:** North Austin (Tech Ridge to North Lamar Transit Center)
- **Segment 2:** North Central (North Lamar Transit Center to Hemphill Park)
- **Segment 3:** Central Austin (Hemphill Park to Wooldridge Square)
- **Segment 4:** Downtown (Wooldridge Square to Auditorium Shores)
- **Segment 5:** SoCo (Auditorium Shores to Oltorf)
- **Segment 6:** South Central (Oltorf to Stassney)
- **Segment 7:** South Austin (Stassney to Slaughter)

The corridor is divided into segments (**Figure 1**) to simplify the alternative definition and evaluation process. This segmentation facilitated the identification and comparison of various design configurations. Consistent data collection and analyses was applied along the full length of the corridor, but the results are reported in segments, where possible. These segments represent natural breakpoints in either corridor development character or right-of-way geometry.

Figure 1. The Orange Line Corridor



Figure 2: Project Connect Vision Map (May 2020)



1.0 Public Engagement

Capital Metro adheres to the FTA and the 1969 NEPA process in order to be eligible for capital funding. Adhering to the FTA process increases competitiveness for federal funding. As such, over the last 30 months, Capital Metro has been developing the Long-Term Vision Plan (2018) per general guidelines of the Federal Planning and Environmental Linkages (PEL) process. Under this PEL process, Capital Metro conducted the alternatives analysis for the Orange Line.

As part of the AA process, Capital Metro and its partners are proposing an LPA (Appendix A). Once the LPA is adopted, Capital Metro can make a formal request to the FTA to initiate the NEPA phase and evaluate the LPA’s environmental benefits and impacts. Capital Metro would seek federal funding for the proposed project. Additionally, federal permits would be required; therefore, FTA has determined that an Environmental Impact Statement (EIS) is the appropriate level NEPA documentation. Additional information relating to the environmental analysis is available in Capital Metro’s Planning and Environmental Linkages (PEL) report (June 2020).

The following sections provide a high-level summary of public engagement activities. **Figure 3** illustrates the key policy and project milestones.

Figure 3. Orange Line Corridor Milestones



1.1 Engagement Background, Goals, and Framework

Public input has been essential to the Orange Line Corridor planning process. Capital Metro has and will continue to seek feedback from community leaders, partner agencies, stakeholders, and the public across Central Texas throughout the development process of the Orange Line Corridor. Early on, Capital Metro worked to identify a public engagement framework to keep the public informed and solicit participation in the development of the Orange Line Corridor. In tandem with the project specific outreach techniques and strategies identified within the Capital Metro Orange Line Corridor Public Involvement Plan (PIP) (2019), Capital Metro also continues to implement systemwide planning outreach techniques and strategies identified within the Project Connect Community Engagement Plan (PCCEP) (2019). This plan reflects the recommended outcomes for Project Connect outreach efforts as established by the Capital Metro Board of

Directors and Austin City Council Engagement during a Joint Work Session held on November 28, 2018. These outcomes include:

- 1) Clear communication of the process and the community’s role by identifying the aspects of the project for which feedback is needed and how that feedback will be applied.
- 2) Provide multiple and meaningful feedback opportunities with ample notice at locations where stakeholders already gather.
- 3) Share information through traditional and non-traditional approaches.

Based on feedback from the Joint Work Session (November 2018), Capital Metro developed public engagement goals that have been adopted by the Orange Line Corridor. Overarching Orange Line Corridor goals include:

- Engaging and informing the community
- Connecting with individuals from all communities
- Tracking and reporting regularly on community engagement activities
- Receiving clearance on environmental studies

As a stand-alone project, the Orange Line Corridor has additional public engagement objectives. Objectives tailored to the specific needs of the Orange Line Corridor are:

- Understand overarching community values to inform decision-making for the project
- Coordinate with other public projects that have a similar timeframe and/or are located in proximity to the Orange Line Corridor
- Understand existing small area plans identified through City of Austin Planning and Zoning efforts

Based on feedback received at the November 2018 Joint Work Session, implementation strategies that would provide continuous public participation opportunities were clustered around major technical milestones, as illustrated in **Table 1**, with the goal to find consensus on tough decisions. Capital Metro heard from the public and agencies that there is a need to achieve progress on advancing solutions that improve mobility in Central Texas quickly; as such, the public engagement framework was developed to reflect this approach. Based on the framework set above, community leaders, partner agencies, stakeholders, and the public across Central Texas were provided a multitude of typical and innovative ways to engage in the project.

Table 1. Technical Milestones and Public Engagement

	Technical Milestone	Public Engagement Objectives
A	Development of the Purpose and Need and Early Scoping	Ensure the project’s Purpose and Need is clearly defined and provides the opportunity for the public to review and comment on the draft Purpose and Need.
B	Development of Conceptual Alternatives	Evaluate and compare the Build Alternatives against each other and the No Build Alternative, and gather input on the public’s needs and desires in order to refine the approach.
C	Detailed Evaluation of the Alternative	Develop and present quantitative and qualitative data and determine if the Build Alternatives or the No Build Alternative consider the public’s needs and concerns.
D	Identification of the LPA	Receive public feedback, share the proposed LPA, make refinements, and complete the remaining steps of the project development process.

1.2 Coordination & Maximizing Networks

Early on, the Project Connect and Orange Line Corridor public engagement framework helped Capital Metro identify the stakeholder groups that could serve as partners to help distribute information, engage Environmental Justice (EJ) communities, provide feedback, and offer insight into ongoing and future development projects within the Orange Line Corridor. Capital Metro coordinates with groups in order to maximize outreach and engagement, align messaging around the concurrent processes, and prevent information overload and confusion for the public. The groups are categorized below with a brief summary of to-date associated activities:

- **Community Leaders:** Capital Metro has worked with the Project Connect Ambassador Network (PCAN). PCAN members represent various interest areas including EJ communities, transit dependent populations, schools and youth, workers, walking and biking, healthcare, and business groups and is made up of more than 150 community organizations and stakeholders to provide input through a community lens. Regular updates at key Orange Line Corridor milestones identified in Table 1 as well as updates on ongoing activities were provided to the PCAN.
- **Partner Agencies:** Capital Metro coordinated closely with agency partners including City of Austin Transportation Department (ATD), TxDOT, Capital Area Metropolitan Planning Organization (CAMPO), Travis County, FTA, and many others to discuss facilities, policies, approvals, funding, regulations, public feedback, and other technical content. Capital Metro convened a Technical Advisory Committee (TAC) that included agency professionals from engineering and design disciplines and those with expertise on mitigating potential environmental impacts. Regular monthly updates at key Orange Line Corridor milestones identified in Table 1 were provided as well as updates on ongoing activities. These discussions occurred on a regular basis.
- **Stakeholder Groups:** These groups included local residential groups, business interests, and developers to name a few. One-on-one and small-group meetings were held with over 30 stakeholders near the Orange Line Corridor regarding project development and to solicit feedback.
- **Working Groups:** Three different working groups were established to focus on sharing information and providing feedback on the needs of specific areas of the corridor. These groups included the Downtown Working Group, the South Congress Working Group, and the Guadalupe Working Group.
- **Public:** Capital Metro conducted four rounds of formal public engagement to gather input at key points in the process that included partner agency participation. Capital Metro made a special effort to meet people in their communities, including attending community events, conducting outreach at transit stops, and implementing innovative strategies including online open houses and virtual outreach when community members were unable to attend in person public meetings.

1.3 Environmental Justice, Persons with Disabilities and Limited English Proficiency

Capital Metro sought to engage all individuals that could be impacted or benefit from the Orange Line Corridor. The public involvement process complies with legislation and guidance for persons with disabilities, persons with limited English proficiency, and environmental justice. Specific to low-income and minorities, persons with disabilities, and Limited English Proficiency individuals, the following strategies were implemented:

- Hosting Virtual Open Houses
- Hosting the Project Connect Hotline, and Capital Metro's general customer service hotline
- Community meetings with groups representing disabled populations at upcoming major Orange Line Corridor millstones
- Distributing fliers
- Community tabling with groups that represent disabled populations at upcoming major Orange Line Corridor millstones
- Translating materials

1.4 Events and Notification

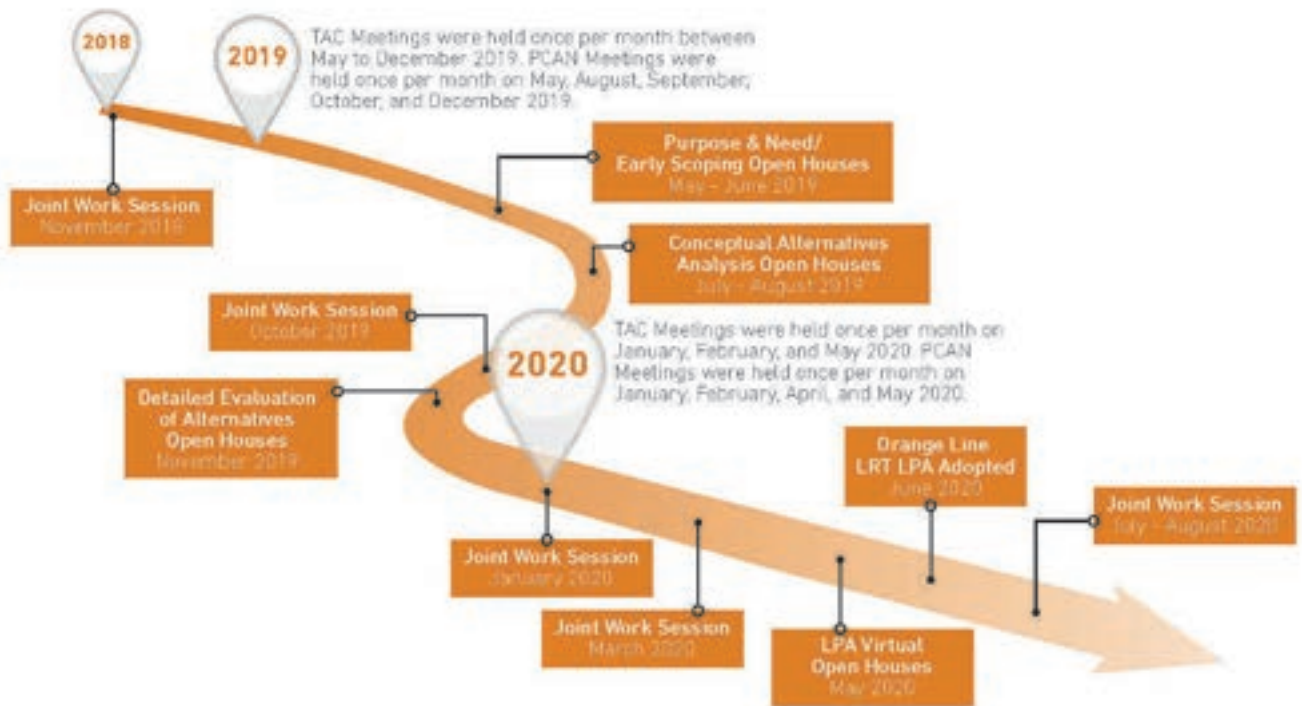
Consistent with the Capital Metro Orange Line Corridor PIP (2019) and PCCEP (2019), Capital Metro implemented various strategies to notify, solicit feedback, and engage in dialogue with community leaders, partner agencies, stakeholders, and the public. These strategies include, and are not limited to:

- Project Connect Website and Orange Line Webpage
- Capital Metro Website Promotional Banners
- E-newsletters and E-blasts
- Email Inquiries
- Social Media
- Traditional Media including news channels and newspaper ads
- Elected official and community leader briefings
- Pop-Up Outreach, Community Fairs, and tabling to target existing and potential new riders
- Project Connect Office
- Open Houses and Virtual Open Houses

1.5 Summary

Specific public engagement results for each milestone of Orange Line Corridor are found within each section of the Orange Line AA Report. **Figure 4** provides a high-level overview of public engagement activities targeting community leaders, partner agencies, stakeholders, and the public, including EJ communities.

Figure 4. Public Engagement Summary



Through its Project Connect engagement efforts, Capital Metro has engaged with over 40,000 people at nearly 600 events to discuss Project Connect. These events include tabling at transit stops and community events, presentations to neighborhood associations and community groups, office hours and special events for the public at the Project Connect office, and numerous public open house events at key milestones in the project. Communication strategies included phone calls, emails, flier distribution, advertisements, radio announcements and social media efforts.

Specifically, 35 neighborhood associations along the Orange Line Corridor were contacted at each of the project milestones to encourage their involvement. Working groups with stakeholder representation from the Guadalupe, Downtown, and South Congress areas were formed to share key project milestone information and updates. During the process, the three working groups convened for 14 meetings. Orange Line specific activities involved over 4,850 people at over 55 events, presentations, and meetings and over 1,230 people provided comments in response to Orange Line surveys.

2.0 Purpose and Need for the Orange Line Corridor

The purpose of the Orange Line HCT investment is to meet growing corridor travel demand with a reliable, safe, cost effective, time competitive, state-of-the-art HCT option that is congestion proof. The Orange Line HCT Corridor Study is being undertaken by Capital Metro to assess the need for a HCT system with

transitways¹ in Central Austin, and to evaluate a range of alternative alignments, station locations and vehicle modes.

The study will follow the NEPA process, so that the recommended alternative may be eligible for potential federal funds, as well as state and local funds. The NEPA process begins with the identification and detailed assessment of the need for a transit project. The process will continue with an evaluation of a range of alternatives and vehicle modes that would satisfy the identified needs, complemented by a significant level of community participation in the evaluation process; resulting in a recommendation for an LPA. The NEPA process will also evaluate future conditions in the year 2040 if nothing is implemented beyond planned improvements (the No-Build Alternative). It will also evaluate lower-cost transportation system improvements as well as physical improvements and transit service enhancements on the existing corridor.

The need for Orange Line HCT is demonstrated by increasing congestion within the Orange Line corridor and parallel roadways, which is exacerbated by the inability to sufficiently expand roadway capacity to accommodate the projected demand while maintaining reliable travel speeds or levels of service. Orange Line HCT will efficiently expand mobility capacity by leveraging the existing transportation network infrastructure. Sustaining Austin's strong economy relies upon ongoing population and employment growth, which will increase travel demand and corresponding congestion without an efficient means to move more people. Failure to accommodate this increased demand for efficient mobility is a threat to continued community and economic growth.

Four needs have been identified and outlined for the Orange Line corridor HCT investment and are as followed:

Need #1: Sustainably Support Austin's Population and Economic Growth

Significant population and employment growth is affecting all travel modes and travel times. CAMPO estimates the Orange Line corridor's population and employment are expected to grow 65 percent and 93 percent, respectively, from 2010 to 2040. Within Travis County, where the Orange Line corridor is located, population and employment growth from 2010 to 2040 is forecast at 71 percent and 112 percent, respectively. Counties at both ends of the Orange Line corridor, Williamson and Hays, are experiencing some of the most significant growth in the region, with their populations doubling or tripling between 2010 and 2040. The region's growth will reduce people's ability to access jobs, education, medical care, and other needs while reducing the quality of life, particularly as development of residential, employment, and entertainment centers continue in Central Austin.

Need #2: Increase Transportation Network Capacity to Meet Increasing Travel Demand

CAMPO estimates that while the region's population doubles by 2040, new roadway capacity will grow by 15 percent between 2010 and 2040. As population and employment have grown in Central Texas, the traditional approach to providing transportation capacity by expanding roadways has become increasingly complex and expensive. In order to provide mobility and accessibility for current and future residents, the region will need to make better use of existing transportation right-of-way (ROW) and find ways to move more people in a limited amount of space.

¹ Transitways are pathways only transit vehicles can use in order to provide the highest level of reliability, speed and safety. They are separated from other vehicles to keep transit vehicles moving free of traffic.

Need #3: Improve Transit Access between Affordable Housing and Jobs

Employment opportunities continue to increase within and adjacent to the Orange Line Corridor. However, access to those jobs is challenged by the lack of affordable housing and reliable mobility options. While employment options in downtown Austin continue to grow, the cost of living in downtown has increased and government-backed affordable housing cannot bridge the gap alone. Employees are forced to live further from their jobs which results in the need for affordable and reliable transportation.

Need #4: Support Growth of and Connectivity to Regional Activity Centers

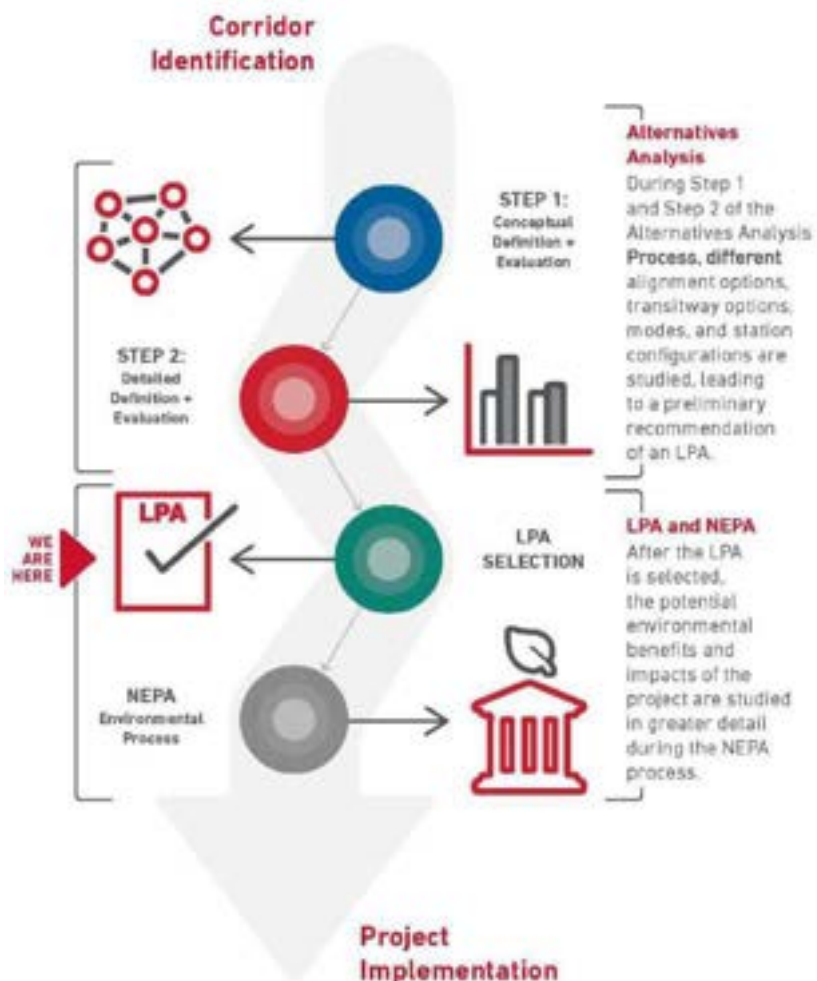
Capital Metro would provide better transit service along the Orange Line Corridor to connect existing activity centers and future growth along the corridor. Population in the Austin metropolitan statistical area (MSA) has increased by 34 percent in the past 10 years and is projected to double by 2040. By providing improved transit service between established activities centers, Capital Metro would encourage additional transit-supportive land use at strategic locations. These areas of transit-supportive land uses could be connected through a network of improved transit service.

3.0 Alternatives Analysis Process Development Summary

As mentioned in previous sections, Capital Metro adheres to the FTA and NEPA process in order to be eligible for FTA’s Capital CIG funding. These formal guidelines require the adoption of an LPA. To determine an LPA, an alternatives analysis process may be conducted prior to or within the formal environmental process. Since the EIS must be completed within two years, Capital Metro is conducting an alternatives analysis to determine an LPA prior to the EIS. The findings and due diligence documents for the alternatives analysis process will move forward into the EIS through the FTA PEL federal guidelines.

The Orange Line Corridor AA process uses a phased approach, as illustrated in **Figure 5**. The process is structured as a tiered screening, where alternatives are defined, evaluated, and refined or eliminated in each step of the process. The result is a proposed LPA whose environmental benefits and impacts will be

Figure 5: Analysis and LPA Selection Process



further evaluated under the formal NEPA process.

The evaluation criteria identified for each step of the alternatives analysis process relates to the goals and objectives identified for the Orange Line Corridor, as shown in **Figure 6**.

Figure 6. Orange Line Corridor Goals and Objectives



Step 1: Conceptual Definition and Evaluation Results

The conceptual evaluation of Step 1 established a method for carrying forward transitway options for each segment to the Detailed Evaluation of Step 2. The evaluation used the available ROW width and transit supportive nature of preliminary station locations to determine the appropriateness of four² different transitway types within each segment. Throughout the Orange Line Corridor, the type of transitway may vary due to differing ROW constraints and land use. For the purposes of the Step 1 analysis, these constraints were assessed by segment. In segments where a large percentage of the ROW is narrow and/or the station areas are highly transit supportive, a more capital-intensive transitway (such as Elevated or Underground) may be considered, while segments with minimal amounts of narrow ROW and less transit supportive station areas may not warrant a more expensive transitway capital investment.

To expedite the analysis and ensure consistency with work completed to-date, the Step 1 evaluation used the percentage of the segment ROW width calculated as "Narrow" (less than 80') from the Purpose and Need Early Scoping public meetings (completed in May 2019) and "Low/Medium/High" transit supportive station area scores from the Station Area Evaluation conducted for the Project Connect Long Term Vision Plan (completed in 2018). The inputs to produce results of the Step 1 conceptual evaluation may be found in the Step 1 Definition and Evaluation of Conceptual Alternatives Report.

² Following the Step 1 evaluation, "Cut-and-Cover" and "Tunnel" transitway types were consolidated to a general "Underground" option for future phases of evaluation. Further explanation can be found in section 3.3.2.

Figure 7: Step 1 Conceptual Evaluation Inputs



The results of the Step 1 conceptual evaluation are shown in **Figure 8**. The conceptual evaluation determined that due to the less transit supportive nature of the station areas and the ample ROW available in Segments 1, 6, and 7, elevated and underground transitways are generally eliminated for further consideration within those segments of the Orange Line Corridor. In Segments 2, 3, 4, and 5, all transitway options move forward into the detailed evaluation phase.

Figure 8. Step 1 Conceptual Evaluation Results



	Street Level	Elevated	Underground
1. North Austin	✓	X ¹	X ¹
2. North Central	✓	✓	✓
3. Central Austin	✓	✓	✓
4. Downtown	✓	✓	✓
5. SoCo	✓	✓	✓
6. South Central	✓	X ¹	X ¹
7. South Austin	✓	X ¹	X ¹

¹Elevated and Underground are not necessary due to limited street-level traffic.

Note: Following the Step 1 evaluation, "Cut-and-Cover" and "Tunnel" options were consolidated to a general "Underground" option for future phases of evaluation.

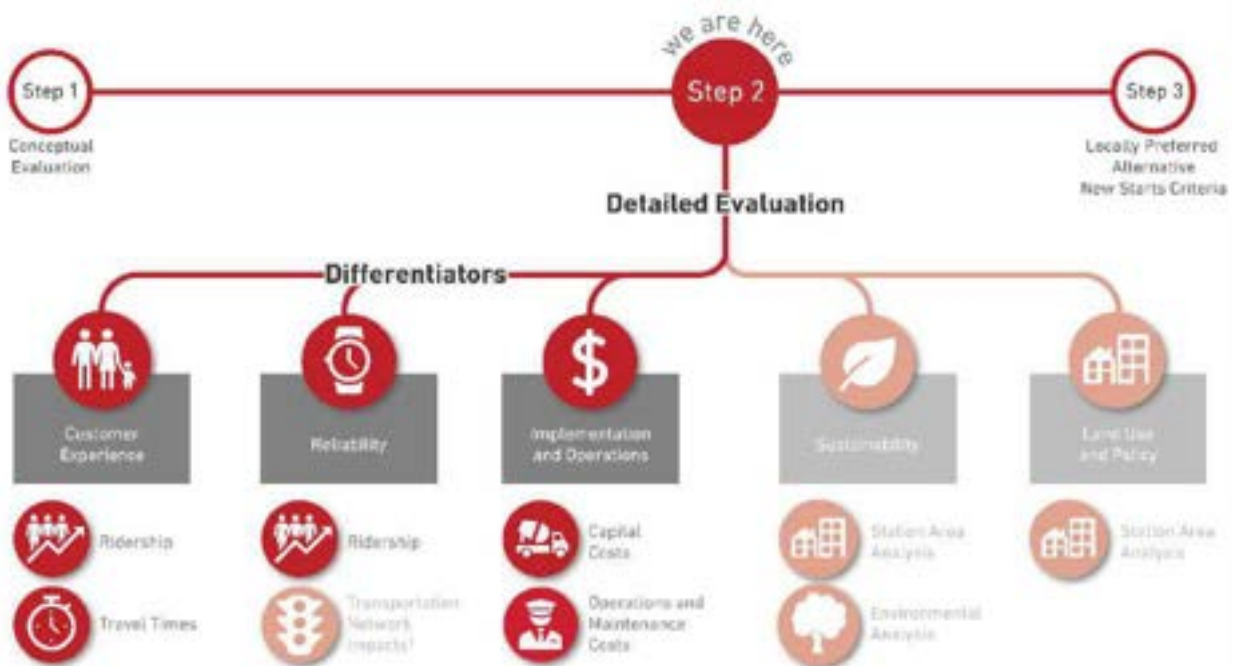
Step 2: Detailed Definition and Evaluation Metrics

The Step 2 evaluation of the Orange Line Corridor alternatives includes the use of quantitative and qualitative assessments of benefits and impacts to understand the performance of the alternatives and identify a preliminary LPA to evaluate further through the NEPA process. The evaluation centers on six areas of technical analyses documented in technical memoranda that provide comparative metrics on how well the alternatives address the Orange Line Corridor's goals and objectives:

- Ridership
- Capital Costs
- Operating and Maintenance (O&M) Costs
- Station Area Analysis
- Environmental Analysis
- Transportation Network Impacts Analysis

The metrics were related to the project goals and objectives shown in **Figure 9**. The evaluation categories that provide the most distinction between alternatives are the potential ridership, travel times, capital costs, and O&M costs, shown in the figure with dark red icons to highlight the role these metrics play as differentiators in the overall alternatives analysis process. The other technical evaluations and metrics are also useful for a variety of other reasons discussed later in this report, but do not provide as much differentiation between the alternatives at this stage of analysis. These metrics are shown in lighter red on the figure below.

Figure 9. Detailed Evaluation Analyses and Goals/Objectives



4.0 Detailed Alternatives Definition

This section summarizes the alternatives presented during engagement with community leaders, partner agencies, stakeholders, and the public across Central Texas. The Build Alternatives are compared to the No Build and Transportation Systems Management Alternatives (TSM) in order to understand the benefit of transportation investments and to fulfill FTA requirements.

No Build (Do Nothing)

As required by the FTA, Capital Metro will carry forward a “No Build” or “Do Nothing” alternative for comparison. For the Orange Line Corridor, the No Build Alternative keeps the existing transit network consistent with Capital Metro’s existing 2019 network which includes Capital Metro’s 2018 system overhaul changes referred to as Cap Remap.

The No Build Alternative provides the baseline against which the TSM and all build alternatives are compared in the alignment alternatives process. The FTA Simplified Trips-on-Project Software (STOPS)-based No Build ridership model uses the existing transit network described above. Forecasted ridership will be estimated based on existing ridership in the corridor and other factors, such as population and employment forecasts.

Transportation Systems Management Alternative

The TSM alternative presents the plan for system service improvements informed by the CMTA board-approved Connections 2025 plan. This study used Connections 2025 as a starting point and coordinated with CMTA staff to inform which roadway improvements and transit service changes will be implemented before 2028. The TSM identifies improvements to two existing MetroRapid routes (801 and 803) as well as the introduction of two new MetroRapid routes (804 and 820).

The recommendation from Connections 2025 that the 801 and Route 1 should be consolidated with 1/3-mile stop spacing was excluded from the TSM. Consolidating the routes would make the route less desirable due to longer travel times with more frequent stops. It seems unlikely this change would be implemented before 2025 and therefore was excluded. This recommendation also included 7.5-minute frequencies for the 801; however, for this analysis, the current 10-minute frequency and route alignment was used.

The TSM Alternative route improvements include:

- **Route 4 Montopolis**
 - Increased headway and reduced service span
- **Route 20 Manor Road/Riverside**
 - Increased headway and reduced service span
- **801 North Lamar/South Congress**
 - New alignment and improved frequency
- **803 Burnet/South Lamar**
 - New alignment and improved frequency
- **804 7th Street**
 - New MetroRapid route
- **820 Riverside/Manor**
 - New MetroRapid route
- **550 MetroRail Red Line**
 - Improved frequency

The TSM Alternative would assume completely mixed-traffic operations with no dedicated transitways except for three areas of transit priority lane expansion/improvements:

- South 1st Street Bridge
- Guadalupe between MLK and 38th Street
- 7th Street between Guadalupe and I-35

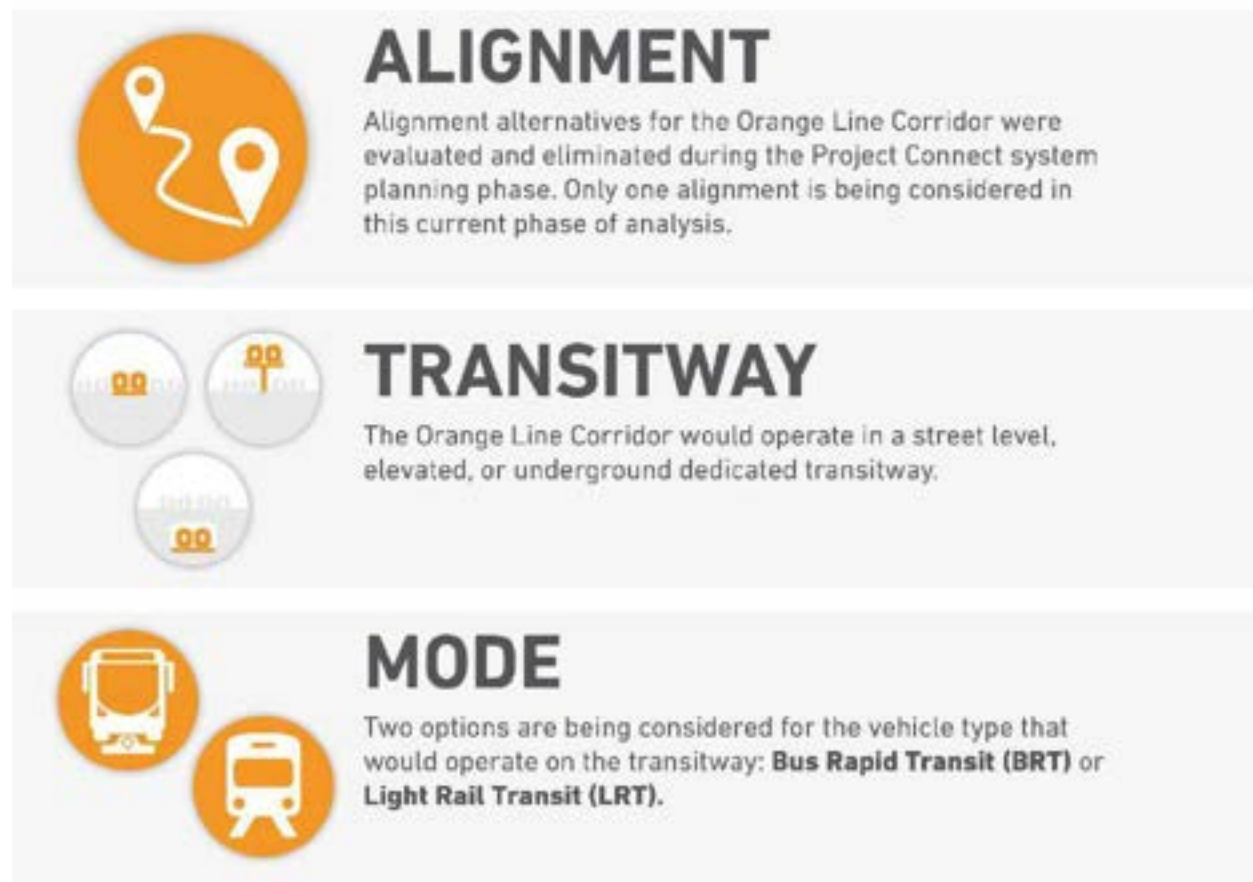
These projects would facilitate the movement of buses by providing a lane separated from congestion for bus operations.

Build Alternatives Overview

The definition of Build Alternatives is based on the 2018 Project Connect Long-Term Vision Plan and has been advanced through the Orange Line Study. Each Build Alternative (**Figure 10**) is comprised of three elements:

- Alignment
- Transitway Type
- Mode

Figure 10: Build Alternative Elements



3.3.1 Alignment

The Orange Line Corridor follows the 20-plus-mile route and serves the stations that were identified in the Vision Plan. The corridor was broken into seven segments for purposes of alternative definition and evaluation; this segmentation facilitated the isolation of key differentiators between the alternatives. Changes in roadway geometry, variations in development patterns and land uses, and the presence of major activity generators were used to identify segment boundaries.

The seven segments are shown in **Figure 11** and listed in **Table 2** (including stations).

Figure 11. Orange Line Corridor Segments



Table 2. Orange Line Corridor Segments

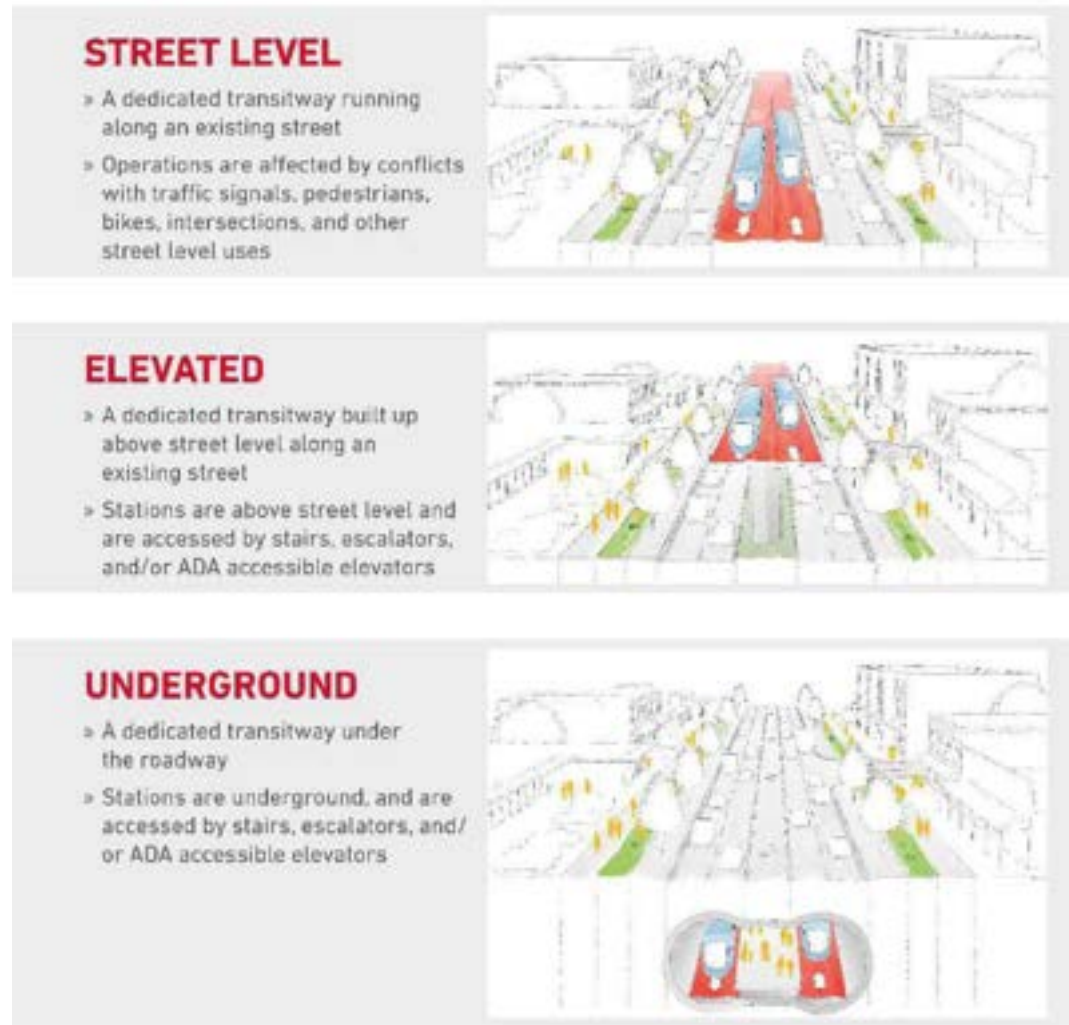
	Segment Name and Limits	Stations
1	North Austin <i>Tech Ridge to North Lamar Transit Center</i>	Tech Ridge, Parmer, Braker, Rundberg
2	North Central Austin <i>North Lamar Transit Center to 38th Street</i>	North Lamar Transit Center, Crestview, Koenig, Triangle, Hyde Park (38 th)
3	Central Austin <i>38th Street to 15th Street</i>	Hemphill Park (29 th), UT Mall (24 th), Capitol West
4	Downtown <i>15th Street to Riverside</i>	Wooldridge Square, Republic Square,
5	South Congress (SoCo) <i>Riverside to Oltorf</i>	Auditorium Shores, SoCo, Oltorf
6	South Central <i>Oltorf to Stassney</i>	St. Edwards, South Congress Transit Center, Stassney
7	South Austin <i>Stassney to Slaughter</i>	William Cannon, Slaughter

3.3.2 Transitway

The detailed definition of Build Alternatives uses the results of the Step 1 evaluation to identify the transitway types considered for each segment in the Step 2 evaluation. **Figure 12** highlights the dedicated space for transit within the ROW called “transitways” that were evaluated for each segment of the Orange Line Corridor.³

³ Capital Metro initially identified four types of transitways that could accommodate HCT service within the Orange Line Corridor. After the Step 1 analysis, Cut-and-Cover and Tunnel transitways were combined into one “Underground” transitway for various reasons. Cut-and-Cover and Tunnel transitways have similar archaeological and environmental considerations. Both Cut-and-Cover and Tunnel transitways have similar impacts to the built environment once operational. Additionally, there is no significant difference in transit operations between Cut-and-Cover and Tunnel.

Figure 12: Transitway Options

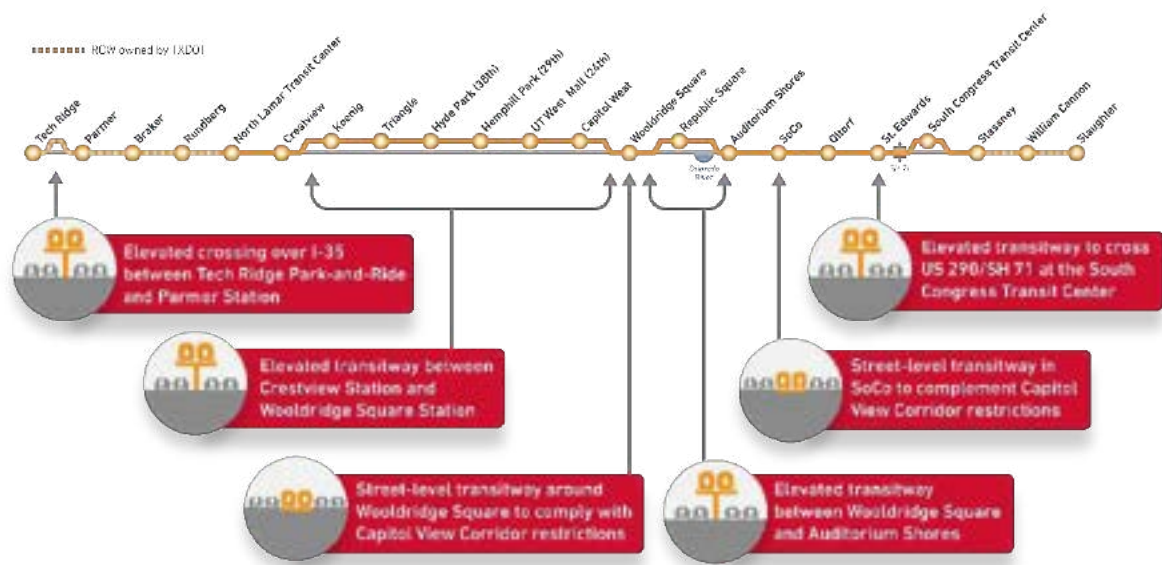


The transitway types identified for each segment were combined to generate two end-to-end transitway profiles for the Orange Line Corridor: Mostly Street Level and Mostly Elevated. A Partially Underground design option will continue to move forward, but the exact details on how much of the route could be underground will be determined through a separate process conducted in coordination with the Blue Line Corridor team. Due to this uncertainty, a Partially Underground transitway profile was not evaluated during Step 2 for any metric other than high-level capital costs. **Figures 13 and 14** show the potential transitway profiles assumed for each Build Alternative.

Figure 13. Mostly Street Level



Figure 14. Mostly Elevated



3.3.3 Mode

Capital Metro had identified two HCT modes for consideration in the Step 2 evaluation: **Bus Rapid Transit (BRT)** and **Light Rail Transit (LRT)**. Both BRT and LRT vehicle fleets would be fully electric, and both feature off-board fare collection, larger stations with level boarding, and intersection signal prioritization. The primary difference between the two modes is the capacity of the vehicles and the perceived attractiveness of the modes as assumed in ridership estimating (discussed later in this report). **Table 3** shows the general characteristics of each mode.

Table 3. Mode Characteristics

	BRT	LRT		
Maximum Speed	Posted arterial speeds were used for Street Level segments. Grade Separated maximum speeds are based on transitway character with a maximum speed of 55 mph. ¹	Posted arterial speeds were used for Street Level segments. Grade Separated maximum speeds are based on transitway character with a maximum speed of 55 mph. ¹		
Acceleration/Deceleration	2.7 mph/second	2.7 mph/second		
Station Dwell Time	<i>Boardings</i>	<i>Dwell Time (sec)</i>	<i>Boardings</i>	<i>Dwell Time (sec)</i>
	15 or less	20	170 or less	20
	16 – 34	30	171 – 290	30
	35 or more	40	291 or more	40
Guideway Curvature (Street Level)	30 seconds of additional time and acceleration/deceleration at identified turns that require vehicles to slow down	30 seconds of additional time and acceleration/deceleration at identified turns that require vehicles to slow down		
Guideway Delay (Grade Separated)	N/A	Minimum of 3 minutes to change direction at Republic Square in Build Alternative 1 (Trinity)		
Vehicle Type	60-foot domestic BRT vehicle 5 doors per vehicle	Low-Floor LRV 4 doors per train car		
Vehicle Capacity	115 total passengers (per vehicle)	172 total passengers (per vehicle)		

¹ Maximum speeds in the Downtown portion of Segment 3 were lowered to 25 mph due to the urban character of the corridor.

Autonomous Rapid Transit (ART) was identified as a mode that could be accommodated within the transitway as a future condition if the technology becomes more readily available to transit markets in the United States. At this time, ART technology cannot reasonably or feasibly be evaluated in direct comparison to BRT and LRT modes within the Orange Line Corridor, and is therefore not defined as a distinct mode in the definition of detailed alternatives. Capital Metro does recognize that any capital improvement should consider and, where possible, incorporate elements to future-proof the investment.

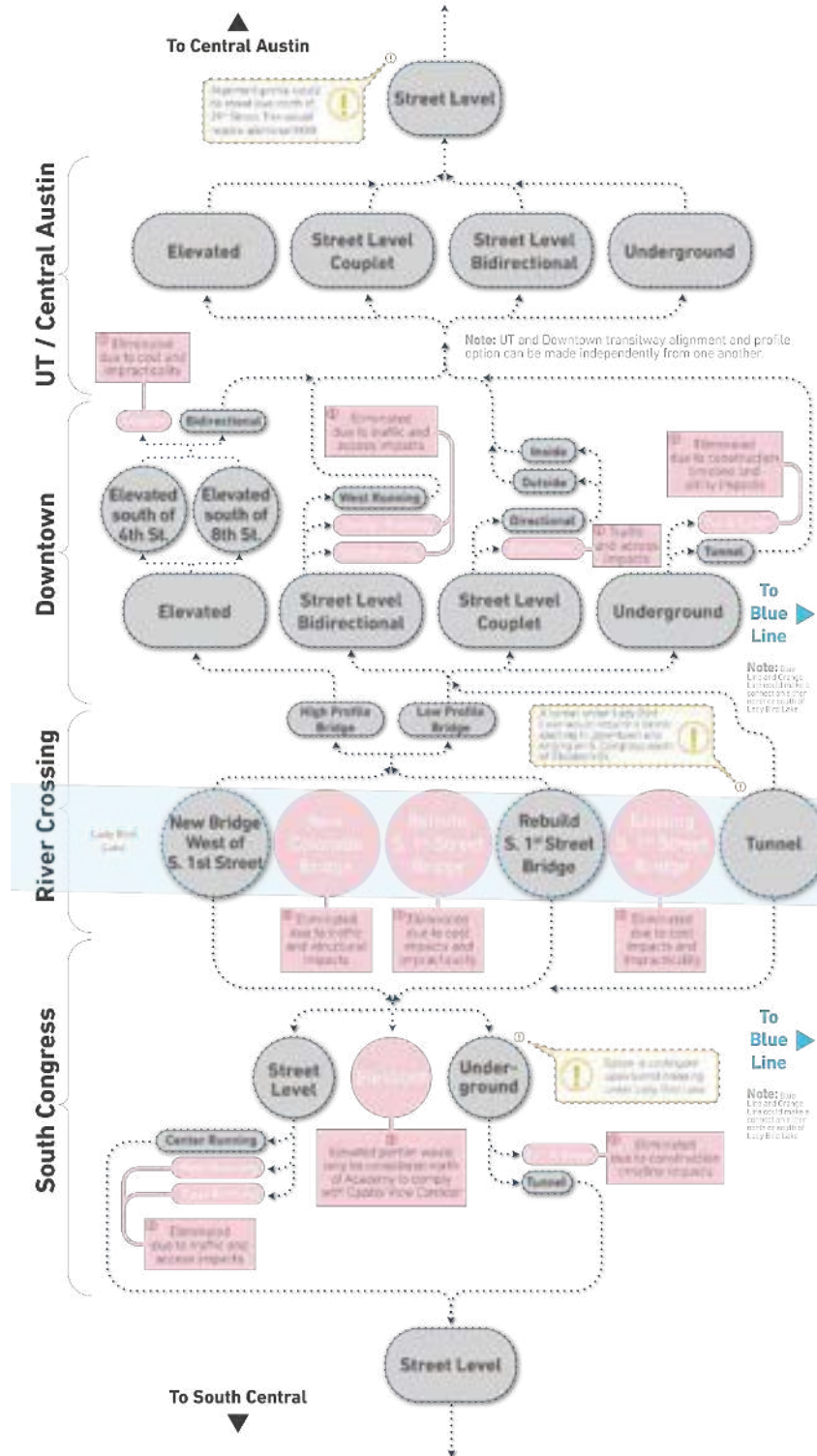
Detailed Alternatives Summary

The following table (**Table 4**) summarizes the Build Alternatives identified as part of the Step 2 alternatives definition process. These alternatives are compared to the No Build and TSM Alternatives using a variety of evaluation metrics in the following section.

Table 4. Orange Line Alternatives

			Corridor Segments								
			1 North Austin	2 North Central	3 Central	4 Downtown	5 SoCo	6 South Central	7 South Austin		
Alternative	Mode	Transitway Type									
No Build	NB	-	None	NA	NA	NA	NA	NA	NA	NA	NA
Transportation System Mgmt	TSM	Bus	None (Mixed Traffic) with Select Portion of Transit Priority Lane Impts	Mixed Traffic	Select Transit Priority Lane Impts	Select Transit Priority Lane Impts	Select Transit Priority Lane Impts	Mixed Traffic	Mixed Traffic	Mixed Traffic	Mixed Traffic
Build	BRT	Street Level		✓	✓	✓	✓	✓	✓	✓	✓
		Elevated		✗	✓	✓	✓	✓	✗	✗	✗
		Cut-and-Cover		✗	✓	✓	✓	✓	✗	✗	✗
		Bored Tunnel		✗	✓	✓	✓	✓	✗	✗	✗
	LRT	Street Level		✓	✓	✓	✓	✓	✓	✓	✓
		Elevated		✗	✓	✓	✓	✓	✗	✗	✗
		Cut-and-Cover		✗	✓	✓	✓	✓	✗	✗	✗
		Bored Tunnel		✗	✓	✓	✓	✓	✗	✗	✗

Figure 15: Refining the Alternatives for Detailed Evaluation



Note: While some of these options that are recommended for elimination may be further studied during future project phases, it is recommended that they are removed from consideration during this phase of the study.

Refining the Alternatives for Detailed Evaluation

While **Table 4** lists the universe of alternatives for detailed evaluation in Step 2, some of these alternatives would not be feasible for implementation and/or operations. The Lady Bird Lake (Colorado River) crossing is the constraining factor in the design of segments 4 and 5 – that decision dictates how (street-level, elevated, or underground) and where (new bridge, rebuilt 1st Street Bridge, or tunnel) the transitway could be located north and south of the crossing. **Figure 15** “maps” the designs that could be feasible based on the viable Lady Bird Lake (Colorado River) crossing options. This conceptual assessment of detailed alignment options was analyzed and presented to stakeholders at ATD for further vetting and coordination. While some of the options recommended for elimination could be further studied during future project phases, they were recommended to be removed from consideration during this phase of the study. The remaining alternatives were carried forward for detailed evaluation. Additional information regarding the alternatives carried forward for detailed evaluation can be found in the Definition of Detailed Alternatives Report

5.0 Detailed Evaluation Results

Evaluation Summary of Results

The Step 2 evaluation of the Orange Line Corridor used the evaluation criteria established in the technical evaluation methodologies and the detailed alternatives defined as a result of the Step 1 evaluation to generate high-level comparison between different combinations of options for alignments, transitway, and modes within the Orange Line Corridor. **Table 5** provides a summary of some of the key metrics from the technical evaluations, while the sections that follow discuss some of the key assumptions and results from each of the six technical memorandums.

The metrics displayed in **Table 5** report the results of the analysis for capital and O&M costs, ridership, and travel time, which are often the factors that are used by communities to select an LPA. These factors, are not, however, the only that were generated through this study – potential impacts to the transportation network (traffic, parking, and active transportation), station areas socio-economics, demographics, and land use, and potential environmental impacts, are all considerations that should be integrated into the process of identifying the LPA. Selection of the LPA will be made through the balance of high-level tradeoffs between key decision points – such as the cost of minimizing street-level impacts through grade separated transitways – but do not necessarily reveal any one tested combination to be the “right” choice for the LPA. This information is intended to provide decision-makers and the public with information that will help them balance costs and benefits, and the ultimate selection of the LPA may represent a different combination of mode, transitway, and alignment that meets the Purpose and Need of the project, is financially feasible, and has strong local support.

Table 5. Selected Evaluation Metrics for All Alternatives

		No Build	TSM ⁴	Build Alternatives			
				Mostly Elevated (Configuration A)		Mostly Street Level (Configuration B)	
				BRT	LRT	BRT	LRT
Running Time	One-Way ⁵	91-96 mins	91- 96 mins	42-43 min		52-53 min	
		Tech Ridge to Republic Square	54 – 56 min	26-27 min		32-33 min	
		Republic Square to Slaughter	37 – 40 min	15-16 min		19-20 min	
Average Weekday Boardings	2028 (Low)	--		38,600		33,700	
	2028 (High)	--		55,000		47,600	
	2040 (Low)	12,300	11,100	53,600		45,200	
	2040 (High)			73,700		61,600	
Capital Cost⁶		--	\$214.3 M	\$3,479.1 M	\$5,062.7 M	\$1,972.6 M	\$3,761.0 M
Annual Operating & Maintenance Cost⁷		--	\$80.7 M	\$30.3 M	\$55.6 M	\$24.4 M	\$50.2 M

⁴ TSM running times reflect PM peak running times.

⁵ Reflects a rounded average of the northbound and southbound one-way running time.

⁶ Represented in mid-construction year dollars (2023 for TSM; 2025 for Build Alternatives)

⁷ Represented in opening-year dollars (2028 for all alternatives)

Ridership

Ridership forecasts are an indication of potential demand for service. Ridership forecasts were utilized as an input to a capacity analysis which drove the service plan utilized for operating and maintenance costs. **Figure 16** provides an overview of the ridership results.

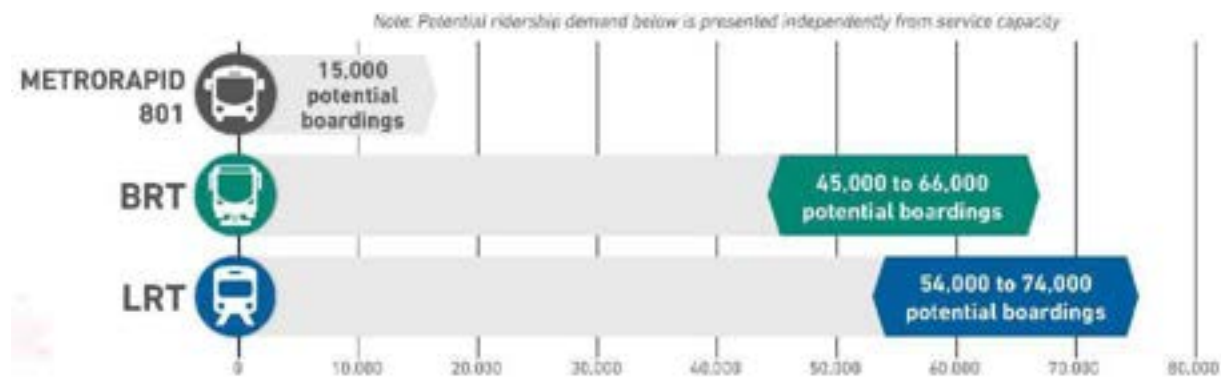
The Orange Line Corridor as a part of Project Connect represents one of the two proposed dedicated transitways. The transitway would provide reliable and frequent transit operating in a congestion-proof environment from which the entire Capital Metro System would benefit. The range in results depend on the configuration and the mode for the Orange Line.

The mostly elevated alternative provides the highest ridership results due to faster running times achieved through grade separation. The highest ridership Orange Line stations for the mostly elevated alternative are UT Mall, Rundberg, and Republic Square. The highest ridership Orange Line stations for the mostly street level alternative are UT Mall, Rundberg, and Crestview.

Regardless of the operating configuration, both alternatives represent operating on a dedicated transitway and produce significant increases in ridership along the corridor ranging from a 175% to 351% increase for the 2028 opening year along the corridor compared to the expected 2028 ridership for the No Build MetroRapid 801 that operates in mixed traffic, based on potential diversions from other routes due to constants and visibility factors.

The operational enhancements of the Orange Line result in a premium service that is attractive at the system level and benefits the system level ridership resulting in 11% to 28% increase for the 2028 opening year compared to the No Build system level ridership.

Figure 16: Potential Ridership Demand on Typical Weekday



Capital Costs

Capital cost estimates were prepared for each of the Orange Line Corridor Build Alternatives and the TSM Alternative (**Figure 17**). Standard Cost Categories (SCC) represent FTA's format for the reporting, estimating, and managing of transit capital projects and were used in this estimate. Financing costs (SCC 100) were not included as the development of the financial plan and would not be completed until the selection of an LPA. Unit costs used to develop the capital cost estimates were developed in coordination with Capital Metro using similar recently completed FTA-funded projects and scaling the unit costs to the local market. All costs were escalated to a mid-construction year estimate (2025) using a 3.5 percent annual inflation rate.

Figure 17: Estimated Capital Costs



**This cost reflects a joint tunnel for Orange and Blue Lines*

Key assumptions used for the Orange Line Corridor capital costs include:

- Unit prices for the various standard cost elements are based on unit prices for other completed U.S. transit projects and tempered for the Austin market.
- Quantity estimates are based on the conceptual designs developed for each alternative.
- Capital costs are escalated by 3.5% per year for inflation and reported in 2025 dollars.
- Guideway
 - LRT tracks
 - Embedded track – Street level
 - Direct fixation – Elevated
 - BRT guideway
 - Concrete guideway throughout the alignment
- Signals
 - At grade crossings of the guideway would be limited to signalized intersections.
 - Signals in aerial sections would be modified
 - Assume mid-block crossings only for center platform
- Roadway work
 - Reconstruction of sidewalk may be on both sides of the street along the alignment with Americans with Disabilities Act (ADA) compliant crosswalks at all signalized intersections
 - Assuming reconstruction of roadway along alignment including curb and gutter and drainage where needed.
 - Cross streets may need to be rebuilt or modified
 - Medians assume landscape 50% concrete 50%
- Professional services and contingency are calculated as percentages of different subtotal costs and therefore vary depending on both the transitway and mode

In general, the Street Level alternatives are less expensive than Elevated alternatives and significantly less expensive than Underground alternatives. LRT alternatives are also more expensive than BRT alternatives. This is primarily due to the greater cost of the transitway, stations, vehicles, and systems associated with LRT technology compared to BRT technology. There is also a significant difference between LRT maintenance facility capital costs and BRT facility costs. Sitework and ROW costs are more dependent on the transitway assumption rather than the mode.

Operating & Maintenance (O&M) Costs

Cost estimates for each Build Alternative and the TSM Alternative are shown in **Figure 18**. Cost estimates are presented in 2028 dollars reflecting the anticipated opening year for the Orange Line Corridor. Note that the TSM Alternative cost estimates are for traditional bus, not BRT or LRT modes.

Overall, BRT Build Alternatives have a lower estimated annual O&M cost. However, not all O&M cost estimates are intuitive as the primary driver for O&M costs is revenue hours which is driven by the service plan (to meet capacity) and cycle time. For example, one may assume that the Mostly Elevated alternative has a lower O&M cost due to a shorter cycle time (driven by running time); however, this alternative forecasts higher ridership which requires additional service in order to meet demand. As such, the service plan for each alternative varies based on forecasted demand. Therefore, to meet forecasted demand, additional capacity was necessary either in the form of increased headways (BRT) or increased vehicles/cars (LRT).

Figure 18: Estimated Annual Operating and Maintenance Costs



Station Area Analysis

The Orange Line Corridor analysis evaluated data on population and density characteristics and identified stations where there may be higher concentrations of transit-dependent populations as part of an EJ evaluation. Improved access to employment, improved connectivity, and/or improved air quality can offset impacts to EJ populations. An initial assessment indicates that EJ populations would have access to employment near station areas.

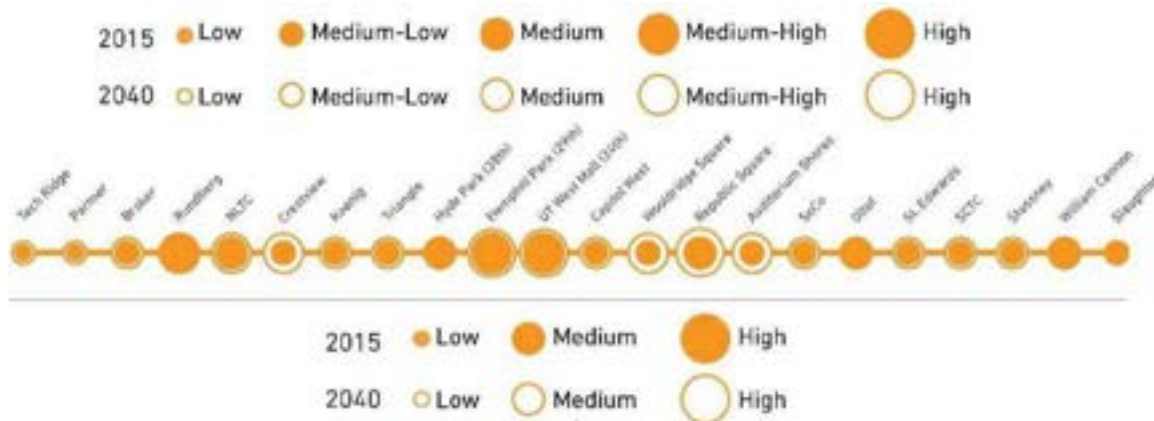
Table 6 shows the overall population, employment, and EJ characteristics of the build alternative alignment studied for the Orange Line Corridor. The Orange Line Corridor would serve a high number of jobs (over 150,000) and population (almost 90,000), and a higher percentage of the corridor’s residents identify as minority, low-income, or belonging to a zero-car household than citywide and regional averages.

Table 6. Corridor-Level Demographic Summary

	Population (2015)	Employment (2015)	% Population Minority	% Households Below Poverty	% Zero Car Households
Orange Line	86,270	150,082	47.7%	19.5%	7.3%
City of Austin	851,846	603,036	51.3%	18.0%	6.6%
Five-County Area	1,978,341	944,538	46.4%	14.2%	4.8%

The assessment shows that about one third of the station areas along the Orange Line corridor (7 of 22 station areas studied) score Medium to High in population density. Unsurprisingly, downtown through UT and Hempstead Park are the densest sections of the Orange Line corridor and also the places where population density is expected to increase the most through 2040. **Figure 19** shows population density by station for 2015 and 2040.

Figure 19. Population Density by Station



Almost 50% (9 of 22 station areas studied) scored High in the metric of employment density. By 2040, 17 station areas are projected to score High in employment density while all the remaining station areas score Medium. **Figure 20** shows employment density by station for 2015 and 2040.

Figure 20. Employment Density by Station

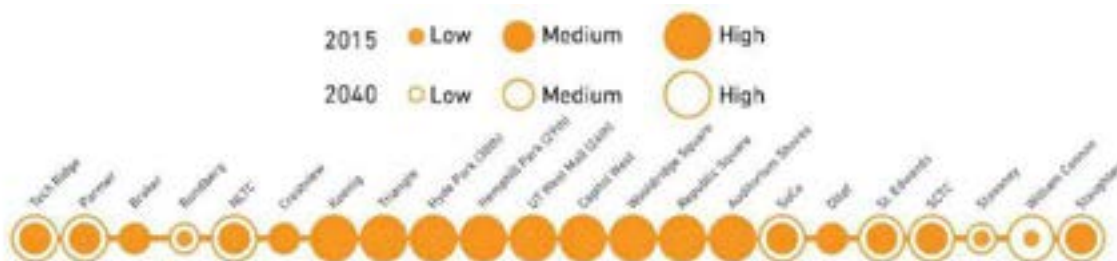


Figure 22. Environmental Considerations

	<p>Habitats & Species Based on U.S. Fish and Wildlife (USFWS) data (1) there are no designated critical habitat for any federally-listed species in the study area; and (2) there are potential habitats including Lady Bird Lake, and Karst Zones 1, 2, and 3.</p>	
	<p>Floodways & Waters of the U.S. The Orange Line Corridor contains crossings of Waters of the U.S., including Lady Bird Lake (Colorado River) and 100-year floodplains; the Orange Line Corridor intersects the Edwards Aquifer Transition Zone in Segment 1 along N. Lamar Blvd.</p>	
	<p>Capitol View Corridors Capitol View Corridors exist along the Orange Line Corridor. The Capitol View Corridors will be examined further under NEPA and the Section 106 process of the National Historic Preservation Act.</p>	
	<p>Historic and Archaeological Resources Numerous historic and archeological resources exist throughout the Orange Line Corridor. Direct impacts to National Register of Historic Places will be avoided to the extent possible. Section 106 compliance concerns for direct and indirect impacts may be highest for new right-of-way, above-ground, or below-ground construction.</p>	
	<p>Parks There will be impacts along Lady Bird Lake (Colorado River) and associated parkland. The Orange Line Corridor will minimize impacts to park resources in compliance with environmental regulations found in Section 4(f) of the U.S. Department of Transportation Act of 1966 and Section 6(f) of the Land and Water Conservation Fund Act.</p>	
	<p>Air Quality No significant negative impacts to air quality are anticipated to result from any of the alternatives.</p>	
	<p>Community Resources All Orange Line Corridor alternatives serve community resources including health care and government services, schools, places of worship, and cultural institutions.</p>	
	<p>Environmental Justice All Orange Line Corridor alternatives serve Minority and Low-income persons as well as Zero-Car Households. Positive impacts (benefits) could include improved access to transit options and improved travel times. Adverse impacts would be avoided, minimized, or mitigated during the NEPA process.</p>	

Transportation Network Analysis

The Orange Line Corridor alignment alternative was evaluated for the potential impact on the transportation network in terms of transit travel times, intersection delay and LOS, parking impacts and effects on active transportation. Further analysis on roadway and vehicle movement and capacity will be evaluated in preliminary engineering and design.

Transit Travel Times

Reduction in travel times is a key means of fostering achievement of the Austin Strategic Mobility Plan (ASMP) 16 percent transit mode split in the peak commute hours shown in **Figure 23**.⁸

Figure 23: Austin Strategic Mobility Plan Framework Overview

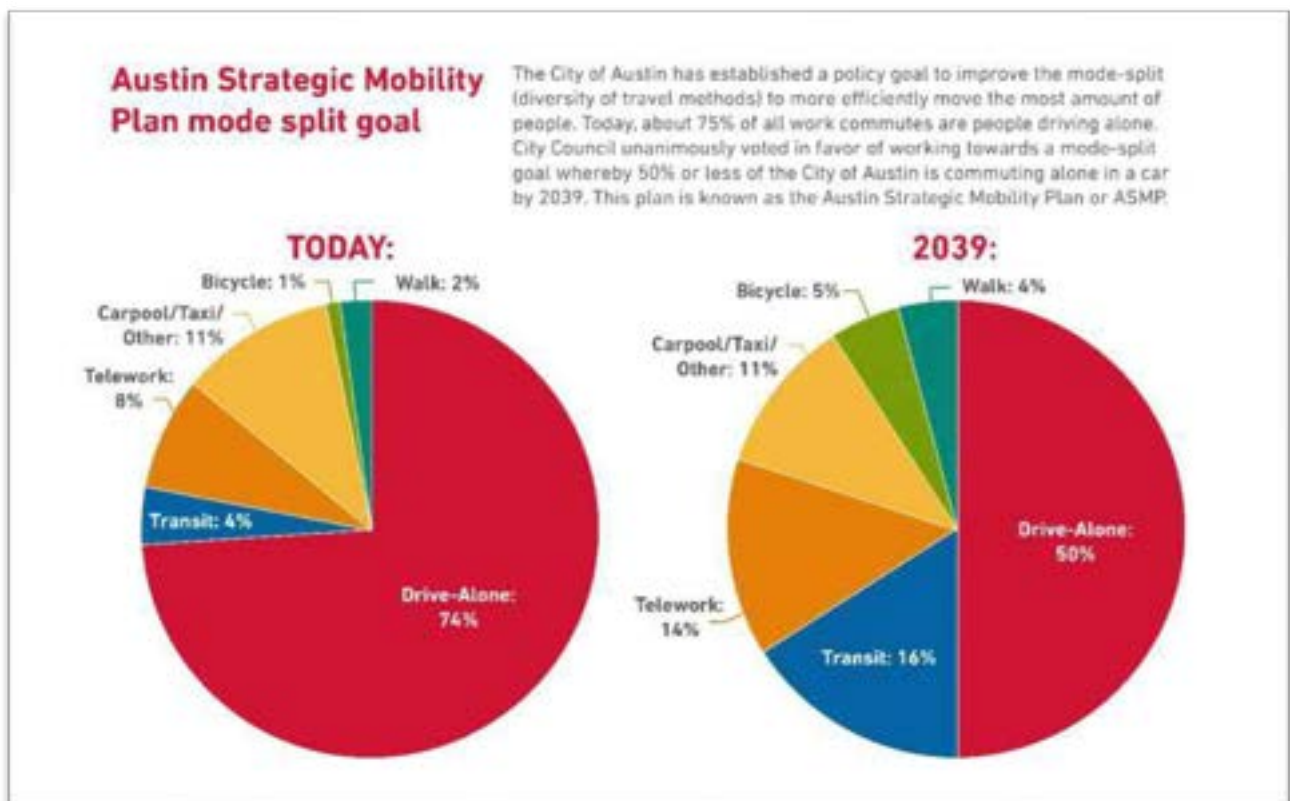


Figure 24 provides an overview of travel times for LRT. **Table 8** shows travel times between stations for the Build and TSM alternatives. Adding dedicated transit way significantly increases travel time along the Orange Line. Mostly aerial provides the greatest benefit in travel time savings. As demonstrated in the table below, many trips are significantly shorter by transit, however intersection delay and LOS will be evaluated during the NEPA process.

To accomplish the project Goals and Objectives, travel times along the Orange Line Corridor between key activity centers should improve for targeted populations including new riders previously not using transit along the corridor as well as members of EJ communities. **Figure 25** shows four different types of trips

⁸ City of Austin. <https://www.austintexas.gov/department/austin-strategic-mobility-plan>.

showing travel times between Central Texas activity centers that help determine whether travel times improve with the Build Alternatives based on the modeled operating plan.

Figure 24: Orange Line Travel Times

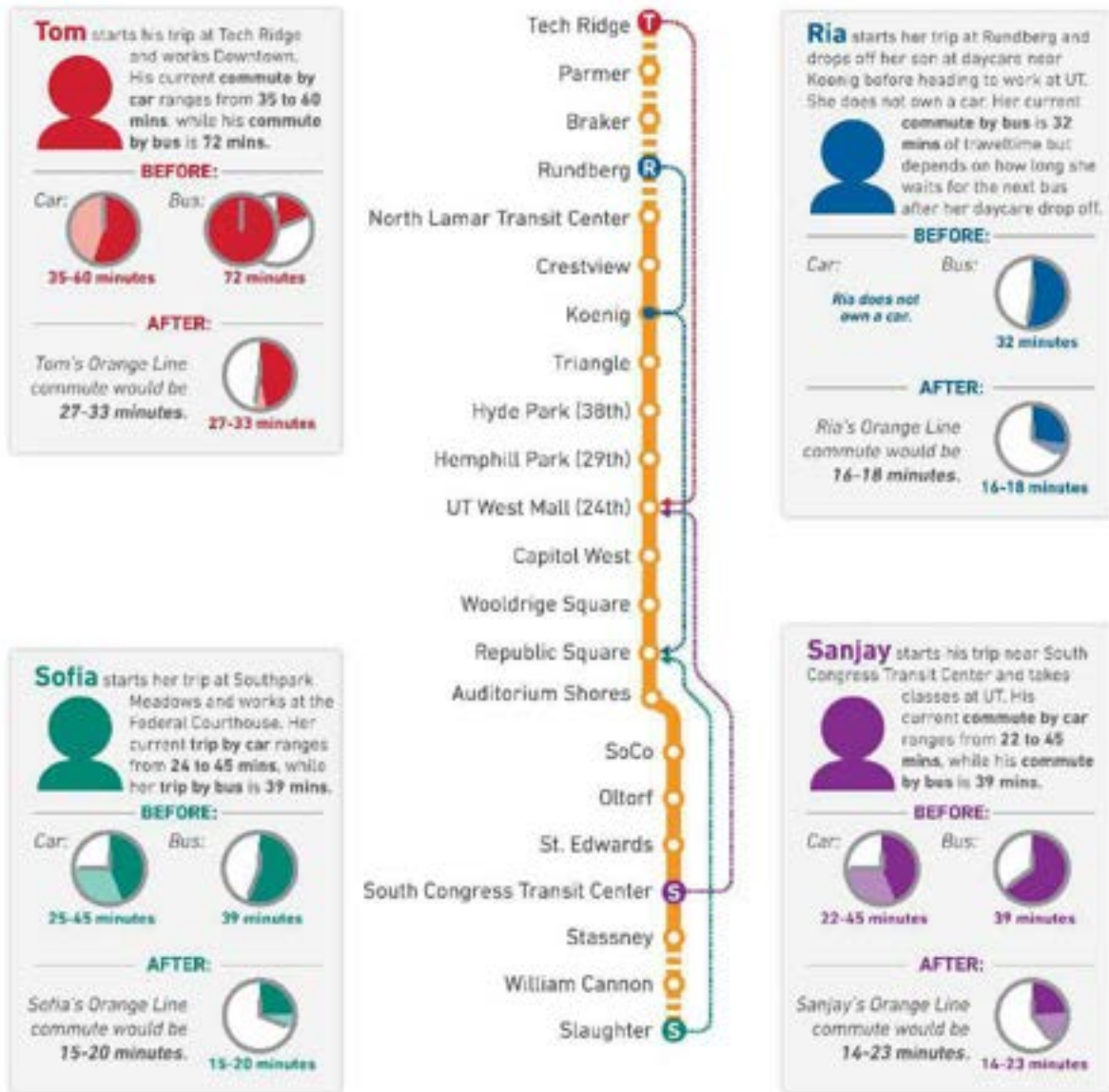


Table 8. Travel Times Between Stations for TSM and Build Options

	TSM	Option A (Mostly Aerial)	Option B (Mostly At-Grade)
	Off Peak (Midday)		
Average End to End	88	43	52
Slaughter to Auditorium Shores	32	13	16
Slaughter to Republic Square	34	15	19
Slaughter to Crestview	62	30	39
St. Edwards to Republic Square	17	7	11
St. Edwards to Tech Ridge	67	34	44
Auditorium Shores to Lamar & Rundberg	43	21	28
Republic Square to Lamar & Rundberg	41	19	25
Republic Square to Tech Ridge	54	27	33
Crestview to Tech Ridge	33	13	13

Source: Orange Line Corridor Running Time Model

Figure 25: Travel Time Estimates between Activity Centers



Note: Car travel time does not include time spent finding a parking space.

Intersection Delay and Level of Service

Existing delays are as reported in the Guadalupe Street Corridor Mobility Program Report (2019). Both transitway alignment options preliminarily evaluated increase intersection delays at most intersections. Delays are higher in the PM for the existing and alternative configurations. Reported delays in **Table 8** only represent delays calculated from SB traffic diverted from Guadalupe Street to Nueces/San Antonio. The delay at the intersection of the eastern leg of Nueces Street and 24th Street is indicative of the heavy delay possible on Nueces Street for this configuration. Guadalupe & 29th and Guadalupe & Dean Keeton are substantially delayed by the addition of the at-grade HCT guideway for all scenarios.

Active Transportation

For the Active Transportation analysis, the approach taken was to compile facilities in and around the potential Orange Line alignment, and identify opportunities and constraints within each station area for pedestrian and bicycle access and identifies critical gaps in the active transportation network where future recommendations should be made to enhance station area connectivity. In the next phase, the analysis will go further to recommend strategies for implementation to the build alternative. Active transportation is critical in transit first/last-mile connections.

Parking Impacts

The parking impacts analysis was a preliminary inventory of on-street parking spaces impacted by the potential Orange Line alignment. The total number of available parking spaces would be reduced by the addition of an HCT guideway; however, the exact impact is unknown until a locally preferred alternative has been selected. There is a possible under-utilization of parking in the Orange Line Corridor based on the data presented in this report and the previous Downtown Austin Alliance Parking Report. Downtown parking especially appears to be underutilized outside of normal business hours. Further analysis of the location and design of parking spaces that would not be impacted by the HCT guideway will be addressed in the subsequent phase of this project.

6.0 Engineering Considerations

In order to fully evaluate options and set a path forward, distinguishing factors that eliminate alignment options and types of transitways were evaluated. This analysis is representative of baseline conditions known to-date that could be refined in later project development phases. This section describes analysis performed that is reflective of a continued planning effort to understand engineering constraints at a conceptual level.

For this effort, preliminary engineering drawings were developed to an extent that facilitated analysis of the ROW available and what would be required for the transitway of each alignment. The purpose of the effort documented below is to help inform local decision-making in the selection of an LPA. As the LPA is advanced, more detailed engineering and design activities will occur through the Preliminary Engineering and NEPA phases.

Horizontal Alignment

Through the Vision Plan and subsequent study, the Orange Line corridor was identified as a HCT corridor with fully-dedicated transitway. To serve the capacity needs of the completed system, the corridor would consist of double track guideway. The horizontal alignment generally follows the existing southbound MetroRapid 801 service route, traveling along the major N Lamar Blvd, Guadalupe St, and S Congress Ave within both TxDOT and City of Austin right-of-way. From the northern terminus at the existing Tech Ridge Park and Ride Station, the alignment travels north-to-south along N Lamar Blvd and transitions to Guadalupe St north of the Triangle. It continues along Guadalupe St through UT campus and Downtown, crosses Lady Bird Lake, and transitions via E Riverside Ave to S Congress Ave. The alignment continues along S Congress Ave to the southern terminus near Slaughter Lane. Each of the baseline alternatives evaluated shares a similar horizontal alignment with slight variations due to guideway and station configuration. Horizontal alignment will be refined slightly as part of preliminary engineering.

Capitol Viewshed Corridor

Based on the Capitol View Corridor requirements as defined in Texas Government Code §3151.000, an aerial guideway or station would be precluded adjacent to Wooldridge Square. For this reason, an otherwise fully aerial guideway downtown would need to touch down to at-grade between approximately

12th St and 8th St. The station adjacent to Wooldridge Square would also need to be at-grade in this location.

Figure 26: Capitol Viewshed Corridor (Wooldridge Square looking Northeast)



Vehicle and Systems Requirements

While vehicles and systems elements were not the focus of the initial planning and conceptual engineering design, efforts to identify the potential vehicle technology and systems elements that would be most suitable for the Orange Line based on the characteristics of the project corridor were initiated. A white paper is being developed which will contain a series of sections that describe various systems elements of the Light Rail alternative--namely, the vehicles, traction electrification system, OCS, signaling, communications, fare collection, and operations and maintenance facility.

An important decision to be made early in the preliminary engineering phase is the selection of the vehicle configuration. While there are a number of examples of light rail vehicles (LRV) with level boarding using high passenger station platforms (e.g., Buffalo, Calgary, Edmonton, Los Angeles, Pittsburgh, St. Louis), all of the most recent new start light rail systems have opted for low passenger station platforms and level boarding using partial (approximately 70%) or 100% low floor LRVs (e.g., Charlotte, Houston, Hudson-Bergen, Kitchener-Waterloo, Minneapolis, Norfolk, Phoenix, Portland, San Jose, San Jose, Seattle, and soon Ottawa). Calgary and Edmonton, the two earliest LRT systems in North America, began and have expanded with high platform stations, and are now building new, stand-alone lines with low platforms, as well.

Future-Proofing

The Orange Line is a substantial capital investment and would drastically reshape travel patterns throughout the region. In turn, this investment must endure and be scalable to support advancements in technology, emerging system capabilities and service needs. Planning for system resiliency and scalability

helps eliminate design obstacles that limit a project’s long-term usability and helps determine design considerations that provide the best investment value over the project’s entire life cycle.

Future-proofing Capital Metro’s Orange Line so it will be positioned to incorporate emerging technologies and adapt to changing patron demands will require investment in and commitment to making provisions and accommodations that may not be used during the early stages of revenue service of the system.

A separate document related to future-proofing all elements of the Orange Line has been prepared, and each element should be evaluated for implementation during future design phases of the project.

7.0 The LPA — Your Plan, Your Orange Line

Selection of the LPA is a balance between tradeoffs made at key decision points – such as the cost of minimizing street-level impacts through grade separated transitways even though it may be more costly. The AA process provided information to the decision-makers and the public that helped them balance costs and benefits, but it does not necessarily reveal any one alternative to be the “right” choice for the LPA. The LPA selection is represented by a combination of mode, transitway, and alignment choices that when combined meet the Purpose and Need of the project, is financially feasible, and has strong local support. This section summarizes the proposed LPA that evolved from the Orange Line Corridor AA process.

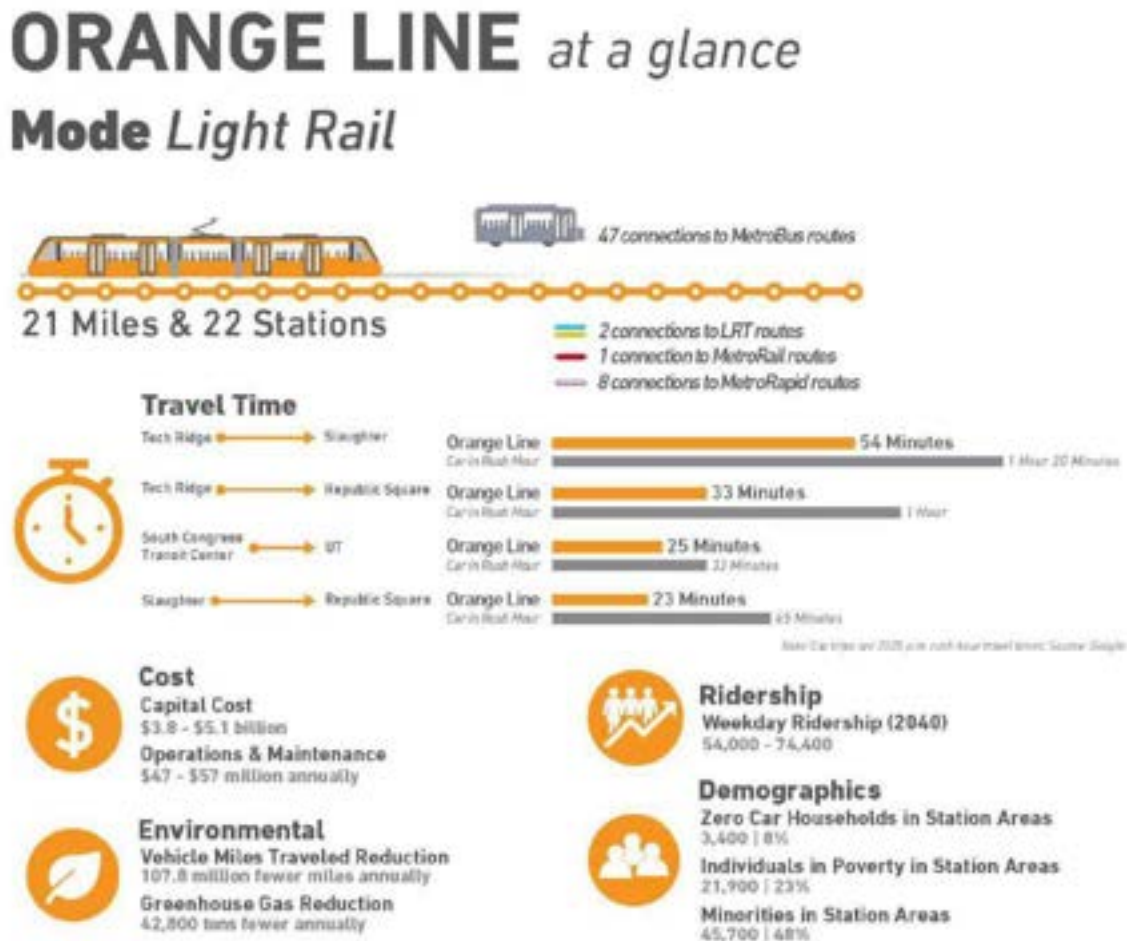
The Orange Line LPA is defined as light rail operating in an approximately 20-mile dedicated transitway from Tech Ridge on the northern end of the corridor to South Park Meadows on the southern end of the corridor (**Figure 27**).

The transitway is proposed to operate at street level (center running) throughout most of the corridor. The Orange Line transitway profile near Crestview Station and the Red Line crossing will be determined pending the outcome of a separate study. Through Downtown and UT, there are four potential transitway options: street level, partially elevated, and tunnel. Selection of the preferred transitway option (or combination of transitway options) between Auditorium Shores and Hemphill Park Station (29th St) will be made during the next project phase (Preliminary Engineering).

Twenty-two stations are planned along the route. The placement of these facilities will be coordinated with the local community during the design phase. Service has been modeled to operate every 10 to 15 minutes, seven days a week, from 5:00 a.m. to 3:50 a.m. (12:50 a.m. on Sundays), the next day. The Orange Line would feature off-board fare collection, larger stations with level boarding, ADA accessibility, and intersection signal prioritization.

The Orange Line would connect with the Blue and Gold Line in downtown Austin at Republic Square; the exact location of that connection (including potential joint use of a tunnel) will be determined in Preliminary Engineering.

Figure 27: The Orange Line LPA at a Glance



8.0 Implementation and Next Steps

The LPA was unanimously adopted by the Capital Metro Board of Directors and endorsed by Austin City Council on June 10, 2020, affirming it ready to advance into the next steps in the implementation process. These next steps include incorporation of the LPA into the CAMPO 2045 plan and developing an implementation plan that addresses funding, completion of the federal environmental review process, preliminary and final design, and construction. Capital Metro will continue to engage with the community throughout this process as the Orange Line project advances.

Project Implementation

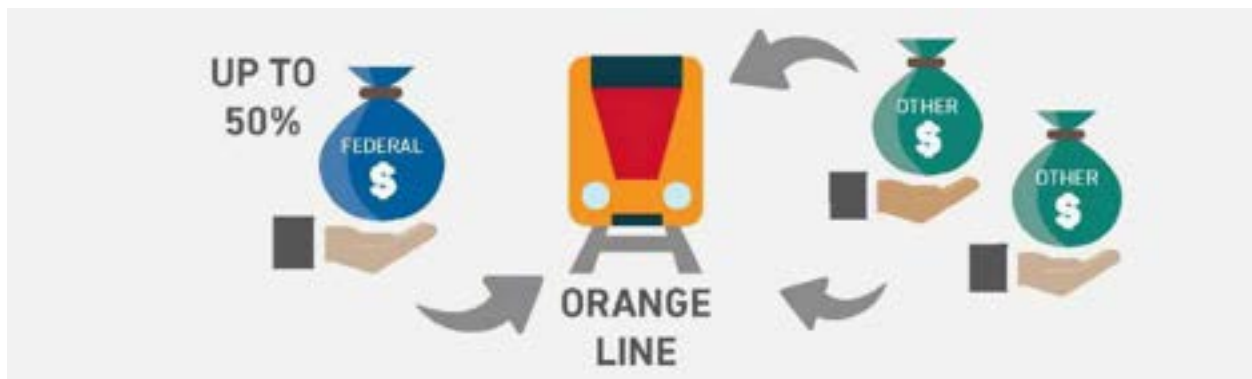
Following the LPA's June 2020 adoption, Capital Metro will develop an implementation plan that identifies the sequencing and extent of projects to be implemented over the coming years. This may include consideration of a Minimum Operable Segment (MOS) and/or implementation of a Starter System of whole or part of the Orange Line LPA. An MOS provides the most cost-effective solution with the greatest

benefits for the project. The MOS must be able to function as a stand-alone project and not be dependent on any future segments being constructed.⁹

Project Funding

The implementation plan will include a funding strategy to implement the proposed projects. With the adoption of the LPAs, the project would be eligible for Federal funding in line with recent trends in CIG authorizations. The CIG program may award up to 50 percent of a project’s capital cost. Other funding will primarily come from local sources, and authorization of new local funding to be directed towards some or all of the Orange Line cost could be on a potential November 2020 referendum. **Figure 28** illustrates the funding approach discussed above.

Figure 28: Orange Line Funding Approach

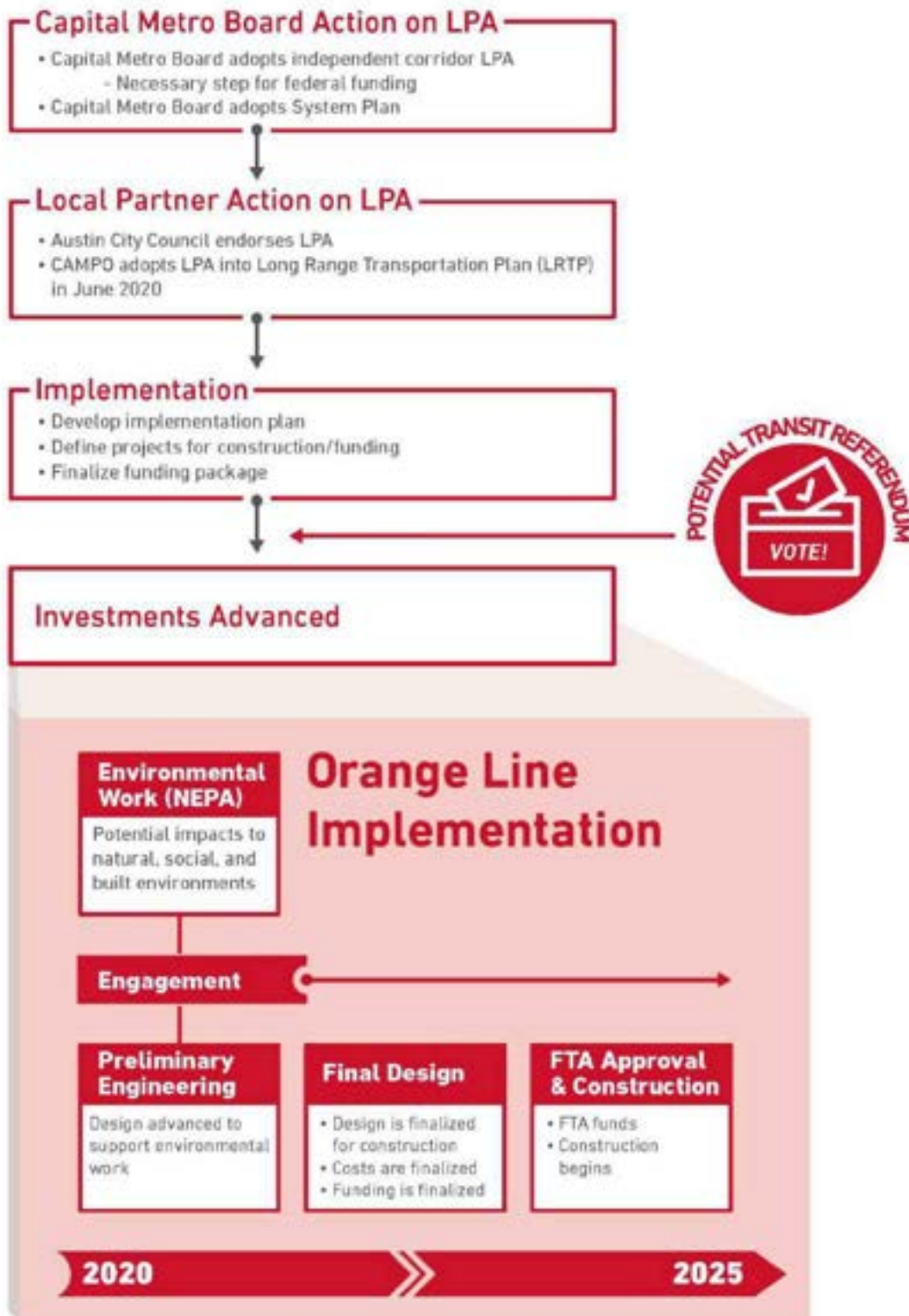


Preliminary Engineering and NEPA Phase

The project implementation plan will determine how the Orange Line project advance into the Preliminary Engineering and NEPA phases (**Figure 29**). During these phases, the potential impacts and benefits to the natural, social, economic and built environments will be evaluated in detail and compared to the alternative of taking no action to implement HCT in Austin. The project design will be advanced to support this evaluation and it will include the development of preliminary design concepts for a tunnel in downtown Austin.

⁹ FTA Circular 9300.1B, November 2008.

Figure 29: Implementation Steps for the LPA



Proposed Next Steps

The proposed Orange Line LPA is documented in the LPA Summary Report (Your Plan, Your Orange Line Summary Report, April 2020). Public comment on the LPA was sought through a virtual open house.¹⁰ Feedback from those virtual public engagement efforts helped to inform the Capital Metro Board of Directors adoption of the Orange Line LPA and the Austin City Council's endorsement. Following June 2020 adoption of the System Plan, Capital Metro will develop a sequencing plan and funding strategy for implementing the projects, including consideration of how the Orange Line service will be coordinated with the Blue and Gold Lines.

¹⁰ Source: <https://www.capmetroengage.org/en/engagement-initiatives/project-connect-virtual-open-house>

APPENDIX C: PUBLIC MEETING SUMMARY REPORTS

Orange Line Early Scoping Outreach

Engagement Summary



Engagement Approach

The Orange Line stakeholder engagement team planned and conducted a large-format, centrally located Open House held on April 8, 2019 that served as the formal Early Scoping meeting for the Orange Line corridor. That meeting also served as a kick-off to six Corridor Conversation-style meetings along the proposed Orange Line between May 8 and May 16, 2019*. These conversations were designed to inform the Early Scoping phase of the project while bringing engagement directly to the constituents along the diverse segments of the 20-mile corridor. Documentation of all seven of these events, as well as a concurrent Virtual Open House (VOH), is included in this summary.

In addition to these open house meetings, the stakeholder engagement team began the process of setting up one-on-one meetings with key stakeholders and stakeholder groups which will continue between this phase of general public outreach and the Conceptual Alternatives phase of outreach, anticipated in July 2019.

**Please note that the overall project engagement approach is documented in the Project Connect Orange Line Public Involvement Plan (PIP).*

Engagement Goals

These early open house meetings were designed to:

- 1) Introduce the project study area, alternatives being considered, relevant environmental benefits and impacts being considered, and the overall schedule and public participation process.
- 2) Allow the public an opportunity to review and provide comments to the project's Purpose and Need statements.

Event Details

Seven total open house meetings were held to correspond with the seven segments identified in the project's PIP. With the exception of the April 8 event which included longer hours, partner tables, and more extensive staffing, each meeting was set up similarly and held from 4:30 p.m. – 6:30 p.m. between May 8 and May 16. The VOH was designed to reflect this set-up as closely as possible, however, the VOH survey questions differed slightly from the in-person survey. All materials used are included in Appendix A. Event photos are included in Appendix B.

Set-up included:

- A sign-in table with an assortment of program handouts and maps
- An Orange Line project fact sheet in English and Spanish
- 15 exhibits arranged in a semi-circle around the perimeter of the space
- Three to five project team members positioned with exhibits to provide additional information and answer questions
- A comment station to allow attendees to sit while completing comment forms

Segment #	Segment Name	Event Location	Event Date/Time
1	North	Little Walnut Creek Branch Library, 835 Rundberg Lane	Thursday, May 16
2	North Central	North Austin Lions Club, 1103 Justin Lane	Wednesday, May 15
3	Central	Cambridge Tower, 1801 Lavaca Street	Monday, May 13
4	Downtown	Central Library, 710 W. César Chávez Street	Monday, April 8
5	SoCo	Fulmore Middle School, 201 E. Mary Street	Wednesday, May 8
6	South Central	South Congress Transit Center, 1801 Lavaca Street	Tuesday, May 14
7	South	Pleasant Hill Library, 211 E. William Cannon Drive	Thursday, May 9
All	Virtual Open House	https://www.capmetroengage.org/en	Monday, April 8 – Friday, May 24

Event Notifications and Media Coverage

The Federal Transit Administration (FTA) published a formal Notice of Intent for Early Scoping on February 28, 2019. Due to the speed at which these events were organized, notifications to key stakeholders and neighborhood associations were more limited than would be ideal for similar events in future phases. Example notifications and PDFs of media coverage are included in Appendix C.

Notification	Dates	Number of Recipients	Performance
E-blast to legacy Project Connect contact database for kick-off event	April 2; April 9	782 each	Open: 53%; Click: 6% Open: 42%; Click: 21%
Newspaper ads (Kick-off event only)	Chronicle: March 29 Community Impact: March Edition El Mundo: March 28 La Prensa: March 21 Statesman: March 24 Villager: March 22	Approx. 2 million total circulation	N/A
Radio ads (Kick-off event only)	KUT/KUTX: March 25 – April 7 KOOP: March 15 – April 6 KAZI: March 28 – April 8	Approx. 500,000 total circulation	N/A
E-blast to legacy Project Connect and newly-created Orange Line contact database for six corridor	April 24; May 6	2814; 3509	Open: 43%; Click: 0% Open: 40%; Click: 0%

meetings held between May 8 - 16			
Inclusion of event information in Project Connect e-newsletter	May 6	790	Open: 47%; Click: 7%
Follow-up calls to key audiences, including neighborhood groups, to confirm receipt and request distribution	April 24 – May 8	N/A	N/A
Social media posts	Near-daily, March 31 – May 22	N/A	N/A
Earned media coverage (Kick-off event only)	Statesman: April 5 Chronicle: April 12	Approx. 1 million total circulation	N/A

Engagement Results

The results of the Orange Line Early Scoping meetings have been incorporated into the overall Project Connect outreach dashboard and tracker. The results are shown in the table below. A summary of the Virtual Open House engagement summary is included in Appendix D.

Segment #	Attendance	Number of Comments Received	Zip Codes Represented
1	7	3	78753, 78758, 78723
2	11	1	78757, 78752, 78751, 78731, 78702
3	26	13	78741, 78705, 78757, 78701, 78731, 60640, 78731, 78681, 78702, 78712, 78744, 78722
4	168	137	78613, 78660, 78666, 78681, 78701, 78702, 78703, 78704, 78705, 78707, 78717, 78718, 78721, 78722, 78723, 78725, 78727, 78729, 78731, 78732, 78735, 78736, 78741, 78745, 78746, 78747, 78748, 78749, 78750, 78751, 78752, 78753, 78754, 78755, 78756, 78757, 78758, 78759, 98103
5	6	2	78701, 78704, 78737, 78746, 78754
6	23	22	78757, 78745, 78701, 78741, 78748, 78769, 78704, 78707, 78767
7	11	2	78748, 78745, 78744, 78746, 78704

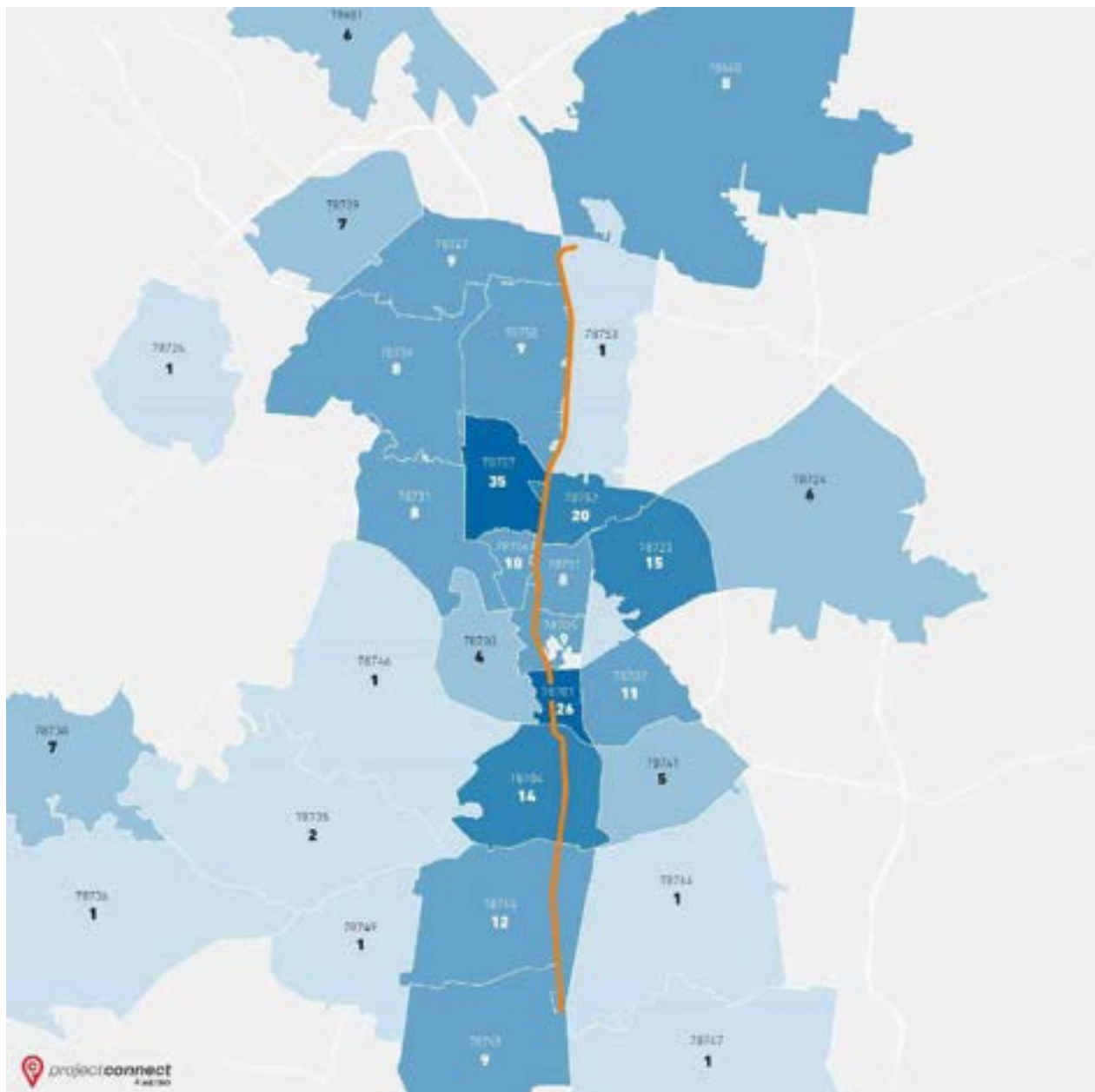
Total In-Person	252	180	
Virtual Open House	3,406 site visits; 2,911 unique site visits	487	78681, 78701, 78702, 78723, 78724, 78727, 78729, 78731, 78738, 78748, 78751, 78752, 78757, 78758, 78759 (gathered through 57% of the 487 total comment submissions)
TOTAL	3,163	667	

What We Heard

The Project Connect team offered participants the opportunity to comment through two channels: (1) written feedback to the Orange Line Draft Purpose & Need Statements on comment cards made available at meetings; and, (2) online survey format made available through the Project Connect Virtual Open House (VOH).

Participation by zip code residence along the corridor was highest in southern segments, followed by Downtown, and Central Austin (Figure 1). A spreadsheet of all comments received is included in Appendix E.

Figure 1 Open House Comment Participation by Zip Code



The following additional questions were included on the open house comment form:

- What number Draft Need Statement (problem we are trying to solve) are you commenting on? (1-6)
- Do you agree with the Draft Need Statement?
- Do you have a personal history or feedback that relates to the Purpose & Need Statement?
- What else would you like the Project Team to know?

The overall sentiment of comments from all events was **concurrence** with the Purpose & Need statement. Results seen in Figures 2 – 6.

Comment Sheets Available at Meetings and via Virtual Open House

Figure 2 Do You Agree with the Draft Purpose and Need Statement? (n=667)

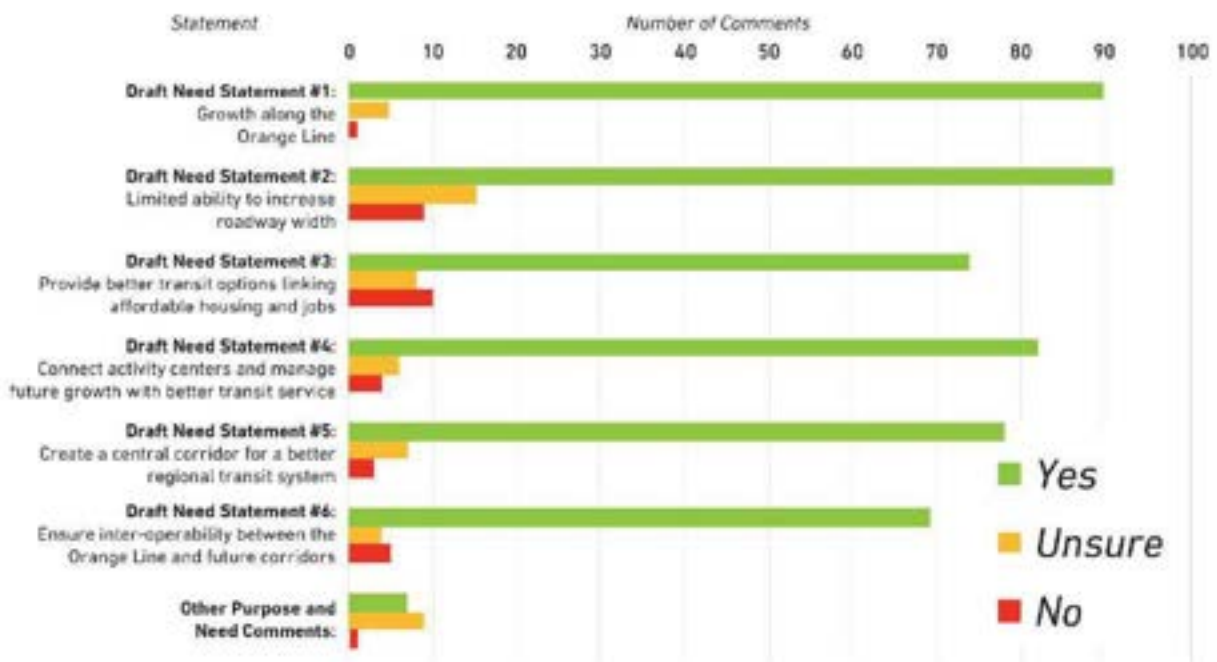
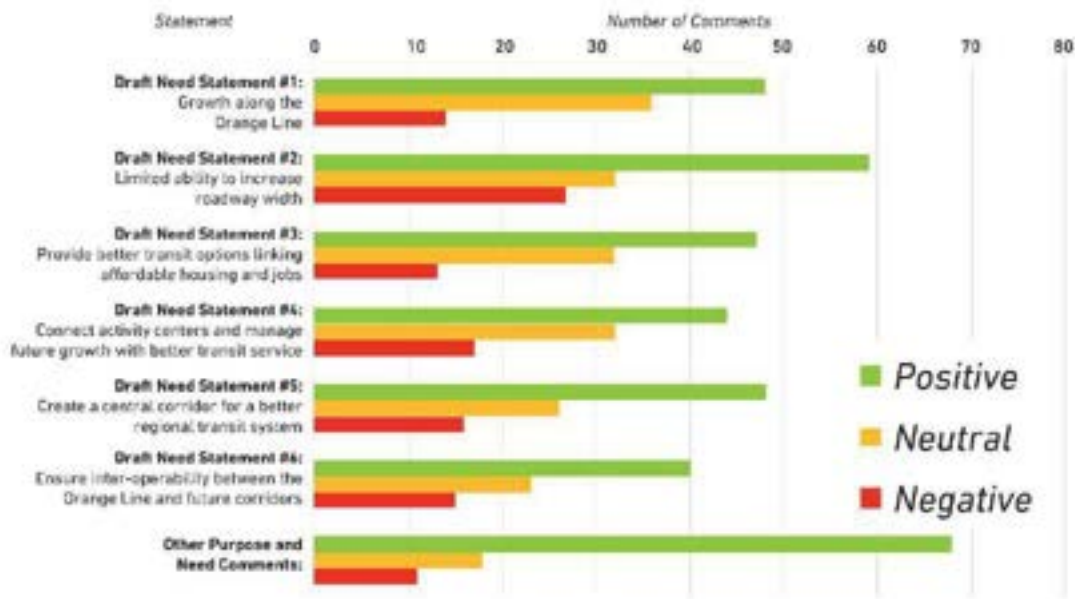


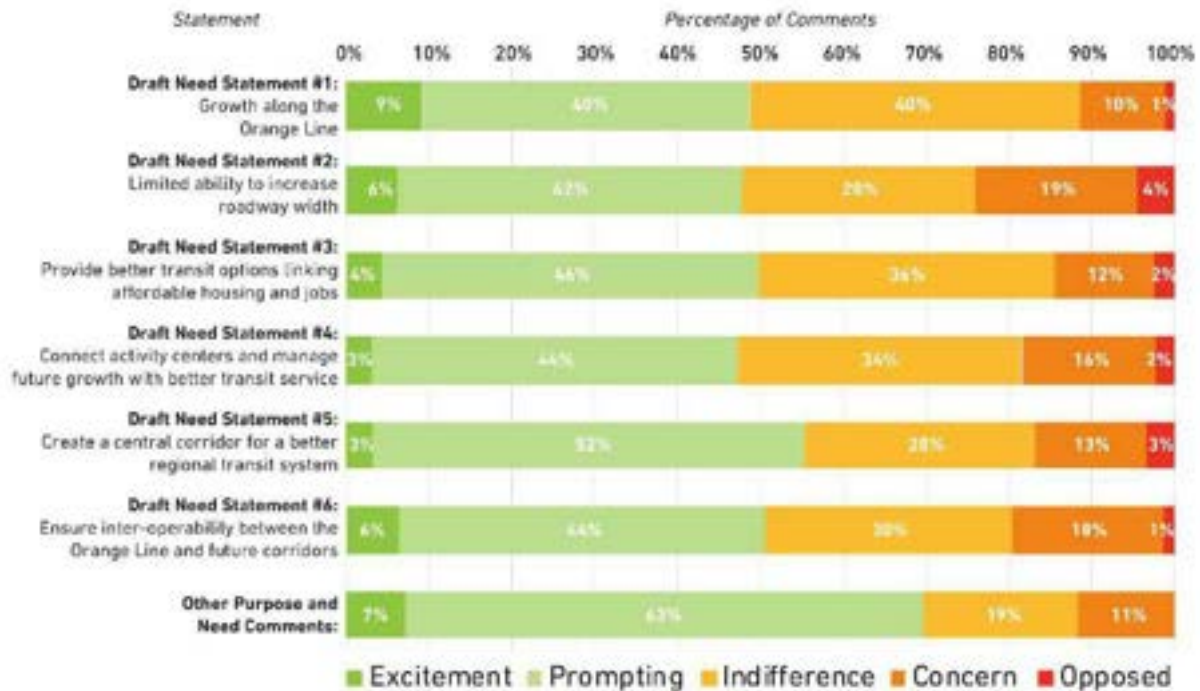
Figure 3 Tone of Personal Story Responses to Draft Purpose and Need Statements



In expressing sentiment through personal stories relating to the corridor, participants' feelings fell into the following sentiment themes:

- **Excitement:** Commenter expressed enthusiasm and overarching support
- **Prompting:** Commenter was urging Capital Metro to be bolder in its approach; supportive with caveat
- **Indifference:** Commenter did not convey support or opposition but commented generally
- **Concern:** Commented had a specific fear or frustration with the Purpose & Need
- **Opposed:** Commenter is opposed to the current notion of high-capacity transit on the corridor

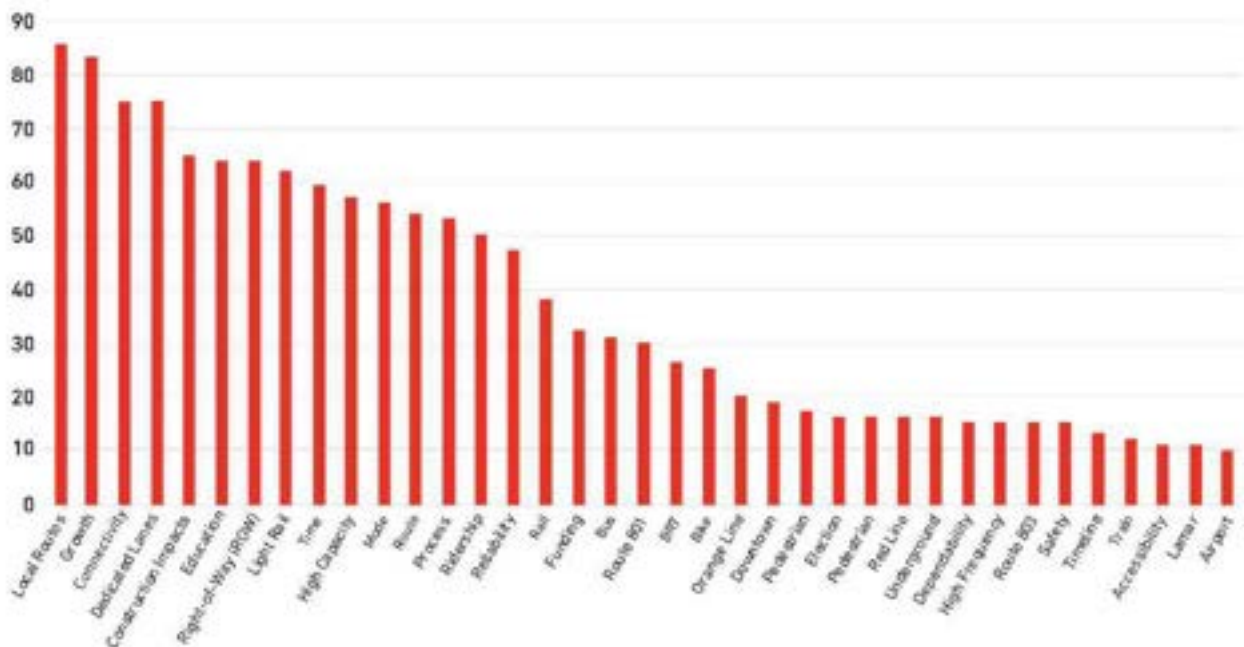
Figure 4 Sentiments Expressed in Personal Story Responses to Draft Purpose and Need Statements



Other common tags expressed in the anecdotes provided by the public included:

- The importance of connectivity so that it is feasible and reasonable to get where you need to go (e.g., home—work) in something other than a car.
- Frequent discussion of local routes – with varying sentiment for excitement to concern
- Support for dedicated lanes, which speaks to a frequent comment regarding routes being impacted by delays in the overall transportation system in Austin
- Understanding that growth is driving the need for transit investment in this corridor, so that quality of life is maintained/improved
- Concern for construction impacts

Figure 5 Topics Mentioned in Open-Ended Responses to Purpose and Need Statements



Lessons Learned and Next Steps

The kick-off open house attendance at the Central Library met expectations, though the attendance at the Corridor Conversations was lower than ideal. This difference may be due to the paid and earned media coverage on the kick-off event; the smaller Corridor events did not benefit from this media attention.

In response, the stakeholder engagement team proposed to reformat the next round of outreach to include only three events that will function as workshops, and will drive participation to these workshops using paid media coverage and neighborhood/advocacy group primers.

These primers will be presented to neighborhood and advocacy groups identified through coordination with Capital Metro and will range from tabling at existing events to half-hour introduction presentations with Q/A during regularly scheduled neighborhood association meetings. The format will vary based on the organizations' availability. This change in outreach approach is designed to increase interest in the events based format, allow attendees to interact with each other, drive attendance through increased advanced outreach, and glean conversational-style feedback from attendees.

The next phase of outreach will begin in mid-June and wrap up at the end of July.

Appendix A: Materials

WELCOME

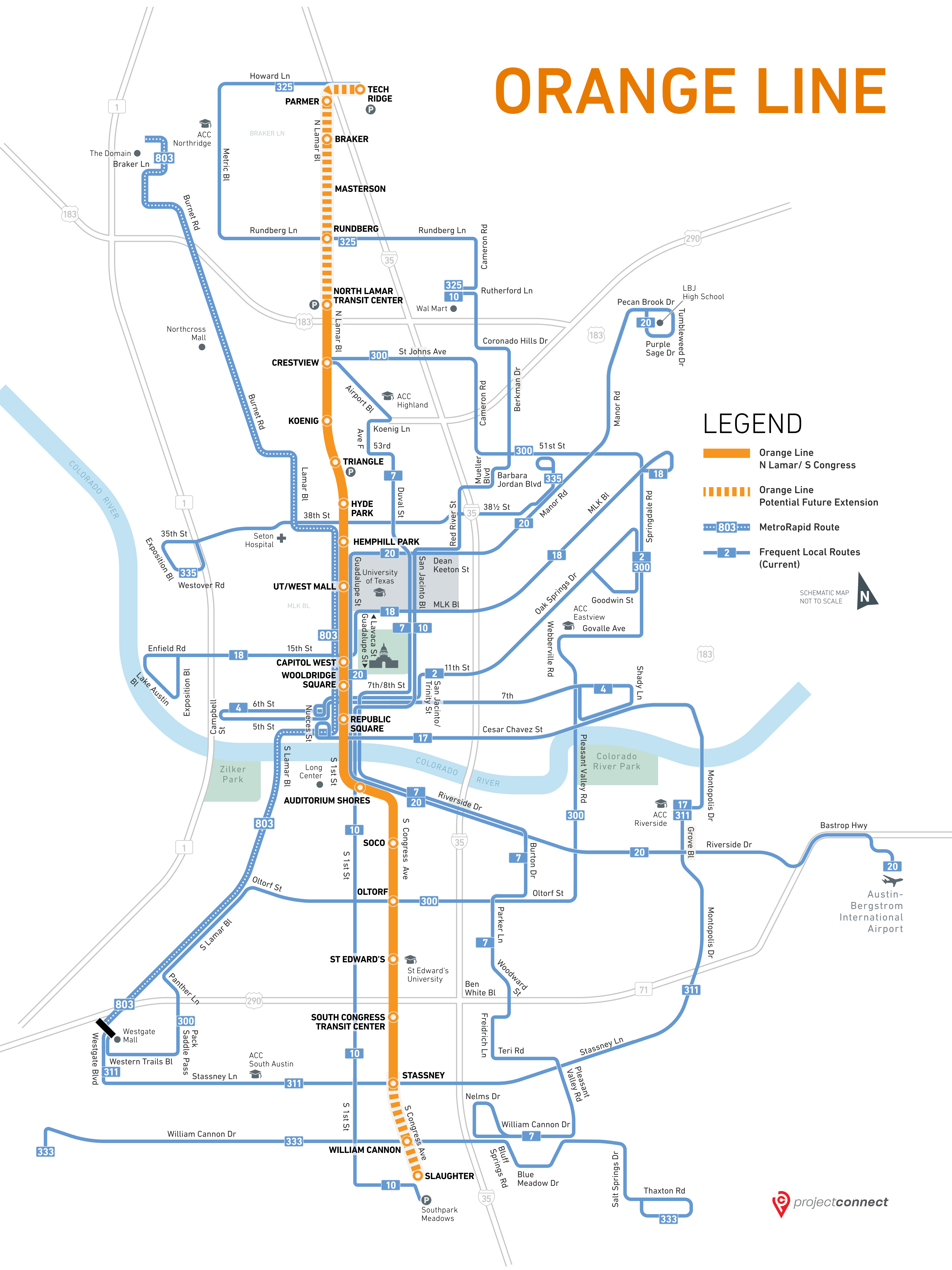
PROJECT CONNECT
OPEN HOUSE

Orange Line

RELIABLE. FREQUENT. CONGESTION-PROOF.



ORANGE LINE



LEGEND

- Orange Line
N Lamar/ S Congress
- - - Orange Line
Potential Future Extension
- · - · - 803 MetroRapid Route
- 2 Frequent Local Routes
(Current)

SCHEMATIC MAP
NOT TO SCALE



ORANGE LINE SCHEDULE

Early 2019-Early 2020

PROJECT DEFINITION



Key Milestones

- »Public and Stakeholder Involvement
- »Develop Purpose/Need
- »Develop Alternatives
- »Screen Alternatives
- »Ridership Analysis
- »10 Percent Design
- »Selection of Locally Preferred Alternative (LPA)

- »Capital Metro Adoption of LPA (Feb 2020)
- »CAMPO Adoption of LPA (May 2020)
- »November 2020 Vote

Early 2020-Early 2022

NEPA ANALYSIS PROCESS



Key Milestones

- »Continued Public and Stakeholder Involvement
- »Evaluation of LPA and No-Build Alternatives
- »30 Percent Design
- »Develop Draft Environmental Impact Statement (DEIS)
- »Develop Final Environmental Impact Statement (FEIS) and Record of Decision (ROD)

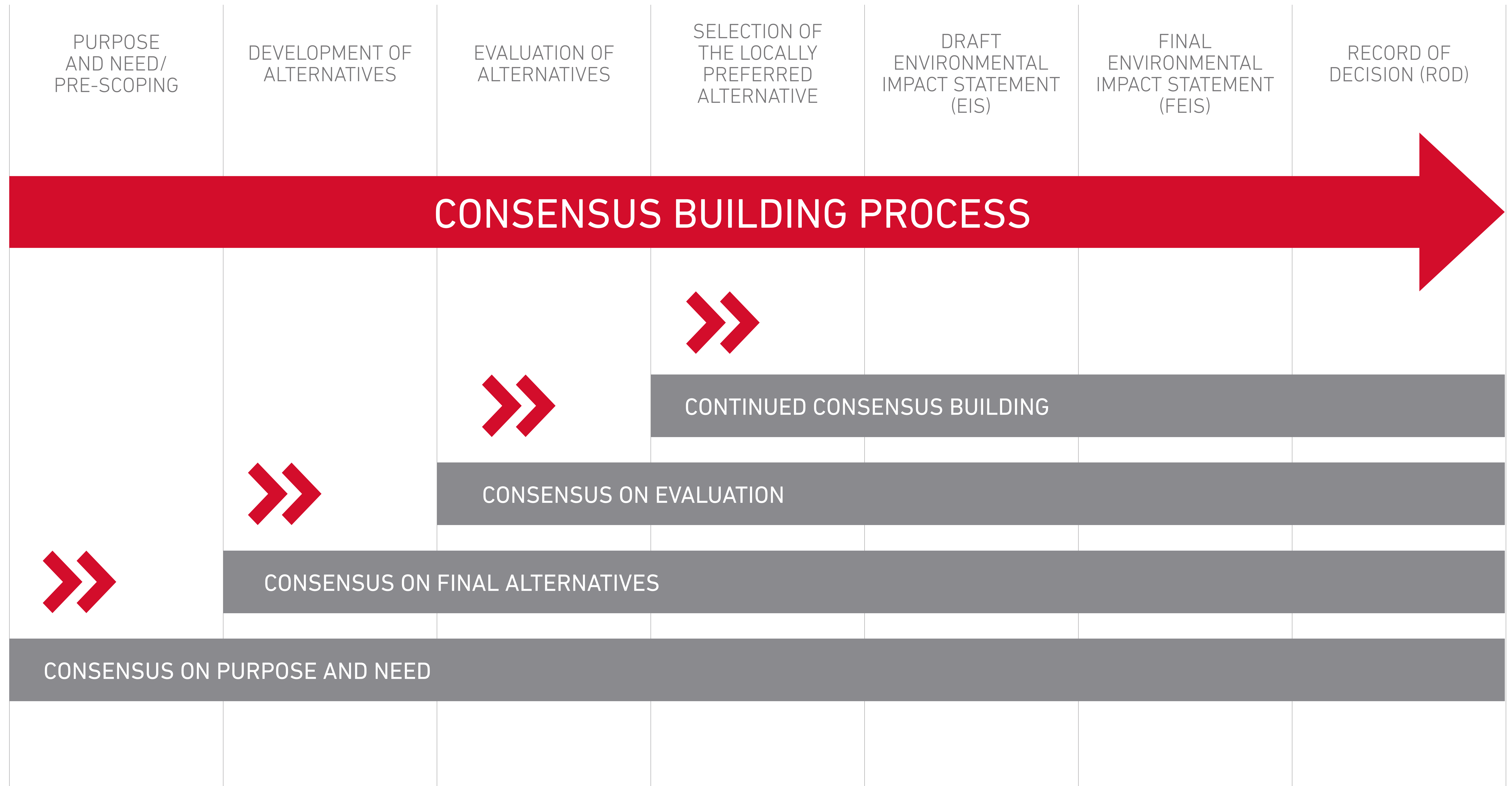
- »Capital Metro to Request Entry into Project Development under FTA Capital Improvement Grant (CIG) Program
- »FTA Approves DEIS
- »FTA Approves FEIS/ROD

Early 2022 and beyond

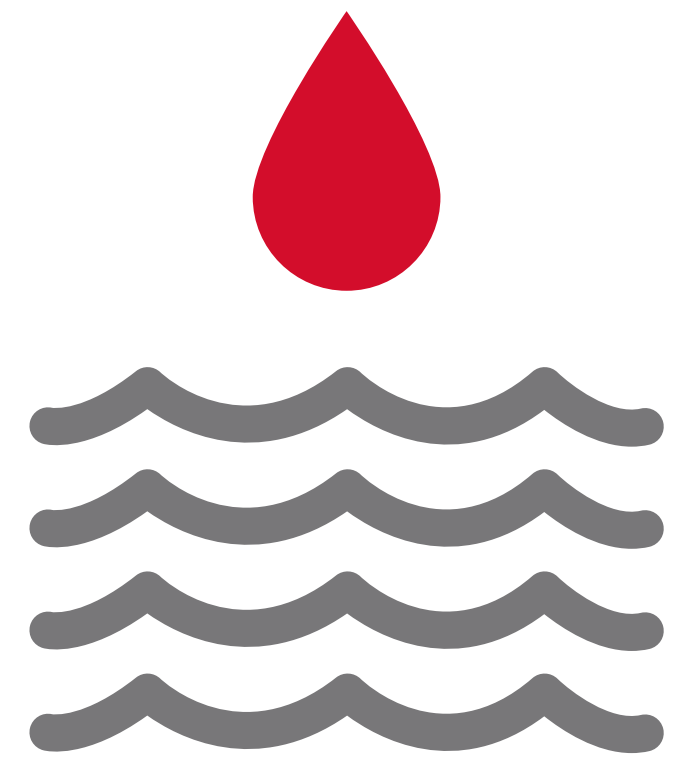
DESIGN AND CONSTRUCTION



NEPA (NATIONAL ENVIRONMENTAL POLICY ACT) PROCESS



ENVIRONMENTAL BENEFITS AND IMPACTS



Water
Resources



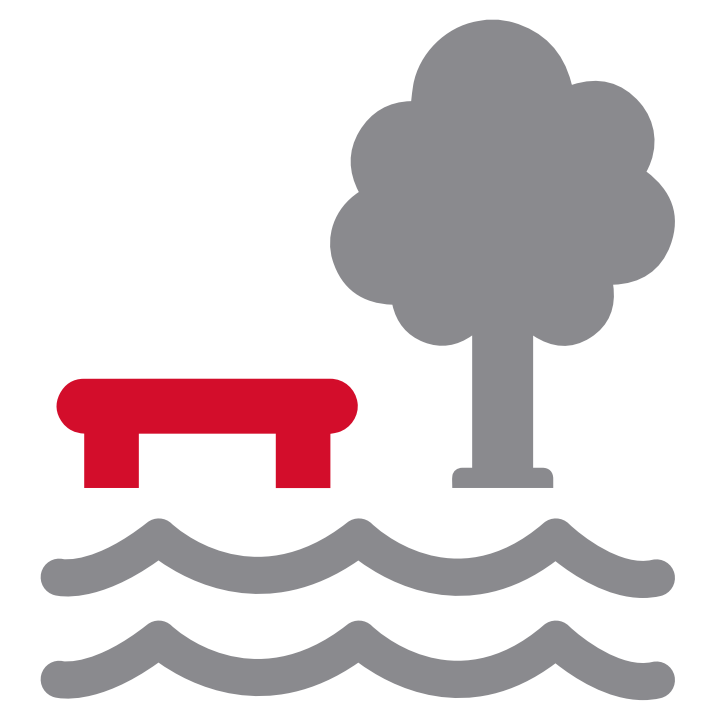
Air Quality and
Traffic Noise



Archaeological
and Historical
Resources



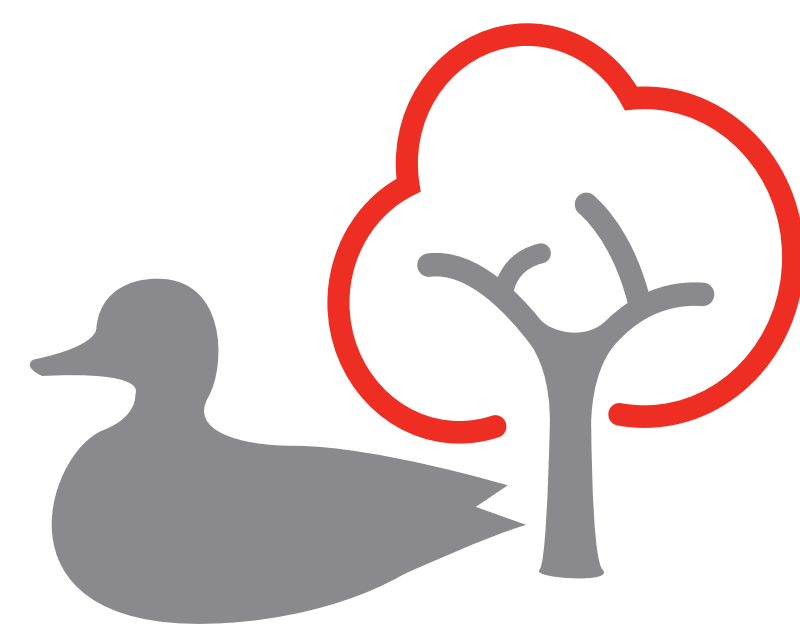
Land Use



Parkland



Traffic and
Parking



Vegetation
and Wildlife



Threatened
and
Endangered
Species



Social and
Community
Impacts



Hazardous
Materials

NEED #1

GROWTH ALONG THE ORANGE LINE

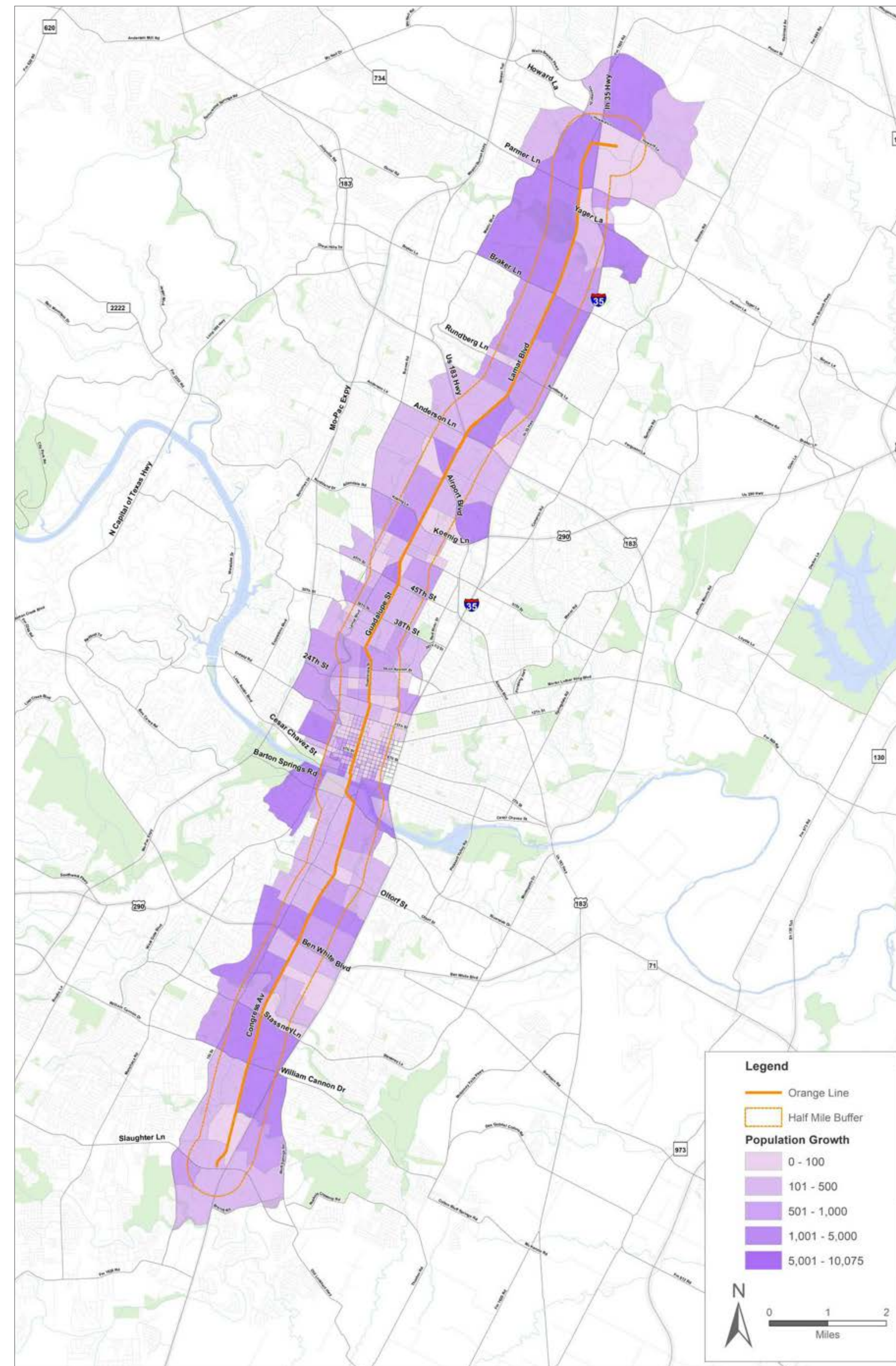
Rapid growth is affecting all travel modes and travel times.

Population along Orange Line by Jurisdiction

Area	2010	2015	2020	2040	2010-2040 Percent Growth
Orange Line Corridor	169,183	193,035	216,987	278,946	65%
City of Austin	777,710	876,776	976,180	1,314,551	69%
Travis County	1,001,490	1,125,640	1,250,211	1,709,791	71%
Hays County	149,950	200,220	250,653	621,291	314%
Williamson County	417,508	526,456	635,602	1,401,915	236%
5-County Study Area	1,675,419	1,978,341	2,282,118	4,005,843	139%

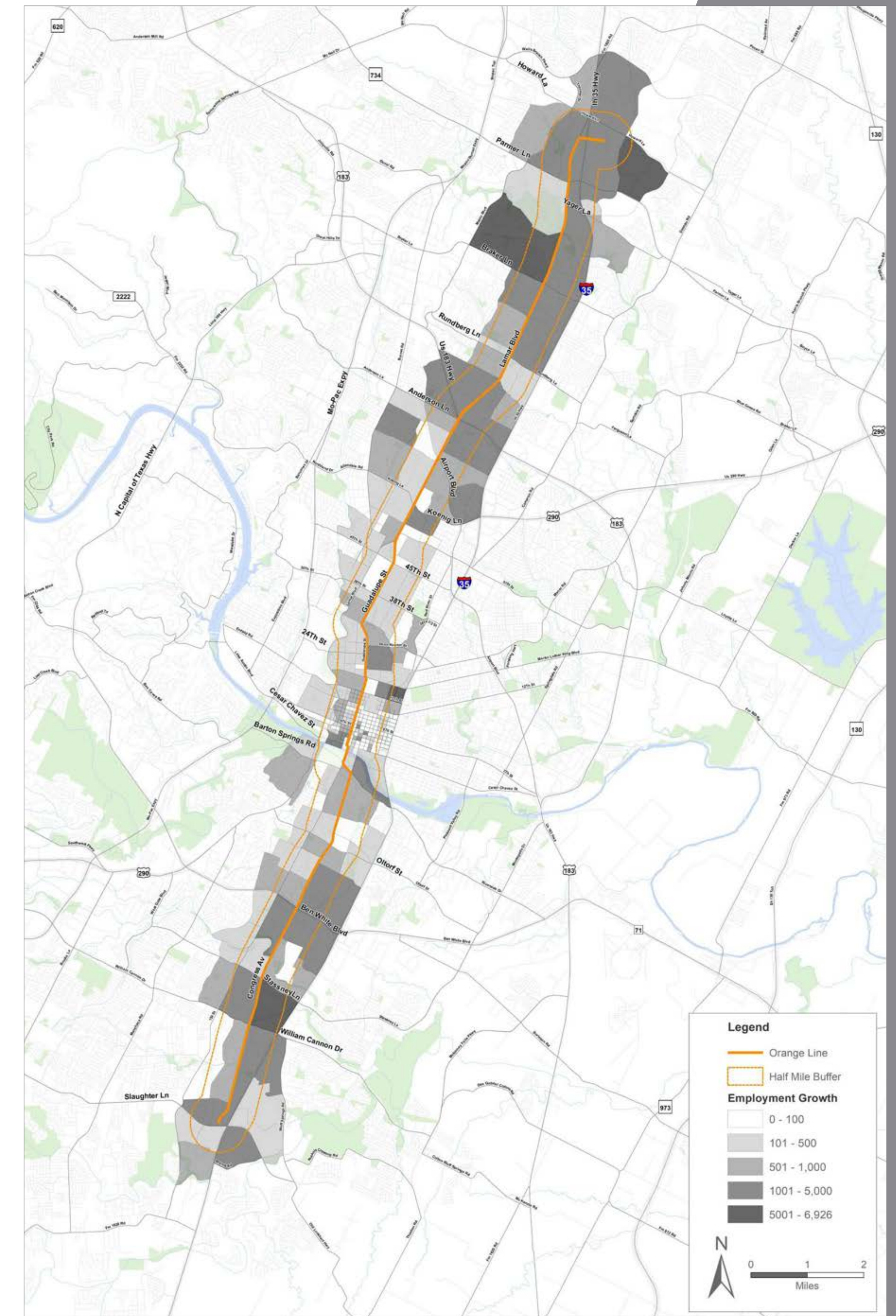
Source: CAMPO 2040 Plan

Study Area Population Growth (2010-2040)



Source: CAMPO TAZ Data (2010 and 2040)

Study Area Employment Growth (2010-2040)



Source: CAMPO TAZ Data (2010 and 2040)

NEED #2

LIMITED ABILITY TO INCREASE ROADWAY WIDTH

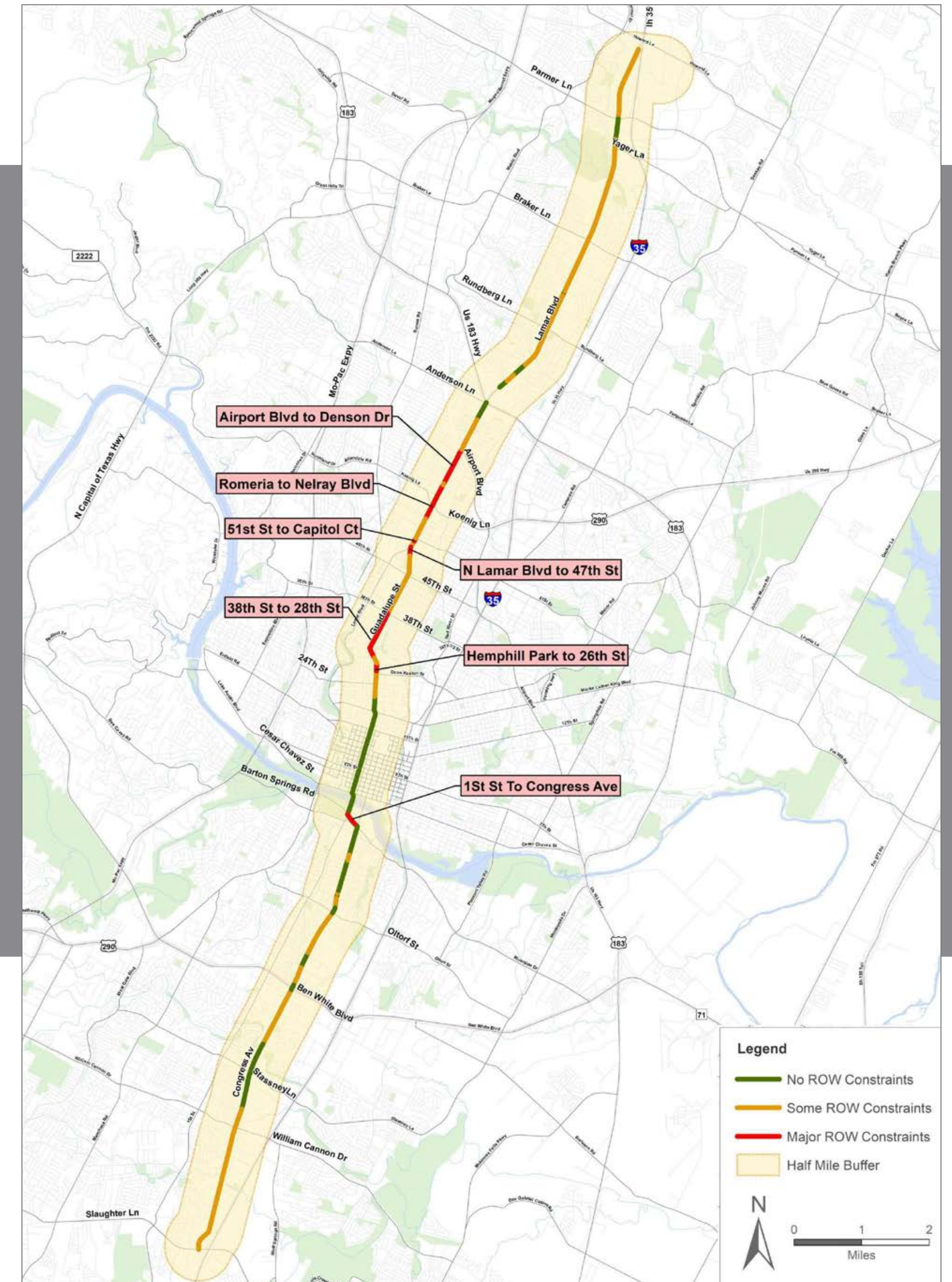
Population and employment growth continue to strain Austin's transportation infrastructure.

By the year 2040, the region's population is expected to double. New roadway capacity will only grow by 15 percent.*

In order to manage this growth, the region will need to make better use of transportation right of way.

➤➤ **Project Connect is working to find ways to move more people in a limited amount of space.**

*According to the Capital Area Metropolitan Planning Organization (CAMPO) 2040 Regional Transportation Plan



Right of Way Constraints along the Orange Line Corridor

ROW data will be further refined by surveying as part of preliminary engineering.

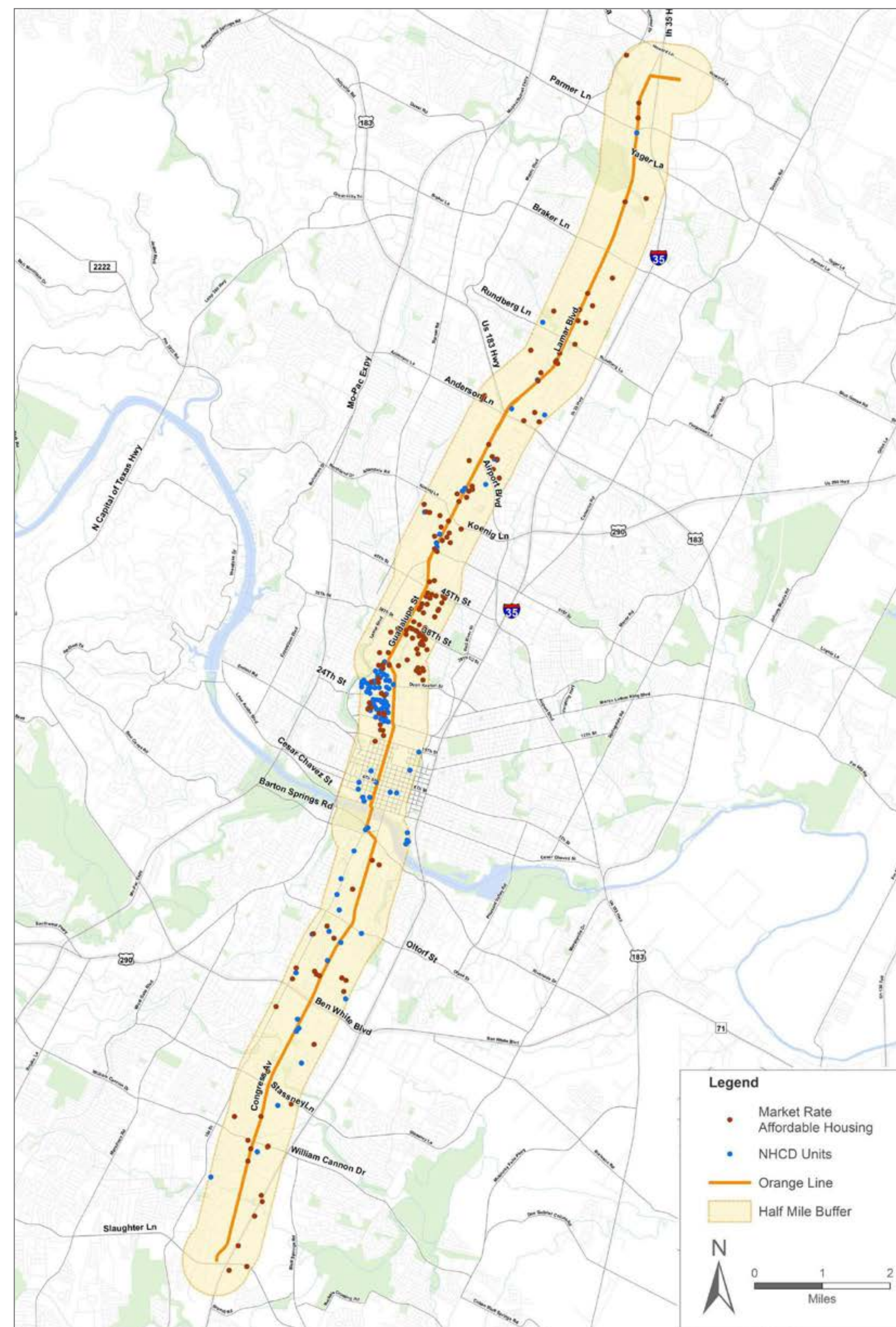
NEED #3

PROVIDE BETTER TRANSIT OPTIONS LINKING AFFORDABLE HOUSING AND JOBS

Employment opportunities continue to increase, while access to jobs is encumbered by the lack of affordable housing and viable mobility options.

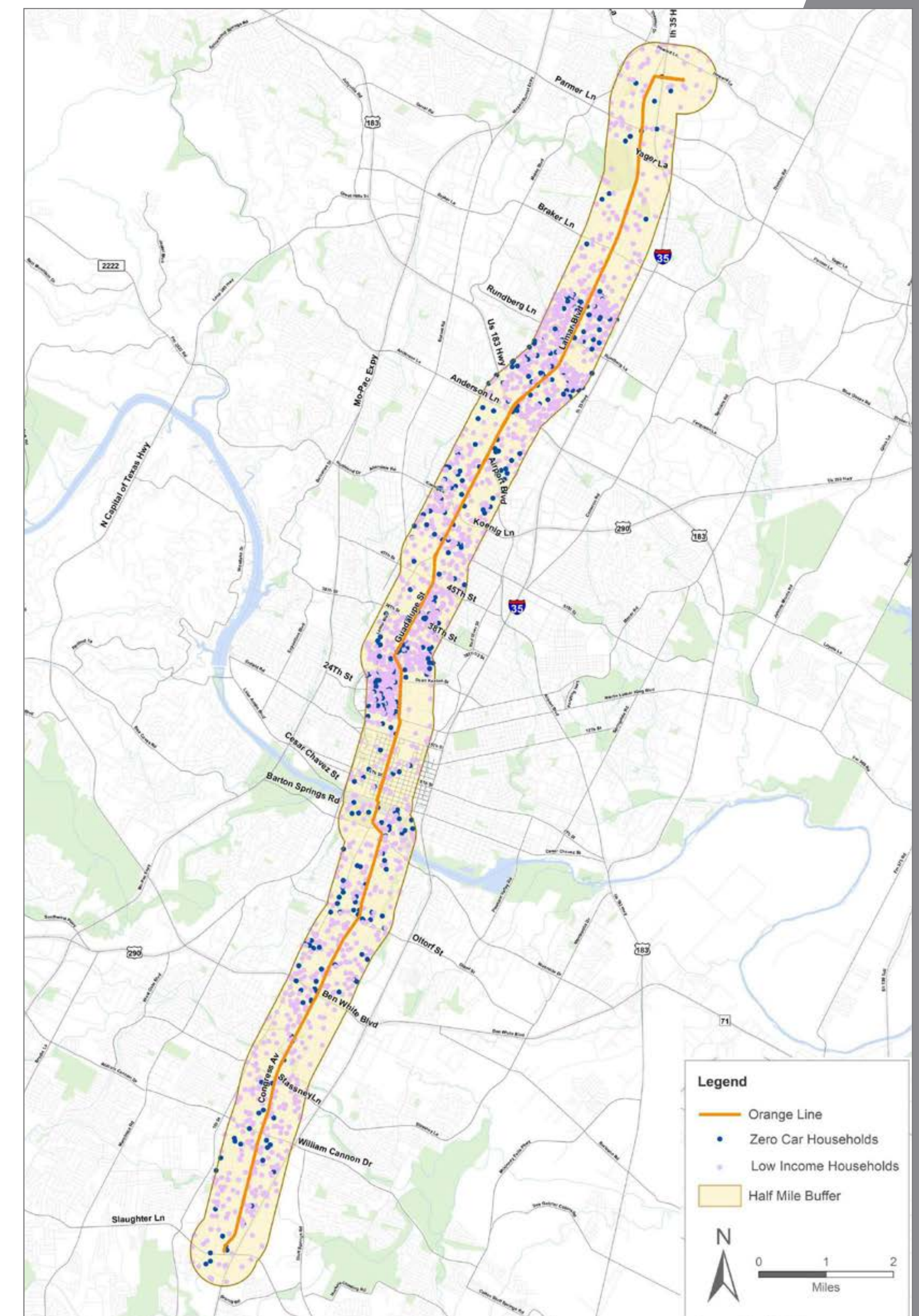
Affordable and reliable public transportation linking jobs to employees is needed.

Affordable Housing Units along the Orange Line Corridor



Source: Austin's Affordable Housing Inventory (NHCD, March 2019); CoStar Market Rate Data (NHCD, March 2019)

Low Income and Zero-Car Households along the Orange Line Corridor



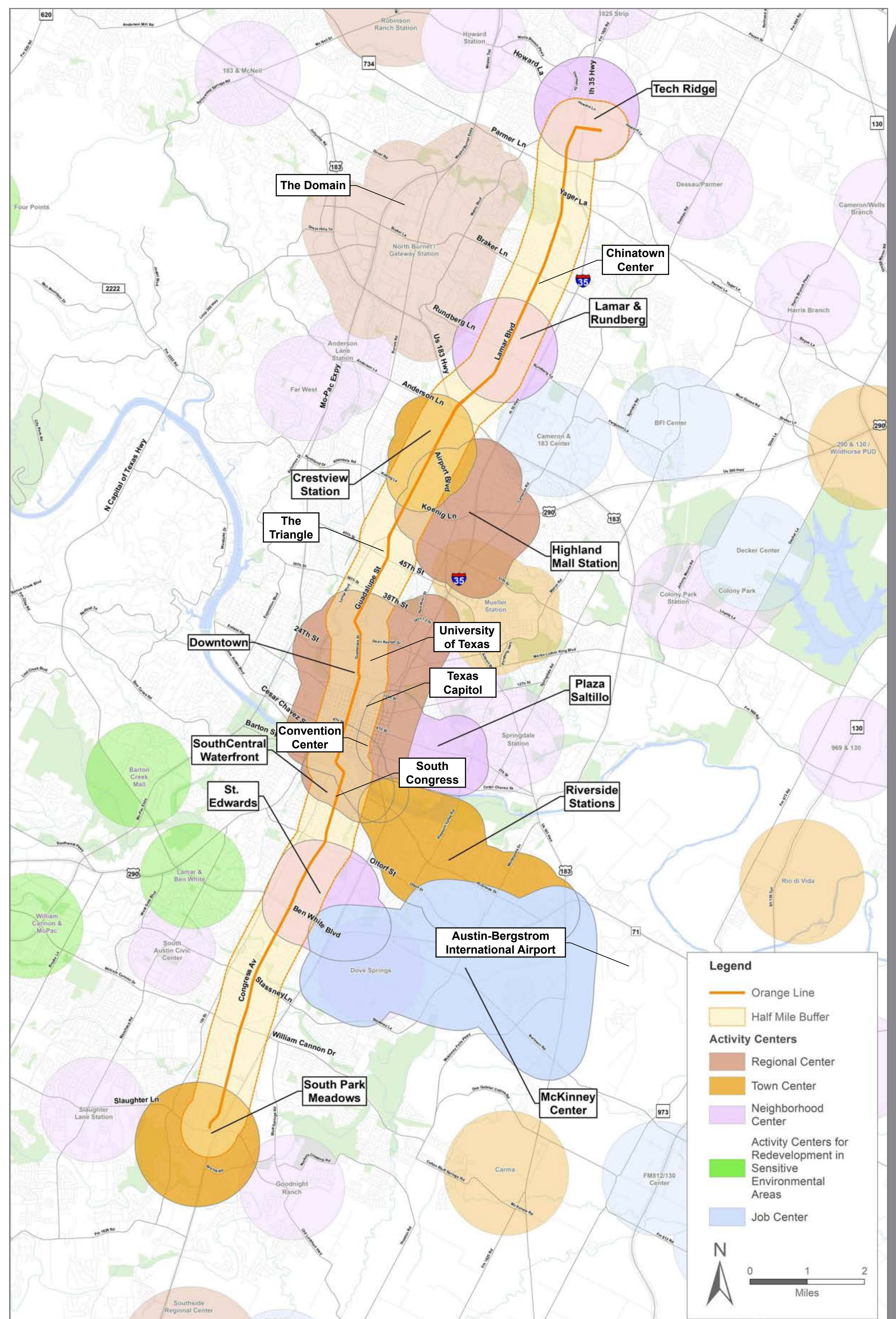
Source: U.S. Census, American Community Survey (2016)

NEED #4

CONNECT ACTIVITY CENTERS AND MANAGE FUTURE GROWTH WITH BETTER TRANSIT SERVICE

Better transit service within the Orange Line Corridor would provide communities reliable and efficient access to activity centers that are increasingly encumbered by vehicle traffic.

Imagine Austin Activity Centers along the Orange Line Corridor



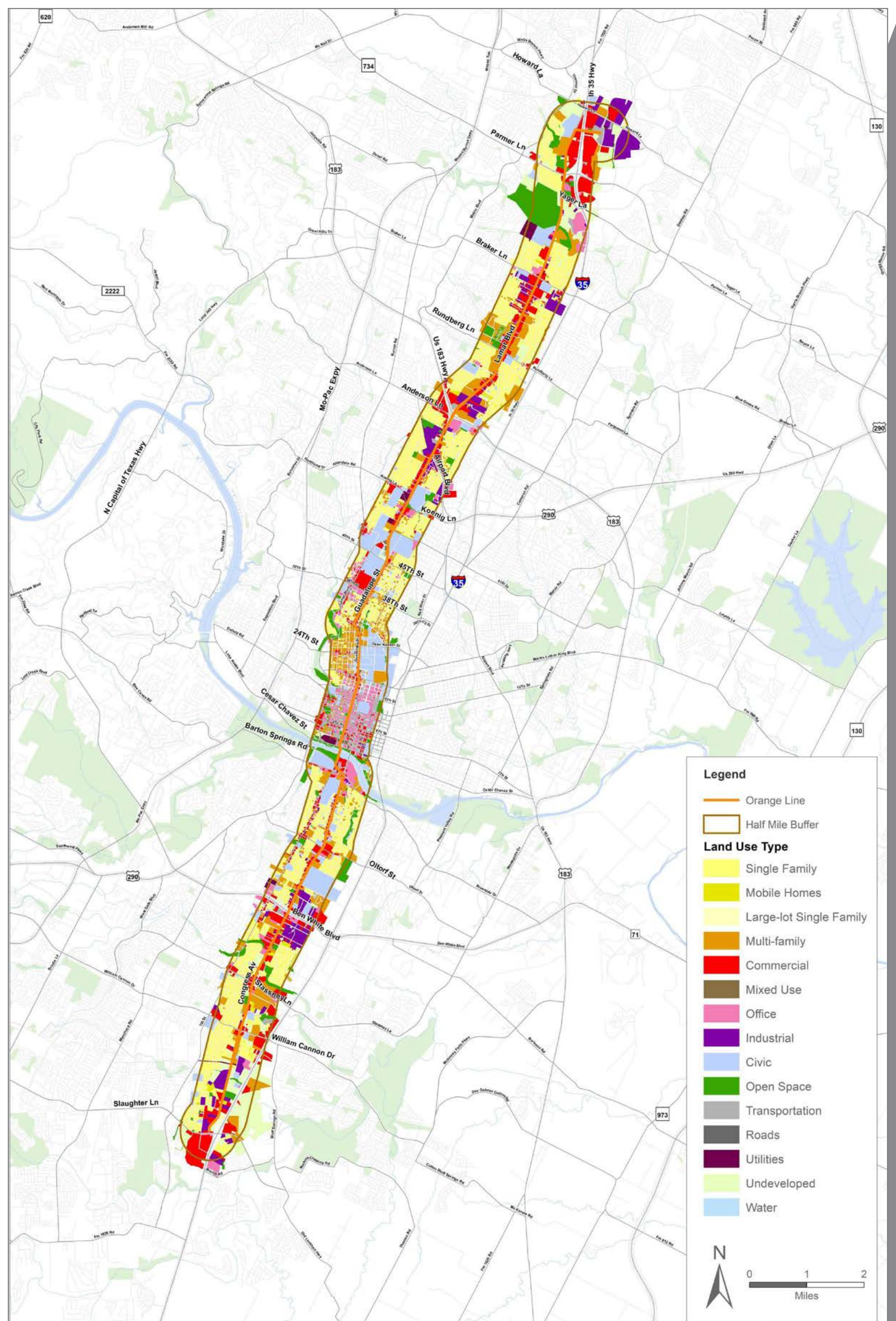
Source: City of Austin Imagine Austin Comprehensive Plan (2012)

NEED #4

CONNECT ACTIVITY CENTERS AND MANAGE FUTURE GROWTH WITH BETTER TRANSIT SERVICE

High-capacity transit service between established and planned activity centers would encourage more transit-supportive land use around places people want to be.

2010 Land Use Data along the Orange Line Corridor



Source: City of Austin 2010 Land Use Map

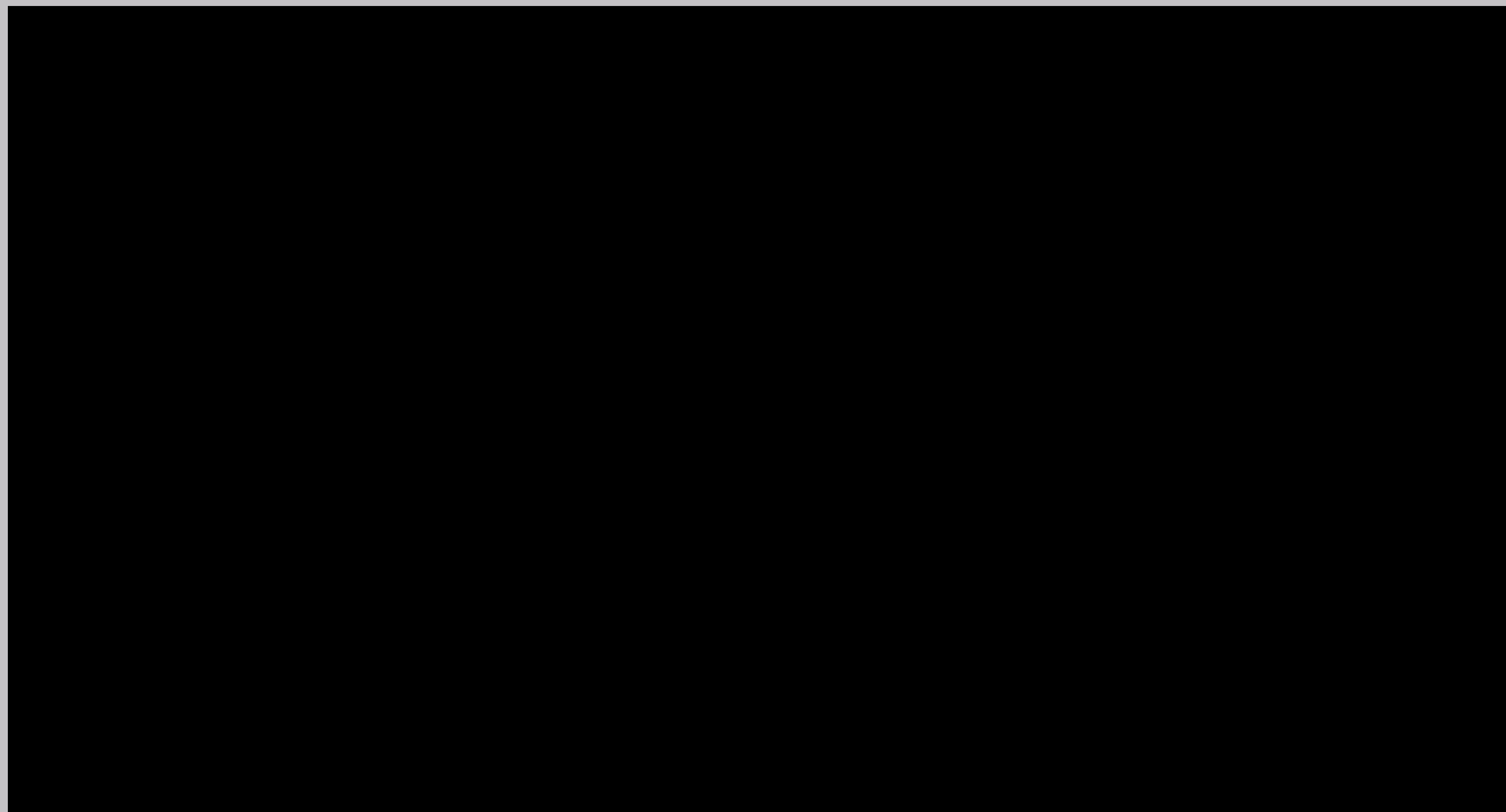
NEED #5

CREATE A CENTRAL CORRIDOR FOR A BETTER REGIONAL TRANSIT SYSTEM

Ridership and location of the Orange Line Corridor provides the region a central transit spine for the overall system.

Routes within the Corridor

Average Ridership from 2016 - 2018



Route 1 and Route 801

Average Ridership from 2016 - 2018

Route #	Route Type	2016	2017	2018
1	Local	5,863	4,860	3,747
801	MetroRapid	5,588	7,652	9,396
Corridor		11,451	12,512	13,143

Capital Metro January 2016 - December 2018 Ridership

NEED #6

ENSURE INTER-OPERABILITY BETWEEN THE ORANGE LINE AND FUTURE CORRIDORS

Inter-operability enables two or more separate systems to work with or use the parts or equipment of another system. **This creates compatibility between systems and more efficiency within a network.**

Compatibility between the Orange and Blue Lines within dedicated pathways will allow Capital Metro to operate and maintain the vehicle fleet for use on both corridors.

Establishing compatibility is critical to operations, service delivery and maintenance of the vehicle fleet.



ORANGE LINE

POTENTIAL ALTERNATIVES

Capital Metro will continue to analyze alternative transit modes, alignment, and design options for high-capacity transit in the Orange Line Corridor.

Current alternatives include:



Baseline Alternative

Continued operation of MetroRapid 801 with transit speed and reliability improvements.



Dedicated Pathways/Transitways

Fully dedicated lanes or facilities set aside for public transportation vehicles that allow for traffic-free travel. These lanes could serve:

- » Bus Rapid Transit (BRT)
- » Light Rail Transit (LRT)
- » Autonomous Rapid Transit (ART)



Alternatives will be evaluated in terms of response to the Purpose and Need, transportation, social, economic, and environmental impacts, capital and operational costs, and technical viability.

HOW DO I

STAY INFORMED?



Visit ProjectConnect.com

Sign up to receive updates or learn about upcoming meetings.



Visit the **Project Connect Community Office** located at **607 Congress Ave.**

Stop by any time between 9 a.m. and 4 p.m.

Talk with project staff, ask questions and provide feedback.



»» PROJECT AT A GLANCE

The Orange Line will be a north/south transit line that offers more frequent, reliable travel to, from and within Central Austin and the surrounding region.

»» ORANGE LINE FACTS

Provides high-capacity service within dedicated pathways.

Establishes the north/south spine of the broader Project Connect system.

Operates from the North Lamar Transit Center to Stassney Lane, with possible extensions north to Tech Ridge and south to Slaughter Lane.

»» PROJECT BENEFITS

Connects people to key activity centers in the city.

High-capacity transit service between established and planned activity centers would encourage more transit-supportive land use around places people want to be.

Key activity centers along the Orange Line include The Triangle, UT, the Texas Capitol, Republic Square, Auditorium Shores, South Congress (SoCo) and St. Edward's University.

Manages future growth.

Population is expected to grow along the proposed Orange Line corridor by 65% between 2010 and 2040.

Links affordable housing and residents to increased job opportunities.

The Orange Line Corridor's business and residential concentration provides a central transit spine for the overall system.

THE FIRST PIECE OF
CAPITAL METRO'S
PROJECT CONNECT,
THE ORANGE LINE
WILL OFFER
CONGESTION-PROOF
SERVICES THAT
OPERATE FREE FROM
OTHER TRAFFIC.



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Stop by any time between 9 a.m. and 4 p.m. Talk with project staff, ask questions and provide feedback.



PROPOSED ORANGE LINE ALIGNMENT

LEGEND

-  Orange Line
N Lamar / S Congress
-  Orange Line
Potential Future Extension
-  MetroRapid Route
-  Frequent Local Routes
(Current)

SCHEMATIC MAP
NOT TO SCALE





Thank you for participating in the Orange Line Open House Meeting. Capital Metro would like your input on the most important problems we are trying to solve with the proposed Orange Line Project. Your input will be documented as part of the process.

Your ZIP code: _____

What number Draft Need Statement (problem we are trying to solve) are you commenting on?

(please circle one)

1 2 3 4 5 6

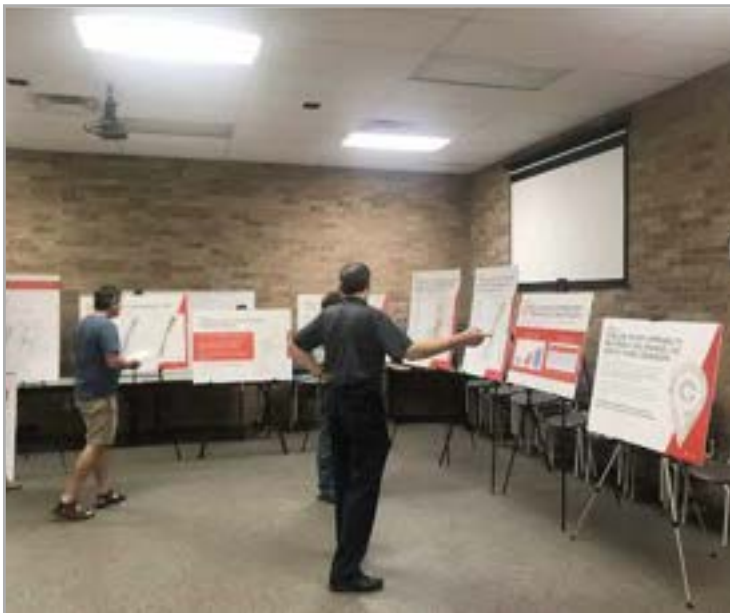
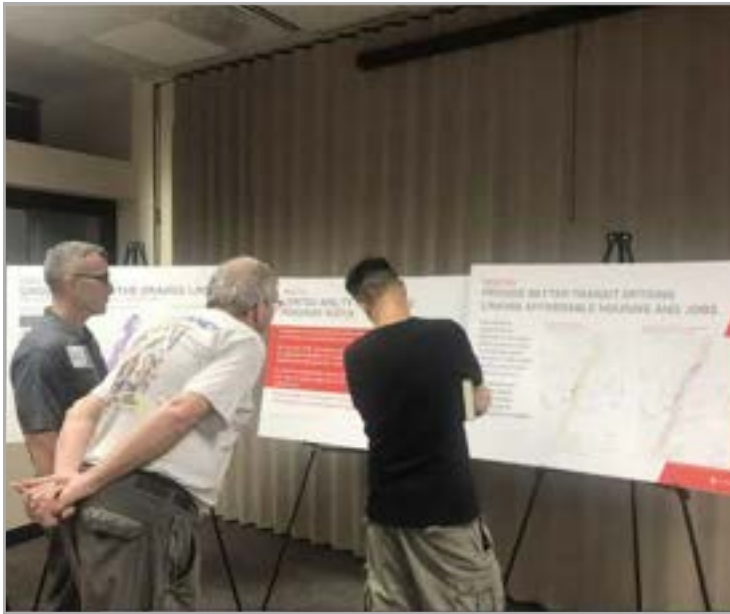
Do you agree with the Draft Need Statement? Yes No Undecided

Do you have a personal story or feedback to share that relates to this Draft Need Statement?

What else would you like the Orange Line Project Team to know?

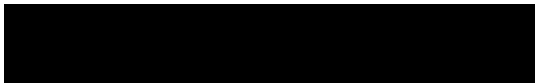
Please print your email address, so we may inform you of future meetings and project progress.

Appendix B: Photos





Appendix C: Notifications and Media



NEWS

Project Connect Unveils Cap Metro's Orange Line

The first route in a high-capacity transit plan

BY SARAH MARLOFF, FRI., APRIL 12, 2019





The MetroRapid 801 currently serves much of the Orange Line. (Photo by John Anderson)

More than 100 Austinites attended **Capital Metro's** come-as-you-please **Orange Line** information session on Monday, April 8. The proposed line through the "spine" of Austin – as Cap Metro's President and CEO **Randy Clarke** described it – is part of the larger **Project Connect**, a comprehensive plan to build a "**high-capacity transit**" system throughout the Austin region. The agency hopes to move forward in tandem with the **Austin Strategic Mobility Plan** (before City Council today, April 11), with final options laid out before year's end and a Cap Metro board decision by March 2020.

The transit agency feels optimistic about what it sees as a shift in Austin's mindset. Finally, said Clarke, "the debate is no longer whether we need to do this, but how. No longer is it debatable that to be a healthy, equitable, robust city we need public transportation – much more than we have today. So now, how do we get the community to come together around what the right long-term investment decisions are and how the pieces come together?"

To get to that answer, Clarke said, Cap Metro has to identify what's most important to Austinites. The latest version of the Project Connect planning process has to consider factors such as frequency of service, the type of transit vehicles used (bus, rail, or something else), how long a system will take to build, how much that buildout will cost, and how much the system will cost to operate and maintain in the future. In addition, Capital Metro aims to educate the community on the trade-offs and balances that will be necessary to deploy high-capacity transit on what are already well-traveled streets. "Obviously," said Clarke, those trade-offs depend on each person's point of view, which is why it's a "big community process."

As a starting point, the Project Connect team has identified what it's dubbed the **Orange Line**, running north/south between Tech Ridge and Slaughter Lane. While an exact alignment has not been finalized, the Orange Line travels major corridors including North Lamar, Guadalupe/Lavaca, and South Congress, which already see Capital Metro's highest ridership and which are currently served in large part by the **MetroRapid 801** line. "If we're going to make a dent in congestion and mobility options, we need this line to be a major part

of our long-term solutions," explained Clarke, who's been on the job for a little more than a year – that is, after the choice of an alignment other than the Orange Line soured many transit advocates on the agency's previous Project Connect proposal, defeated by voters in 2014.

This version of Project Connect, kicked off in 2017, has featured close collaboration with the city of Austin. Already the project is baked into the city's ASMP, which allocates dedicated space for high-capacity rapid transit on major corridors and suggests a lesser scale of "transit priority" treatments on secondary corridors such as Burnet, South Lamar, and Pleasant Valley. Council's anticipated adoption of the ASMP will be a "big leap on a policy position," said Clarke. "The most important thing for good transit is a dedicated right of way to operate exclusively on."

It's then on Cap Metro to decide the technical aspects of Project Connect – "what to build where" to make the best investment of both money and space, explained Clarke. Pointing to the **MetroRail Crestview station** – where the Orange Line would intersect with the existing Red Line – Clarke noted that to make truly functional transit that connects people to the entire city, Cap Metro has to decipher how to create a "mobility hub" that achieves Austin's desired level of service. Only then would come the decision of what mode (bus, rail, etc.) to use. As Clarke summed it up: "Outcome should be what we're focused on. Then you fill in the pieces to get to the outcome."

The Blue Line, proposed to travel Riverside Drive to Bergstrom Airport and UT-Austin, will be the next focus point for Project Connect. Community feedback is welcome at www.projectconnect.com.

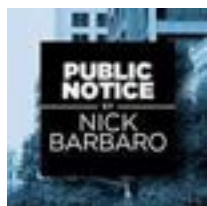
*A version of this article appeared in print on April 12, 2019 with the headline: **Take the O Train?***

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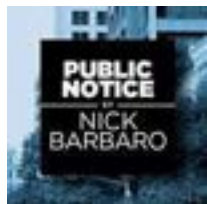
MORE PROJECT CONNECT



Public Notice: Show and Tell

Civic leaders have big plans for your future

NICK BARBARO, OCT. 5, 2018



Public Notice: Your City at Work

"Shaping policy for generations to come"

NICK BARBARO, MARCH 23, 2018

MORE BY SARAH MARLOFF



Community: The Harsh Reality of...

Plus Dining Out for Life, Violent Fems, and more events to do good, feel good

MAY 24, 2019



Chick-fil-A, Saved by the Legislature

Religious exemption bill heads to governor's desk despite testimony from LGBTQ Caucus

MAY 24, 2019

KEYWORDS FOR THIS STORY

Project Connect, Orange Line, Randy Clarke, Capital Metro, Austin Strategic Mobility Plan

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Name

Rae Nadler-Olenick • a month ago

What's the "something else"?

^ | v • Reply • Share

Aireek • a month ago

The 801 already serves this route and from my experience actually riding it, it's not that great! The leaders of Austin continue to be bonafide "morons" when it comes to public transportation. First of all no one can be a leader of public transportation when they don't actively use the transportation themselves! I think the first step would be to close down any and all parking lots-garages that the city uses for their employees.

Once we force our elected officials and their minions to use public transportation themselves then we may actually get proposals that make sense or they may realize that public transportation is never going to work well in a city like Austin.

Invest in the roads...not buses!

^ | v • Reply • Share ›

glenn • a month ago

OMG, the O line already exists ferchrissake! The Number One is the Original bus route since the Ole Austin transit days, and it runs along the same basic corridor. Put the best BRT vehicle you can find on it, and max it out by making it fare - free. This is my O face!

^ | v • Reply • Share ›

ALSO ON THE AUSTIN CHRONICLE

Austin at Large: This Road's Gone On Forever

3 comments • 13 days ago

JP — "Monorails, light trains, and other creative solutions" This would not help much with I-35 though. It is an ...

Doom Rockers Duel Conjure a Masterwork of Otherworldly ...

1 comment • 13 days ago

peteywheats — Duel rule

Rep. Ilhan Omar Tells Austin Dems to Keep Fighting


26 comments • 9 days ago

MichaelITJ — If she truly was courageous, she would lead a gay pride march through Gaza... but of course, that would get her ...

Voter Purge Leader David Whitley Resigns

2 comments • 20 hours ago

Jennifer Baggarly — "Texas ended up settling the suits and was forced to pay \$450,000 in plaintiffs' fees and court ...

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TODAY'S EVENTS



Judas Priest, Uriah Heep
ACL Live at the Moody Theater

TEXAS MEATS CANADA

at Intero

KNIFE + HEART

at AFS Cinema

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Statesman

Cap Metro's proposed Orange Line moves to center stage

By Philip Jankowski

Posted Apr 5, 2019 at 4:58 PM

Updated Apr 5, 2019 at 6:32 PM

A proposed mass transit line that would travel down the spine of Austin along North Lamar Boulevard and South Congress Avenue already is shaping up as the centerpiece of a 2020 bond election.

Even though a vote on a proposed 2020 transit bond is more than a year and a half away, enthusiasm to go big on the so-called Orange Line is building. The route exists only conceptually as part of a set of transit goals known as Project Connect and put forth by Capital Metro, but the Orange Line is being hailed as a transformative mass transit development that could fundamentally alter how Austinites get around the city.

And in the wake of a highly successful \$925 million bond election in 2018, Austin Mayor Steve Adler believes projections of registered voter turnout climbing as high as 75% come 2020 will bring success with a large-scale transit bond.

On Monday, Austin residents will have their first chance to get a closer look at the Orange Line and ask questions about it when Cap Metro and Austin transportation staffers hold an open house that begins at 3 p.m. at the Austin Central Library, 710 W. Cesar Chavez St.

Chief among those questions for many will be the estimated cost of the Orange Line, which is projected to run 12 miles.

No one knows the answer at this point. In 2018, the overall cost of Project Connect's myriad of proposed new transit routes was estimated as between \$6 billion and \$10.5 billion.

To get a better idea of cost, Capital Metro hired the engineering firm AECOM on March 25 to begin design work for the proposed Orange Line. The one-year contract runs \$5,082,528, but possible extensions for an additional three years could bring the total cost to \$12,048,640.

The firm likely will determine the best way to route the Orange Line through Austin without reducing any existing lanes for traffic. Reaching that goal could mean mass transit above roads, below roads or traveling in dedicated traffic lanes built alongside existing roads.

Conceptual maps of the Orange Line show it running from North Lamar Boulevard at U.S. 183 south to the Drag on Guadalupe Street or possibly Lavaca Street and then on South Congress Avenue south of Lady Bird Lake. The exact route has not been set and figures to be a major source of intrigue as the proposed election nears.

“That corridor is one pretty much everyone has traveled,” Cap Metro spokeswoman Amy Peck said. “It is very meaningful to people.”

Future extensions could lengthen the Orange Line north to Tech Ridge Boulevard and south to Slaughter Lane, according to Cap Metro officials.

Adler and Cap Metro CEO Randy Clarke have said they are open to a slew of possibilities for building the Orange Line without reducing any existing lanes for traffic. At a recent meeting with the American-Statesman’s editorial board, Adler threw out various ideas, including a tunnel under the Drag and a tunnel under downtown Austin.

“It wouldn’t surprise me if it were something like taking cars and putting traffic under Guadalupe and come up on the other side,” Adler said.

It’s also unclear what type of transit would run on the Orange Line. Neither rail nor buses have been ruled out, and Cap Metro has on several occasions floated the idea of autonomous self-driving buses pulling a string of passenger coaches.

“The mode choice isn’t as important to me as long as we get the ... Orange Line out of traffic,” Adler said.

The pro-rail advocacy group AURA has questioned Cap Metro's apparent embrace of autonomous rapid transit buses, or ART, while the group's questions about costs and feasibility have remained unanswered. The technology was first deployed in Shanghai in 2018.

"ART is an unproven technology deployed in only a few circumstances," read a blog post on AURA's website before arguing that rail remains the most stable and proven mode of mass transit.



“SINCERELY HELD” NONSENSE AT THE SENATE

Not with a toilet flush, but with a whimper, the Senate Committee on State Affairs sent a sweeping **religious refusal bill** to the full Senate Monday evening, March 25, after several hours of testimony from Texas residents, social workers, lawyers, and numerous members of the clergy. Filed by **Charles Perry**, R-Lubbock, on March 7 and co-authored by senators **Paul Bettencourt**, R-Houston, and **Brian Birdwell**, R-Granbury, **Senate Bill 17** is a far-reaching religious liberty bill that would give any professional licensed by the state of Texas – including doctors, lawyers, teachers, real estate agents, and even mold assessors – a license to discriminate under the guise of protecting “freedom of speech” regarding “sincerely held” religious beliefs.

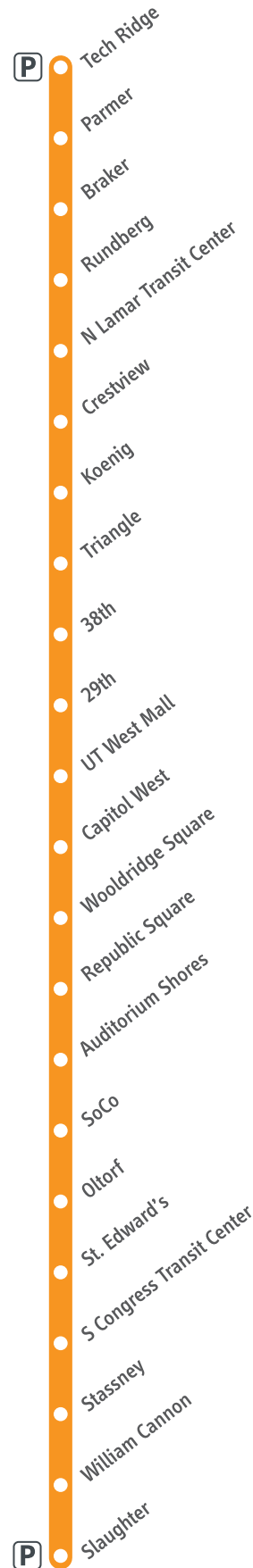
Two days later, leaders from the state’s business, technology, and tourism industries, united in a coalition dubbed **Texas Welcomes All**, gathered at the Capitol to urge lawmakers to oppose SB 17 along with 15 other religious refusal bills, as well as legislation that would gut Texas cities’ nondiscrimination ordinances protecting LGBTQ residents – including **SB 15**, the Lege’s attack on Austin’s paid sick leave rules. Most speakers harkened back to the lasting negative effects of 2017’s **bathroom bill** battle – which cost the state more than \$66 million – and warned that bills like SB 17 would continue to harm the state’s economy, scare off conventions, and make Texas unattractive to “talented workers [who] have concerns about moving to or staying in a state that pursues discriminatory policies,” according to Jackie Padgett of Austin’s Silicon Laboratories.

Equality Texas, the state’s largest LGBTQ rights advocacy group, has dubbed SB 17 the No. 1 legislative threat to the state’s queer and transgender communities this session – though if enacted, it would also affect those who practice different religions, single parents, and women seeking birth control, among others. In a press release sent March 22, EQTX chided Lt. Gov. **Dan Patrick** – last session’s champion of the transphobic **bathroom bill** – for making SB 17 a priority and “expediting it through the legislative process.” (The similar **House Bill 1035** by Rep. Bill Zedler, R-Arlington, was referred to the House Committee on State Affairs on Feb. 26 but has not yet been granted a hearing.)

Monday’s public hearing highlighted a clause in SB 17 prohibiting medical providers from withholding care that would “prevent death or imminent serious bodily injury.” Supporters, including Perry, insisted this ensures life-saving care would not be denied, but could not define what exactly constitutes “life-saving care.” **Ash Hall**, Austin Democratic precinct chair and LGBTQ policy expert, told the committee about a serious brush with depression they experienced while attending Baylor University several years ago. Hall decided to see a school therapist, who was visibly uncomfortable with Hall’s queerness, but still managed to do her job and provided Hall the tools to transfer to a new school. “If she had not listened to me, I assure you I would not be here today,” said Hall, who added, “That lifesaving part of it isn’t always so obvious. It’s easier for a doctor to see I’m LGBTQ instead of five minutes away from my appendix rupturing.”

Perry insisted his bill is not designed to discriminate against the LGBTQ community, but instead defend those who feel the government is attempting to “punish people of faith,” as **Jonathan Saenz**, president of **Texas Values**, described it. (That group sued Austin last October to challenge the city’s employment nondiscrimination ordinance.) In response, a speaker from Dallas – and member of the clergy – said he was grateful for religious liberty laws, but is “disturbed that we could exercise that religion in professional life.” When questioned as to whether a baker opposing marriage equality should be forced to make a wedding cake for a gay couple, he answered: “If you’re using deeply held religious beliefs, then use them as they are in the Scripture. ... Don’t use it to discriminate against one population.”

Despite more than 50 people speaking against the bill – calling it “major government overreach”; cautioning that it could have “disastrous consequences,” especially to LGBTQ folks living in rural parts of the state; and accusing SB 17 of addressing a “problem that does not exist” – the committee forwarded the bill to the full Senate with seven votes in support; Sen. **Judith Zaffirini**, D-Laredo, was the only vote against. – *Sarah Marloff*



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When: 3 to 7 p.m. on Monday, April 8

Where: Austin Central Library
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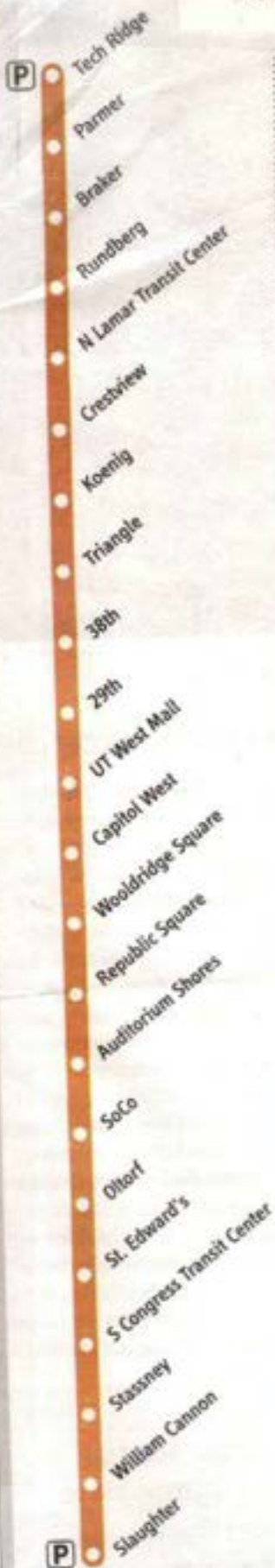
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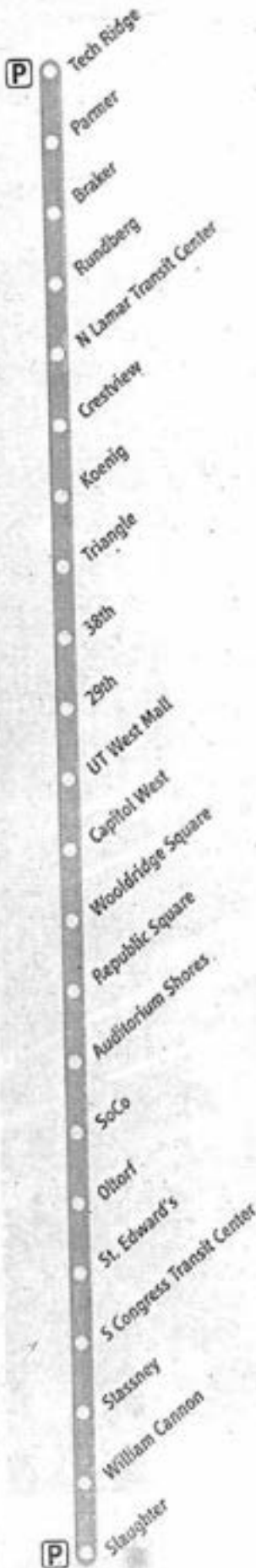
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KUT/KUTX

Support comes from Capital Metro – Studying Project Connect public transportation options North Lamar through downtown Guadalupe to South Congress. Public input wanted on April 8th at Austin Central Library. More at [project connect dot com](http://projectconnectdot.com).

KUT	:15	20 spots	Mar 25 – Apr 7
KUTX	:15	23 spots	Mar 25 – Apr 7

KOOP

Support comes from Capital Metro inviting the public to join them at a Project Connect Open House to learn more about, and help guide plans for, public transportation options from North Lamar through downtown on Guadalupe Street to South Congress. Monday, April 8th from 3:00 to 7:00 PM at the Austin Central Library. Details at [project connect dot com](http://projectconnectdot.com).

KOOP	:30	25 spots	Mar 15 – Apr 6
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KAZI

Support comes from Capital Metro – Do you want a less stressful way to travel downtown and to area festivals? Or maybe a way to bypass traffic on MoPac without paying a toll? Dream of having your own congestion free commute to work? Join Capital Metro for a Project Connect Open House to learn about these possibilities and more. Share your thoughts on public transportation options from North Lamar through downtown on Guadalupe Street to South Congress, Monday, April 8th from 3 to 7 p.m. at the Austin Central Library. Help guide our plans! Details at [project connect dot com](http://projectconnectdot.com).

KAZI	:60	20 spots	Mar 28 – Apr 8
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The University of Texas Dell Medical School and its Mulva Clinic of the Neurosciences now offer deep brain stimulation for people with epilepsy. [RALPH BARRERA/AMERICAN-STATESMAN]

HOSPITAL

for whom the affected area is essential.

"In the olden days, we had nothing for them," Buchanan said.

Deep brain stimulation also works for in cases in which other device treatments — such as a vagus nerve stimulation, which stimulates a nerve in the neck, or a NeuroPace, which is a pacemaker for the brain — doesn't work. With NeuroPace, doctors have to pinpoint the exact area of the brain causing the epilepsy, and the device sends an electric current to stop the buildup of the epilepsy signals.

The deep brain stimulation system can target multiple areas, and it's always stimulating the brain, rather than reacting to a buildup of signals. It actually causes a change in the plasticity in the brain circuitry, Buchanan said. "The constant stimulation can cause the brain to change its seizures temporarily."

All of these treatments require patience, including making any needed adjustments to the deep brain stimulation unit's programming.

"None of these things are like a faucet (for seizures) that you turn on and off," Buchanan said. Some people get relief in a year, others within two years, but it can take five years for patients to feel the full effect, he said. "It didn't take overnight for the seizures to start," he said. "It's going to take a

little time for the brain to relearn to stop doing this abnormal stimulation."

Sometimes it's not a complete end of seizures but a decrease in the number and the severity, he said.

The manufacturer of the deep brain stimulation system, Medtronic, said in its study that after three months the median reduction in seizures was 40.4 percent. After seven years, it was a 75 percent reduction. It also cited that 74 percent of patients had at least a 50 percent reduction in their seizures.

"We study brain signals in health and disease pathology, but we don't really understand how the brain works very well," Buchanan said. "We're just beginning to understand how the brain communicates with itself."

One of the things up next in neurology at Dell Seton and Dell Medical School is a study to install deep brain stimulation systems in people in the early stages of Alzheimer's disease.

The Mulva Clinic has been selected to be one of 20 centers in the world to participate in the Alzheimer's study, which follows two smaller studies. Buchanan expects the study to kick off in the fall, and each center will implant deep brain stimulation units in 10 to 15 patients and then follow them for five years. The study is not open to enroll patients here yet.

"If you want cutting-edge treatment and research on this, this is the place to go," Buchanan said.

HERMAN

From Page B1

"Whether a piece of legislation originates in one chamber or the other is unimportant," Bonnen said. "What matters is what we accomplish."



Bonnen

Yes, that's the general idea.

So, seeking further explanation, I asked Bonnen if he thinks that "when things get heated up and one chamber is mad at the other they start killing off bills just based on what the first letter" is on a proposed piece of legislation.

"I don't know about that," he said, even though he probably does. "But I do think we're all human."

Yes, that's the general idea.

"And human nature being what it is," Bonnen continued, "sometimes we can all have a sense of pride of authorship, if you will, and this is a measure that would help put that aside." His proposed system is not perfect in masking where a bill was born. Bills from one chamber would have odd numbers. Bills from the other would have even numbers. This would rotate, denying us the fun of designating one chamber as the permanently odd one.

I asked Bonnen which chamber, in general, is odder. He laughed, avoided the question (though probably harboring an opinion) and said, "We will alternate each biennium."

Then I asked him if this is going anywhere this session and whether his brother the House speaker is interested in it. "I think all members are interested in it," he said, sounding like a guy who's

shopped this around a bit. He denied that the particularly hard feelings that developed between the House and Senate in the 2017 session were a proximate cause for this effort. "I think that's normal," he said of 2017, "and as much as we can diffuse unnecessary tension, that's good policy." Bonnen acknowledged his measure as just what the doctor ordered. But I bet the neurosurgeon says that about all his proposals.

To be enacted, the measure would have to also win Senate support. Bonnen says feedback so far from the Senate has been positive. Too bad. Wouldn't it be just perfect if this kumbaya idea became a source of great friction between the House and Senate?

On the House side, there was quick action on the measure. It was filed Wednesday and got a Thursday unanimous thumbs-up from the House Administration Committee, sending to the full House along with Bonnen's House Concurrent Resolution 135, which says bills approved this year would lose their House or Senate bill numbers and be assigned a "Texas Legislative Act" number prior to being sent to the governor.

The committee hearing took less than 10 minutes and produced only question from a legislator. Speaking on behalf of the people of Texas, Rep. Rafael Anchia, D-Dallas, offered this one-word query: "Why?"

Bonnen: "I think the value of this is that we would be able to refer to work product that passes both chambers as a Texas legislative act. It would no longer be a House bill or a Senate bill. And it would alleviate a lot of the natural pride of authorship that just tends to occur, always has, and could smooth out some of our conversations at the end of session

so that we're focused on the policy and nobody has any concerns about which chamber the legislation originated in." It could happen. And someday Aggies and Longhorns might repose together in peace and harmony and maybe even play each other again in football.

The only other question that came up at the hearing was directed to Jeff Archer, executive director of the Texas Legislative Council, the legislative wing that so admirably deals with the thousands of pieces of legislation navigating through the hopper each session. Something as seemingly simply as changing the numbering system could mean giant potential headaches for the folks at what's known in the building as "ledge council."

"I think it's pretty clear there's IT implications," Archer told the committee, adding, "almost all of the House and Senate processes are automated. They're also interconnected, so a lot of things such as an identifier would take a lot of work to ensure those systems pull the right document up, whether you're on the internet as a member of the public or whether you're composing your (official legislative) journal. We haven't had a chance to take a deep look at it."

Which brought this query from committee

Chairman Charlie Geren, R-Fort Worth: "We're going to start that deep look today, correct?"

Yes, said Archer, acknowledging, "There'll certainly be some implications."

Sounds complicated, not something that can be addressed with the trusty ol' turn-it-off-and-turn-it-back-on protocol than handles many IT issues.

And the whole idea might more complicated than it appears, says one longtime legislative observer with earned insight into how stuff works under the Pink Granite Dome. I'm granting him anonymity because, as he said, there's nothing in it for him to get crosswise with legislative leadership.

"Is it just me," he began, "or are HR 901 and HCR 135 the most absurd legislative idea? Last time I checked there is still a bill author, so it's pretty obvious if it's House or Senate (legislation). It's pretty easy, even with the even and odd (numbers), to know if it is a House or Senate bill in the middle of a session, so that argument doesn't hold water."

"We've been doing this a lot of years and surprises like this never cease to amaze me," he told me.

Surprises at the Texas Capitol? Yes, sometimes I think that's the general idea.

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**Join Capital Metro for a Project Connect Open House
Monday, April 8 from 3 - 7 p.m. at the Austin Central Library!**



Do you frequently travel on North Lamar, Guadalupe or South Congress Avenue? We want to hear from you! These roads are all part of Project Connect's Orange Line Corridor. Come learn more about how transit can provide a traffic-free alternative on the corridor. You'll also have an opportunity to provide feedback on multiple aspects of the project, including the project study area, purpose and need, and potential environmental impacts. Capital Metro will be joined by our partner agencies to answer questions about mobility programs taking shape in the city and region.

Date: Monday, April 8

Time: 3-7 p.m. (stop by anytime!)

**Place: Austin Central Library, Special Event Center
710 W. Cesar Chavez St., Austin, 78701**

Please plan your ride by using transit routes 3, 17, 803 & 801.

Unable to attend? A virtual open house will be available on the website at projectconnect.com from April 9 until April 24. Visit the site to view meeting materials and comment online.

If you have special communication or accommodation needs, please contact Courtney Black at 512-531-5920 or Courtney.Black@capmetro.com.

To learn more about Project Connect, visit projectconnect.com.



Appendix D: Virtual Open House Engagement Summary

Engagement Report

Project Connect Orange and Blue Line Virtual Open Houses

For the period April 9 to May 30, 2019

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Scope

The report presents data for attention, active engagement and public input to the Project Connect Orange Line Virtual Open House <https://www.capmetroengage.org/en/engagement-initiatives/project-connect-orange-line-virtual-open-house> from April 9 - April 24, 2019 and the Blue Line Virtual Open House <https://www.capmetroengage.org/en/engagement-initiatives/project-connect-blue-line-virtual-open-house> from May 12 – May 30, 2019.

Key Performance Indicators of Public Participation

We assess participation along three dimensions: attendance, active engagement, and input.

Attention: By coming to the site, people are doing the digital equivalent of attending a public meeting. That does not guarantee that they will raise their hand to speak. But it does provide us with an opportunity to inform them. Informing oneself is an important form of participation. To gauge this type of activity, we look at the number of unique visitors, the number of repeat visits, the time on site and the average number of pages being viewed during that time, as well as the time they spend on the key pages delivering information that they can use to learn about the engagement subject matter.

Active engagement: Active engagement captures those participants who send a signal about their views, such as contributing a comment, a rating. These are the people who actively engage in the conversation and provide us with data that may be used to gauge public opinion and considered in decision-making.

Input: Input is the ultimate goal of the site. Input can take many forms, depending on the nature of the content being discussed, the lived experience of participants, and their knowledge, both prior to arriving at the site and incorporating that which they learned on the site. Input may take a variety of forms, including rankings, choices, sentiment or expressions of opinion, preferences or fact. It is important to seek the correct type of input in order to ensure that it the input is meaningful. To be meaningful, the input sought must:

- Involve a topic on which the public is qualified to express an opinion, either because their preferences matter or because they have relevant knowledge or lived experience
- Advance a question that is an open variable and on which the organization is open to being influenced by public input.

Attention

Attention

Since the launch of the Orange Line VOH on April 9, 2,911 people visited the site 3,406 times. During each visit, they spent an average of 2 minutes, 1 seconds viewing an average of 2.57 pages.

Period	Users	Average Users / Day	Sessions	Sessions/ user	Average session duration	Pages/ session	Bounce Rate	# of days
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190425-190511	314	19	386	1.23	02:12	2.71	67.62%	17
190512-190522	381	35	481	1.26	01:48	3.22	43.45%	11
190523-190530	324	41	365	1.13	01:30	2.30	67.95%	8
Total	2,911	56	3,406	1.2	02:01	2.57	56.69%	52

Table 1: Attention

Attention Trend

Over three quarters of the visitors to the site viewed it on one of two days – 371 on April 9 and 777 on April 15. Outside of these two dates, the number of people who visited each day was only between 20 and 60.

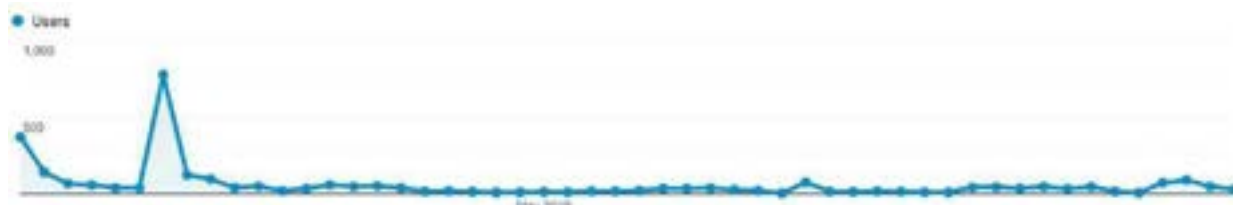


Table 2: Attention trend

Active Engagement

Orange Line VOH

A total of 487 submissions were made to the Orange Line VOH during the report period. Of these 57% were contributed by people who had registered and signed in to their profiles. The remaining 43% of the submissions were contributed anonymously.

Period	Need 1 submissions	Need 2 submissions	Need 3 submissions	Need 4 submissions	Need 5 submissions	Need 6 submissions	Potential Alternatives submissions	Total	Onymous Submissions	Anonymous Submissions
190409-190424	56	55	51	48	48	49	46	353	135	218
190425-190511	15	14	14	13	12	12	11	91	18	73
190512-190522	5	4	2	4	3	3	4	25	16	9
190523-190530	2	3	2	3	3	2	3	18	8	10
TOTAL	78	76	69	68	66	66	64	487	177	310

Blue Line VOH

A total of 40 submissions were made to the Orange Line VOH on May 12 to May 30. Of these 29% were contributed by people who had registered and signed in to their profiles. The remaining 71% of the submissions were contributed anonymously.

Period	Need 1 submissions	Need 2 submissions	Need 3 submissions	Need 4 submissions	Need 5 submissions	Potential Alternatives submissions	Total	Onymous Submissions	Anonymous Submissions
190512-190522	4	2	3	2	4	4	19	2	17
190523-190530	4	3	3	3	4	4	21	7	14
							0	0	0
							0	0	0
TOTAL	8	5	6	5	8	8	40	9	31

Orange Line Input

Need #1: Growth Along the Orange Line

Do you agree with this Need statement?



Yes	74
No	2
Undecided	2

Why?

Of course growth has an impact on transportation networks. But what is really impacting us is the type of growth we are engaging in, auto-dependent sprawl, is way more challenging by creating vastly more VMT/capita. Single occupied cars are an incredibly inefficient use of the ROW and building infrastructure to support them is destructive of the urban fabric and ultimately fails every time.

You can see the growth. Numbers don't lie, nor does traffic.

The growth is in a pattern that appears arbitrary. How did CapMetro decide what neighborhoods will be gaining growth and which ones will not? Again, arbitrary. I believe growth will continue along Lamar Blvd, but the pattern doesn't make sense.

If you need this to be explained, then you need to review the data again. Providing faster commutes also will induce growth.

Austin's transportation system as a whole has not kept up with the growing population. The roads can only grow so much, so I feel we need a more high-capacity network than what's available.

Austin is going to continue growing, especially in desirable areas such as Orange line corridor. Rapid transit will alleviate a lot of the growing pains for all modes of transportation.

ask to stay in the charts the population surrounding Austin and when in the Austin area continues to grow as more businesses are coming into town pretty soon we'll have to be the number one destination in terms of Commerce for population and Technology

So many people are moving to Texas, in general. Because of that, there's more people either living in Austin or visiting Austin. This means more cars. We can't keep adding more lanes. We need a Rapid Transit system like the DART system in Dallas. We need a transit system that is constantly going and moving just like Austinites.

Unless people will work in places next door to where they live, they will travel, along with all the others already traveling

As more and more people move to Austin, we are seeing strain on the roads and public transportation. As the roads get worse, efficient public transportation will become more popular.

Yes growth increases the travel times on this route as there currently is no alternatives besides the bus, which is stuck in the same traffic as personal vehicles. I think it would be more interesting to see a 2040 growth projection based on the inevitable increase in growth along the corridor that comes with a transit investment. What will the difference in growth be if we build this vs. if we do nothing? If a transit system is built on this corridor, the city should do everything possible to encourage growth along the corridor to relieve stress on other areas.

Increased driving due to poor land use and lack of alternatives for most people is increasing congestion for all modes.

Traffic is getting worse by the day, year over year. More congested roadways impact not only drivers, but also transit users as buses are stuck in traffic. They also impact cyclists and pedestrians from a safety standpoint, leading to fewer people opting to use active transportation out of fear of life safety, which in turn increases traffic congestion from cars.

Current public transit options are not frequent enough to sustain Austin's growth. The current 801 does not have "pull-off" stops, so it blocks auto traffic at almost every stop. It's also not reliable due to sharing lanes with auto traffic. It doesn't save any time.

Even in the few year I have been in Austin, the growth is dramatic. At one point, my commute had little to no backups, but now it's a norm to have heavy traffic during my commute. It's noticeable and it's not going away and it'll just keep getting worse. We need a solution besides widening roads which often

doesn't sort the problem. We need a line that is efficient and goes where people are going.

Rail not bus!

When the traffic is slow, the buses don't run on schedule...can't make it to your train on time, etc. Train or dedicated BRT / ART to airport would be very helpful.

Yes, immigration is negatively impacting our quality of life.

Areas outside of the 1/2 mile buffer are excluded. Colors selected (shades of purple and gray) do not help show differences in areas.

Would be more statistically honest to study entire city of Austin and show different categories (0-100, 101-500, 501-1000, 1001-5000, 5001-6926) in different colors to truly show the data.

Traffic is getting worse and we need to be more environmentally responsible in our choices about development (more density!) and transportation (more alternatives to the private automobile and less dependence on fossil fuels).

Simple, car traffic must be reduced and mass transit needs to be increased. I do believe the population increase will continue. The transit system must be faster than car travel

As population and jobs grow along the corridor, the roads are going to get more congested and travel time between two points along the corridor is going to increase drastically. People are going to refrain from travelling along the corridor if they have the option to or waste their time sitting in traffic burning gas and time.

The Orange corridor captures an important segment of both employment and residential population. Any increased transit capacity, particularly a light rail system, would be helpful for metro congestion at large.

It's certainly making single occupancy car travel slower. We need more frequent high-capacity transit options.

The numbers are clear as is, and that doesn't account for possibly even more dense development as Austin builds taller.

Too many cars on the road, which isn't sustainable both logistically and environmentally.

I notice more and more people on the bus, as well as more traffic on slaughter. I think this especially affects public transit simply because it seems as though people don't respect the buses, and when you combine public transit that uses the same lanes that other cars do, it becomes a toxic combination.

More people utilizing the same infrastructure with the same capacity= more congestion

I've lived along the orange line (Midtown Commons) for about 1.5 years and it's obvious more and more apartments are coming up. However, on-time bus service has gone WAY down. BUT, it affects crosstown routes, like the 300 WAY more than the North/South corridor. Not saying the N/S corridor doesn't need a dedicated pathway but it seems other corridors/routes have been forgotten about.

All travel modes are not being impacted bike and pedestrian travel time are not impacted, so we do not need to expand these modes infrastructure. Second, in general if there are no incidences I have consistent travel times. The city needs to focus on clearing traffic incidence quicker.

The Austin area has seen unprecedented growth, and traffic has grown right along with it. Rush hour spans later and later into the night. The need for alternatives for driving are passing from a want to a need. It will greatly benefit everyone in Austin for an additional orange line.

Rapid growth is changing the "alternative" modes of travel the city must take seriously to better manage transportation demand and climate change impacts. It is affecting car travel in that users must start paying a premium for their detrimental impact on our environmental and social conditions.

We know growth is happening in Austin and it makes the most sense to me to grow and add density along corridors that are already developed and can provide transit connections. The worst thing that could happen is that we continue to allow growth to happen as suburban sprawl that destroys undeveloped land and exacerbates all our problems.

High capacity transit is essential to meet the challenges of growth and increased congestion.

More people are traveling, obviously.

The pressures of growth are exacerbated by a distinct lack of mobility options. The primacy that cars hold in our planning is the singular cause of congestion,

the reason we see so many deaths and serious injuries each year, and the largest impediment to a functional transit system.

Our streets are crowded. It's time we give dedicated transit lanes the chance to share a piece of the road.

Along this corridor is one of the most heavily trafficked locations in Austin - the University. With limited parking options and an over abundance of traffic, not to mention the constant road maintenance needs for such heavily driven roads, this is a clear problem in our city. The orange line would solve a MASSIVE number of problems, allowing for transit to/from UT to locations with more widely available parking options (for those coming from far away) as well as to / from activities downtown - which are also currently just as rapidly declining in terms of travel time and comfort / access.

The lack of options for transit forces people to travel in single-occupant-vehicles (SOV), so it's only logical that as the population grows so does SOV monopolization of existing roadways.

As we are seeing the inevitable increases in density more traffic congesting has occurred. With an abysmal street network that significantly lacks the connectivity that other cities have, it is even more important to have high capacity transit options.

Austin is not just growing centrally, but in our outer regions as well. This growth increases the demand for our limited infrastructure. I live 11 miles south of the UT campus (where I work) and it takes on average 45-55 minutes to get to and from work. On a bad day, it has taken two hours to travel 11 miles. We are far beyond the point where we need to debate whether to act. Adding an orange rail line will be a game changer for the entire city and the route will serve our largest employers, the city, the state, and both St. Edwards and UT Austin. Getting a sizeable chunk of these employees on the rail and off the road (myself included) is needed. Not to mention the impact this will have for folks who cannot drive and must rely on Uber or other means of getting around this crowded city.

I'd prefer to see studies in areas that are currently underserved by our current transportation options!!! THIS line is currently well-served by mass transit while other parts of town with equal or less income have little or none. Y'all need to be a lot more creative in your approaches towards improvement. I don't personally believe that a dedicated lane on North Lamar for mass transit is the answer. It is already SO congested and impossible to drive on much of the time. But if you must change what's there, I'd highly prefer MONORAIL as it can go ANYWHERE, not just in a lane of traffic.

I wholeheartedly agree with the need statement and strongly support the orange line.

I wholeheartedly agree with the need statement and strongly support the orange line.

I live and work in this area.

Traffic, transit needs its own lane

Do you have a personal story or comment to share that relates to this need statement?

It is possible to build in ways that contribute less VMT/ca and can be well served by vastly more efficient transit. I live in such a place - we still have a cars, but they are very rarely used (relative) to someone people who have no option because they live in an auto-dependent place that cannot be served well by transit.

I like the idea of the Orange Line in theory, but in practice I see several problems. 1) portions of Lamar are narrower than other parts. 2) how will CapMetro resolve the narrower lanes? 3) what will CapMetro do to help small businesses handle lost of customers during the construction process? 4) will CapMetro help small businesses when larger companies move in to push out the smaller businesses?

I ride the Red Line two times a week and I've witnessed firsthand the development that has sprung about at rail stations as well as the increased traffic in those areas. Any new connections to downtown will hopefully elivate a lot of congestion on existing roads/transit.

No

I live in Austin and we are constantly trying to make it to doctor's appointments. It's hard to make it on time because you can't always plan for wrecks, traffic, or new construction. A Rapid Transit system with a definite, reliable, prompt schedule would help mitigate those issues.

Tons of friends spend way too much time stuck in traffic already, and this is almost certain to get worse

Honestly I'd try to take the line all the way down to 1626 before it gets too built up down there. Already tons of people living in that area.

I took the 801 from the Oltorf and Congress stop to Republic Square for a year or 2 intermittently. It was much faster and more reliable to drive, take a ride-share, or ride a bike. I stopped taking the bus because of the time it took for my commute and because it was not reliable.

Even in the few year I have been in Austin, the growth is dramatic. At one point, my commute had little to no backups, but now it's a norm to have heavy traffic during my commute. It's noticeable and it's not going away and it'll just keep getting worse. We need a solution besides widening roads which often doesn't sort the problem. We need a line that is efficient and goes where people are going.

I used to have a reverse commute from Northwest Hills to south Wilco (Parmer / 45) and would observe the traffic jams on 183 heading south out of Williamson County, wondering where all these cars were coming from. I also took the train regularly for over a year and noticed similar congestion patterns as I observed the cars on the roads.

Fix Mopac and I-35 first.

Yes, I change my habits and choose not to go to certain areas of the city if the traffic is bad, I am fortunate to be able to walk, scoot, or take the train but many others are not.

I use the express system and 803 and 801. Having them run faster would be a wonderful thing. I live a mile from Pavillion and use the express during weekdays and during weekends, ride my bike to the Domain to catch the 803. I sometimes ride to Kramer and catch the train.

Yes, I now ride my bike to avoid sitting in traffic. I also ride the 803 and it's faster, but needs to come more often.

Nothing beyond what everyone in Austin experiences daily

N/A

I live in SE Austin but take the 801 regularly. I tried driving the same route once and it took me twice as long. For one thing, buses are still subject to traffic lights, which takes up a lot of time. Bus drivers also have to deal with plenty of people who think they can cut buses off. Not to mention the fact that multiple buses in the same lane sometimes adds to congestion.

I gave up driving in favor of the bus, but even my buses get stuck in traffic with all of the other cars, so it makes me wonder if I am helping at all by leaving my

car at home. Traffic causes my connections to arrive late/off schedule, which worsens my commute.

Yes, the 801 S is never on time. The electronic boards are always wrong, the predictive live map is generally off and the next departure might as well be re-titled next best guess.

I commute on Parmer. My job is 5 miles away and usually takes me at a minimum 20 minutes. With more people taking public transit, this will hopefully reduce the amount of people on the road and the congestion they bring.

We need better connectivity in north Austin. Run the #803 to Howard station with a stops at Parmer/Mopac and St Davids. This would bring the #803 to the #50 allowing someone to get all the way from north Round Rock to Leander or south Austin. And all that is missing to do this right now is a 3 miles of bus route and a couple of stops.

I live in the study area (south of Ben White in the Battle Bend neighborhood) and I think growth in my area would be positive.

I paid an ungodly amount of money for a tiny little place I call home. Why? Because I refuse to sit in traffic for hours. Help me get to where I need to go more easily and more affordably.

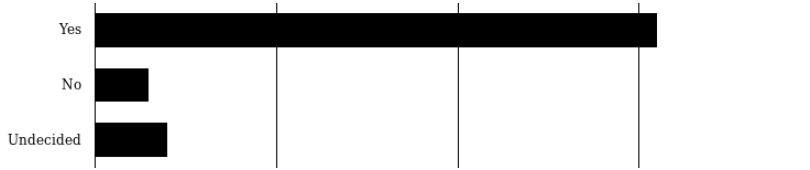
We travel this corridor by car every day. Coming from Europe, where we lived for the last 7 years, I could easily travel the same distance via a friendly streetcar with it's own lane and regular cadence. The experience was IMMENSELY better - I could work, read, or talk to fellow citizens aboard the streetcar, or just watch the world go by. I tense up when I have to drive this corridor, vs looking so forward to a relaxing ride on the tram. It's not just for travel times and modes, but for our health and mental health that we need a transit solution!!

I work on South Lamar. From Barton Springs to Ben White there are two streets that connect to other arterial roads (only to the east). It's a massive corridor with a ton of higher density development just coming on line. S. Lamer is screwed forever. I'd rather sit in traffic on the 803 reading news and rage tweeting John Cornyn then pounding my fist against my steering wheel. That said the 803 can't move in rush hour either.

My issue is distance to get to the bus in particular when I tore my ACL while exiting a bus. Walking a mile or less was very painful.

Need #2: Limited Ability to Increase Roadway Width

Do you agree with this Need statement?



Yes	62
No	6
Undecided	8

Why?

Our major corridors are bloated auto-sewers that are too wide as they are. Not only would it be prohibitively expensive to widen them further, it would be an awful idea regardless of the cost.

The constraints are visible. There's nowhere to build on the drag and it's getting harder to build elsewhere as the city develops.

This is a trick question. CapMetro is looking for a Bond Election to purchase ROW. What they don't purchase they will use eminent domain. CapMetro are lazy transit planners.

Better use of roadways to move more people is important for the livability of a city and the health of a city.

ROW is the biggest pressing issue. The time to have acquired them was decades ago before the need was clearly known. Delaying this only makes a tough problem worse. Creative and possibly costly implementations will be needed as a fact of attempting to implement the Orange Line.

The ROW constraints will only get harder as development increases.

I'm not 100% about the width at these specific areas. But why can't we lift the transit system up? Or close down a lane for transit? The more stations and the more trains you have going, the more people will ride this. Rapid Transit.

Adding lanes for a full fledged BRT line would be difficult given these restraints, though I do believe it would be the favorable option for votes since the existing 801 Rapid route already runs this route.

The map shows the biggest constraints in red... so yes, there are some. But if Development Services prevents rebuilding in those areas, we can probably take out existing structures without a lot of global impact.

Even if we COULD increase road width, there is little evidence to show that we SHOULD. Massive interstates built in Dallas and Houston have only made traffic worse; the future is in more efficient use of the space we have, so that we have more room for things that are NOT roads. Roads do very little for the health of a city, whereas housing, parks, offices, etc are all better.

There's a river there. And a bunch of buildings. Pretty obvious.

Nearly all roadway space is allocated to personal automobiles. This space should be shifted to more efficient modes that have higher capacity than automobile lanes.

This is poor framing. There is plenty roadway width to convert some of that space to dedicate transit lanes in almost the entirety of the corridor.

Where would the ROW needed for the Orange line be taken from? It seems between the existing sidewalks, travel lanes and businesses that line the corridor, the only options are to go above or below or remove travel lanes for cars...which people could adjust to.

Widening the roads will not make a difference. It just means that more people will take those roads. Dedicated public transit right-of-way is what is needed, preferably subway.

Much of this area is fully developed with businesses and activities. It would probably be difficult to do much roadway width improvement through the majority of this corridor.

Use elevated or tunneled rail in areas where space is extremely limited!

There is already a lot of existing development.

I believe there is limited ability to increase roadway width without resorting to eminent domain, which I am not opposed to under certain situations. Primarily, if the use of eminent domain to acquire properties makes possible at-grade

light rail transit in its own dedicated lane on this corridor, I think it would be appropriate. I support removing automobile lanes for LRT.

The limited width needs to be used efficiently. Reduce car lanes and increase transit and bicycle and sidewalk.

As Capital Metro says, metro population will increase 100% while roadway capacity can increase 15%. It seems clear that we need higher capacity on existing ROWs. An extensive and interconnected LRT system will be best to add additional capacity, particularly with the Orange Line. Light rail in this corridor is the answer. I won't directly benefit, as I do not live on this corridor, but all added capacity will help me and everyone in Austin combat congestion citywide.

Adding more lanes or expanding roads is not the solution for a city like Austin which is facing rapid growth. No amount of extra lanes, roads or bridges is going to be sufficient for such growth. If you build a new road, it WILL get congested within a few months and the residents will complain again of congestion.

Only high capacity public transportation can solve the problem of congestion. People will opt to take public transportation as it will save them a lot of time. Each person who takes public transportation is one less car off the road and reduced congestion. I don't need to be actively paying attention while using the train. I can read, listen or do something which I can't do while I am driving in car. Time saved.

On these major corridors, vehicle lanes for single occupancy vehicles is not the best use of space. The most cost-effective Orange Line would take lanes from Lamar/Guadalupe/S. Congress (and remove parking) to create transit-only lanes.

As population grows, the City runs out of options for transit. Unfortunately, Austin's regressive policies of the past have made life that much more difficult for present day Austin.

Geometry.

The ability doesn't seem so limited that I'd frame it that way. Let's stress that there are some possibilities rather than some limits.

I wish you would be frank about the effect this proposal will have on existing road users, home owners, and business located near the proposed right of way.

The closer you get to the city the tighter the gridlock. The bus begins to drive slower and slower because traffic is so backed up or people aren't respecting the ROW rule. This becomes dangerous for buses, cars, and people on bicycles as well.

I ride the 803 and pick it up to go home at Guad and Dean Keeton, where probably 8 or so buses pick people up. I see how much congestion is caused just by the right lane backing up. Sometimes the light changes fully and nobody can go through or move up at all because a bus is picking folks up at the corner. I can see how much pullover lanes would help. Once you get going, there's not necessarily a need for a dedicated lane. But it's a particular form of public transit to watch your bus 100 yards away not move an inch even though there's a green light because someone else is picking up.

I don't know, I have never studied it. But my observation is that no matter how many new roads/lanes we add or road projects we complete, none of it seems to alleviate traffic congestion.

You can't increase the width because you'd take out the sidewalks.

Is it a question of removing lanes for car traffic? Is it a matter of there physically not being enough space given the configuration of road, sidewalk, and residence or business? I need to know the reasons for "limited ability" to respond.

There is limited ROW, but existing car lanes should be repurposed, if necessary, to transit if that can move more people than a car lane.

Some of the roads in Austin are VERY narrow. There are large trucks and SUV's that drive through the city pretty consistently. In these little 2 lane roads, having a bus on them is very difficult to navigate and makes me nervous. Having a bus lane or just extra width on some of these roads will really help ease congestion.

Increasing roadway width leads to unsafe roads and ethically irresponsible for the inequity and environmental damage it inflicts on our city and its residents.

No need to increase road width. STOP inducing demand. TAKE AWAY car lanes and run a light rail system instead.

I'm a bit confused on what the need is, this is written as "there is limited ability", so is the need to "increase road width"? In which case, I do not agree. I am against increasing road widths and would like to see us just use the space we

already have more efficiently, give less room to single-occupancy vehicles and give some of that room to other modes (like a dedicated BRT lane or train).

Just leave the road alone, add some bike lanes. When it gets congested and bikes are passing the cars people will change their habits

This is particularly true along the Drag. We should seriously explore an underground transit tunnel in this segment. This would be transformational, and highly appropriate.

This is true, but it's immaterial. In areas where ROW is constrained, the mode that is capable of moving the most people should be given priority. We should certainly consider dedicated pathways both above and below grade, but must also look at at-grade dedications in order to limit construction costs. Instead of "taking away car lanes," we should frame the change as "upgrading existing capacity."

If we reduce parking and car-lanes in favor of moving away from single-occupant vehicles there is no need to increase roadway width. This "need" seems to be predicated on maintaining the priority currently given to single-occupant-vehicles.

Because for 3 decades the City of Austin abdicated their responsibility to plan for the growth pressures we were experiencing. Now the City and it's partners are trying but it way too late. High capacity transit at least gives us the option of not sitting in a car frustrated and we can sit on the 801 frustrated and email our City reps about how crappy the roadway network is in Austin.

I think that if we remove lanes / spaces for cars on the road, and use that to force in transit space, we will also change behavior. See: <https://www.npr.org/2019/05/07/720805841/city-dwellers-dont-like-the-ide...>
sometimes we need to force change to make it happen faster.

This is why I whole-heartedly believe that MONORAIL is the answer to Austin's transportation woes and always has been. It doesn't necessitate a lane of traffic, it can be put anywhere. I also just disagree with this route being the priority. Y'all keep trying to do this and get voted down because it currently has one of the only highly functional mass transit routes in the city. So why improve IT when there are so many other corridors that are in more need???? Please don't take away a lane of traffic for another stupid fancy project here. These are the only places in town where mass transit actually works already. Improve the rest of town for folks who really need it!

I agree, but the map seems backwards. It seems like the most major ROW constraints would be through UT and downtown. Am I reading this right?

Car lanes are going to have to be sacrificed for greater mobility, otherwise congestion will lock up the city's grid and force development out

I wholeheartedly agree with the need statement and strongly support the orange line.

I wholeheartedly agree with the need statement and strongly support the orange line.

Streets, especially in the core of the city, should be for pedestrians first, then also bikes and transit. Cars should have less, not more, space.

Because there are already buildings on the streets.

Where there is political will, there is always a way.

Do you have a personal story or comment to share that relates to this need statement?

Yeah, it's depressing to spend time on our corridors - they're just awful places.

Have driven on the Katy interstate in Houston and its a nightmare. We don't want or need that in Austin.

It is essential that any new transit along the orange line be high-capacity (see previous need), and separated from traffic (elevated or subway would be best). This will remove buses from the already congested traffic mix and also make transit the faster option during rush hours, special events, weather events, and the like (in other words, most of the time in Austin!)

Yes, many places in Austin do not have a sufficient width for a safe sidewalk or bike lane, let alone space for transit to flow unimpeded by car traffic.

I believe that Austin needs to take aggressive action NOW, and put in a viable rail system along the orange line route, and with a rail connection to the airport. We are stuck 50 years in the past, and if we don't act soon, there will be no space for options that are free from traffic influence.

Another option that will help ease congestion is legalizing filtering for motorcycles within the city, and lane-splitting on the freeways. Filtering allows motorcycles to move between lanes of stopped cars, removing entire car

spaces per bike from the traffic line. It also removes bikes from the dangerous rear ending zone. For similar reasons, lane-splitting on freeways helps traffic. It is also dramatically safer, and studies have shown that should a rider wreck, the chance of death, head injury, or torso injury is approximately halved if the rider was splitting vs. if they were not. More information can be found at www.lanesplittingislegal.com.

Transit needs to be more reliable and consistent

I just don't trust you.

There is a stretch between William Cannon and Slaughter along South Congress where the bus usually drives uninterrupted and at high speed. Paying no attention to unpaved roads, the bus glides smoothly along and this is my favorite stretch of the 801 bus ride because it is so quick. If something like that existed throughout the city, transit would be much more efficient. But this brings us back to need #2.

HOV lanes are the only roadway strategy that seems to make a difference. We need to encourage more efficient commuting. As long as the population in and around Austin continues to grow and those people want to access the city traveling along in a car, we will never be able to provide enough infrastructure to accommodate them.

If it's a matter of removing a lane for car traffic, I don't think there's "limited ability." More lanes = more cars. Take away a lane and people are more likely to adjust their commutes and commute modes.

I do not.

I grew up in London and Den Haag. I have seen public transport done right. Stop kowtowing to car drivers and tear up some lanes and put in a train!

Yeah, I live in Leander and the train service is sad. Why no service on the weekends and why such limited service to the Leander station. The cost of living is very high downtown. Where do you think the people that give you a coffee or sweep the floors live?

Anyone who has ever tried to walk somewhere in Austin in an area that isn't in the CBD has a story about limited PROW. Sidewalks anyone?

We need to look at how other countries do this. In Mainz, Germany, funding was approved for a new tram line and construction started almost immediately following. In THREE years (not 20) this was built and active, and shuttled

people to and from the city centre to the university (also about 50,000 people large). How did they do it? By cutting out car lanes, shutting down large, heavily trafficked parts of the city on a scheduled cadence for construction work, and forced people to work around the construction in order to build something that then won a ton of national awards for excellence in construction, staying on budget, and transit use (people were riding it instead of driving!) . It's already clear that lack of transit is a problem in Austin, but most people I speak to here say, well that's just how it is. Which means change won't happen until people are made to be really uncomfortable and can no longer just accept it like Austinites historically have.

I walk much of the northern part of this area regularly and occasionally hop on a bus to get home. I know it well and have lived along it for most of my 36 years in Austin. I think that what is there now works for most of the people who live along it. I think you are approaching this issue backwards. If usage along this corridor is already high, why not improve other ones to make them BETTER?

We need more street retail that is serviced by the transit.

Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs

Do you agree with this Need statement?



Yes	57
No	6
Undecided	6

Why?

The key is frequency. If people know that a bus or train is going to show up in a few minutes, and there's no need to check schedules, they'll be glad to use the transit - because it will create a much better option than fighting traffic and having to deal with parking.

People are being pushed out of central Austin due to affordability. Linking downtown and other employment centers with reliable, high frequency transit is one way to help defray that.

Too much focus on low income household. People that live in houses within the core are not "low income," they just pay less for housing. Focus on building more housing for ALL along the corridor. Focusing on "low income" is not a good idea and will turn off voters.

The existence of the line will induce growth along it rather than possibly meet an existing need.

The data is deceiving, once again. The large pockets of low income households are college students who live in the UT area and only part of the year. The large pockets of low income household data for the Allandale and Brentwood neighborhoods are wrong. That area is some of the highest income levels in the city and has a very low indicator of low income families.

This takes cars off the road in the busiest times of day (rush hour) and allows lower income families to not have a car or have less cars. This would reduce traffic for other modes of traffic and reduce environmental impact of more cars.

The red line right now does not connect housing to all of the major commercial areas of the city. The orange line might do that if it is able to avoid the congestion of the streets

Austin housing prices have continued to push middle- and low-income residents further outside of Austin. We need a full Orange Line that consistently runs all night to transport people to their jobs in the city and back. Especially if people don't have a car or have only one car and must rely on public transit.

Might it be more economically feasible to put the work where the people live? That is, encourage businesses to develop in areas where there is a lot of affordable housing?

While not personally affecting me, I think this is great for the long-term health of the city. We don't want Austin to become like New York or San Francisco and be for "only the rich". A city built for everyone is a healthy, vibrant city.

I don't really care about "affordable housing" as a government program. I feel like it's usually a boondoggle. But connecting places with affordable housing with job areas, sure.

Transit needs to link where people live to where they want to go.

I live in a relatively affordable neighborhood (Brentwood) and we, a family of four, get by with one car and public transit, with some ride share, scooter, bike and walking mixed in. I can definitely see a huge opportunity to reduce car traffic by having a more reliable and predictable transit service running throughout the corridor.

It's important for all residents to be able to have better transit options.

Many business - restaurants and bars especially - are hurting for employment. It's getting more and more difficult for people working at restaurants and bars to be able to afford to be anywhere near their job or have reliable transportation to their jobs. Increase transit from affordable housing, and businesses will be able to have many of their employees have cheap and reliable transport to get to work.

People should not have to rely on just using a car. Public transit should assist people by connecting them to both their work and home.

Target heavy car usage areas first, Mopac and I-35. There is already regular and frequent bus service on the proposed orange line route.

More of the city should be accessible to those who choose to get around without using a private car.

Better to not have a car note, insurance, gas, upkeep, etc....Better for the environment.

I want waiters in restaurants to available to serve me. They should be able to live nearby.

Ideally, we should encourage a percentage of all income brackets onto mass transit, not just low income. Not only do I not trust the perceived longevity, operating costs, and capacity of bus rapid transit, but I suspect that 'branding' of BRT will not appeal to enough people. We need light rail on the Orange corridor.

These are the homes that need public transit the most and to their jobs.

Those needing to move further and further away from work due to affordability are also the least able to afford the increase in transportation cost, both in time and money, that comes with being further away from work. Viable transit options are needed just as much as affordable housing is needed.

Folks in affordable housing cannot afford the very expensive transportation expenses required to live and commute to the core. Transit will allow more low income folks to get to work for less money.

seems clearly relevant here, per the data

I both live and work along this line in South Austin.

It makes sense to take away at least one stress factor to individuals that need it.

owning and maintaining a car is extremely expensive. I think we will have less traffic congestion if we provide people the realistic option to live without a vehicle (and save that money for rising housing costs).

While I agree that more jobs and housing are along this line I still think you are forgetting those people that live outside that line but need to get to it (for example from home to job or vice versa. While a dedicated line is needed, what about those connections?

This should be an essential consideration of rail and other public transit development.

It is important to provide better transit links between affordable housing and jobs, but it is more important to provide and retain more affordable housing in the city. If a high-capacity line is built, property values will increase, as they have throughout the country; and unless there is a concerted effort to build and retain affordable housing along the line, many people will be displaced. It is not enough to consider the affordable housing that is located along the line now, you should also consider how much affordable housing there will be once the project is built.

In order to make Austin a fun place to visit, the restaurants, small shops, and various other service industries need staff. If you are low income or don't have a car, it would really help to have access to public transit. That way it's easier for people to get to their jobs and maybe help people live in areas where rent is getting higher.

Transportation costs are a hidden cost of housing and providing lower cost, healthier, more environmentally friendly transportation options beyond a singular car improves not only housing affordability but also quality of life and environmental impact.

Cars keep a lot of people in poverty, and a lot of others on the edge of poverty. Cars are too expensive and make NO sense. We have had this stupid car dependency forced on us by people who use it to take away a lot of our hard earned money.

Yes, linking housing to jobs, especially affordable housing, I think is really important in creating equality and access and gives people the opportunity to reduce their household spending by not needing a car (which is usually the second biggest cost for a household behind housing, due to payments, insurance, maintenance and gas costs).

There is currently no viable link between what you are doing and a large part of West Austin. Many low income people work in this area during the day, but because of the lack of connector service along the length of West 24th/Windsor Road those people must walk blocks, in fact miles, to their places of work. There are also many seniors in this unserved area, and they cannot capitalize on the benefits of what you are doing because you have removed

bus service from the core of this area. Please add a connector bus service along the length of Windsor Road, from Rockmoor to Lamar.

There is no reason to think that the Orange line will be any better than the 801 BRT line that we have. The station placements show that staff is simply forgetting about the added stations that were needed to make the 801 function effectively. None of the new stops should be skipped on the "Orange line".

Land-use entitlements should be included in policy considerations for the future of these buffer zones in order to increase ridership and serve populations with the most need for increased access to mobility.

I mean many of us are choice riders, but let's be honest, these services should first and foremost serve existing residents that rely on them for their primary mode of transportation. The 1/2 mile buffer on your map is generous particularly on the extremities of the study area corridor. Your faith in accessible pathways to the corridor is almost laughable. 1/4 mile is more realistic particularly in the Austin summer (mid-May to October).

If the goal is to get cars off the road and transition people to rail and bus then you need to focus on adding metro centers near large planned communities and high schools. I live on East Slaughter where a lot of new development is being built and a new high school will be added to this area. This is a prime area that would benefit from an inter-connected station that provides access to rail and bus as well as a parking lot or garage. Think of how it is done up north. People drive to the train station and board the train to travel to work.

While I do fundamentally agree with this - affordable housing and jobs should be accessible - we need this to be a universally desired thing. Yes, of course, low-income and zero-car households should have more access to transit. But guess what: we need the high income and multiple-car citizens to desire transit and USE it for it to work and be worth the investment. This needs to be about improving our quality of life as Austin citizens, for everyone and not just for low income / zero car families. We need to pitch it as that in order to make a stronger case for disrupting traffic to build something, and present it as a way to make Austin stand out. We can be a more exciting tech hub than San Francisco! Why? Because our transit is new, efficient, and made for ALL people to get around.

I like the pretty pictures, but I believe that you are creating your own reality here. I can see how this would be the easy place to put your attention because it's a nice straight line up and down the central corridor of Austin. But it's all those other areas that need more transportation solutions and need help getting folks out of their cars. This does nothing to limit car usage in the suburbs where it's needed most. Or helping folks in Northeast or Southeast Austin without resources get to their jobs, if they have them. To say nothing

about SW Travis County where so many folks are being forced to live due to high cost of living in the city. THAT is where we should be investing mass transit money and time. And again, I strongly believe that MONORAIL should be considered as it doesn't require being built on a previously established road. I think it's really the only mass transit option that makes sense in our already over-congested city.

I wholeheartedly agree with the need statement and strongly support the orange line. We need fewer cars and more sidewalks, bicycle lanes, and public transportation offerings.

It creates equality between people in the city! People don't have to have a car to go to work

Do you have a personal story or comment to share that relates to this need statement?

Underappreciated is the quality of the ride - if people understand that they're not going to have to sit on a loud bus, that rattles their teeth out and strains their back, and they're going to have a pleasant walk to a quiet station they're going to be loads more likely to take the transit.

I make just above the wage needed for "affordable housing" but I pay almost twice as much housing. We need more housing for all, not just "low income".

I personally chose to live where I do partially because it has reasonable access to a Red line park and ride.

The CapMetro data is way off and staff is using the false data to steer voters into voting for another Transit Bond. The data can be easily disputed by using local jurisdictions, regional, state and US Census data.

I cannot drive. I would love to be able to go back to school and get a higher paying job to contribute financially to my family. But because we live in an area that is not served by CapMetro, I'd have to pay considerable fees to rideshare to school and back. That's cutting into family finances. I'd love CapMetro to serve the entire AISD area, at the VERY least.

I see many students and employees taking the existing 801 Rapid route to get to school/work, and a higher capacity, more reliable system would transform many low income residences commute times.

I think there needs to be more than one bus route (currently 801 and 1, which are effectively one bus route) that travels along the corridor south of the river.

Right now you can get from UT campus to downtown on a vast variety of routes (801/1, 803/3, 7, 10, 17, 19, 20, 171, etc etc), but no such option exists south of that. So when the 801, for instance, is running late (I've seen it being as late as 50 minutes), you are simply stuck south of the river. More options need to exist at least extending to Oltorf (the HEB) or St Ed's.

See above.

I do not own a car and prefer to get around without using one.

Having a viable public transport option allows people to not need cars, and not needing space for parking can increase revenue to square footage for developers, allowing for more affordable living options. I believe that Austin needs to take aggressive action NOW, and put in a viable rail system along the orange line route, and with a rail connection to the airport. We are stuck 50 years in the past, and if we don't act soon, there will be no space for options that are free from traffic influence.

Furthermore, Austin seriously needs to expand the areas in which highrises can be build. Highrises can be a major solution to the housing problem we have. A plot that could only support a small number of houses could instead support hundreds of homes, thus increasing housing supply, and helping lower cost.

Another option that will help ease congestion is legalizing filtering for motorcycles within the city, and lane-splitting on the freeways. Filtering allows motorcycles to move between lanes of stopped cars, removing entire car spaces per bike from the traffic line. It also removes bikes from the dangerous rear ending zone. For similar reasons, lane-splitting on freeways helps traffic. It is also dramatically safer, and studies have shown that should a rider wreck, the chance of death, head injury, or torso injury is approximately halved if the rider was splitting vs. if they were not. More information can be found at www.lanesplittingislegal.com.

I believe the a rail car of some sort would be the best option for the orange line. Permanent, affixed, and one like the grey rail car on your home page.

This is not a story of affordable housing but certainly regarding a low-paying job. When I first moved to the city, I had a low-paying job downtown and I was also a student. I had a car but hardly wanted to use it because of the charges for parking. Public transit made it much easier for me to get around the city. This was in 2014 - CapMetro has made tremendous improvements to their system. Public transit should serve the citizens of the city, regardless of their financial status. But if there's an opportunity to provide help to those most in need, we should take it.

I live in a 1-car household and use the bus to commute. I feel like those of us that do not commute by car are treated as less important, through policy choices and other attitudes and behaviors, despite making a significant contribution to easing traffic.

I'll be living outside the orange line study area very soon. But, to get to work I need to get to that orange line (to get to work). The 300 thus far is the only option and it's always LATE LATE LATE (one time it didn't even show up after an hour)

Nope.

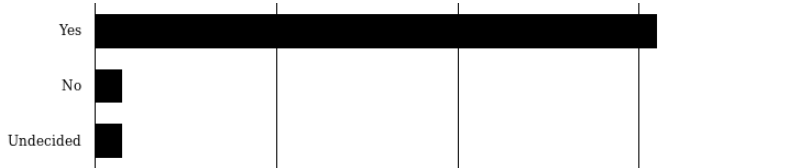
By being car free I have saved about \$400/ month for the last 10 years. That is \$48,000 that has gone into my retirement that otherwise would have gone to a bank or car company. Even if I had to pay an extra \$200 a month on a special transit tax, I STILL would have come out ahead by \$24,000. Imagine if we all paid even \$100 extra tax dollars a month for transit?!! We would have a public transit system that would put The Netherlands to shame! And we would ALL b

I watch domestic and landscape workers climb the 24th Street hill west of Lamar every day going to their work, often more than a mile from that bus stop at 24th and Lamar. This is especially onerous in the heat of the summer. Why isn't bus service available to them to go into Pemberton and Tarry Town? (The service on Enfield and 38th in no help).

Marketing this will matter and I think we need to consider whose minds need to be changed in order to meet this need (the people who do have cars, not the people who don't). We need to make it compelling for them, and that will require making their driving experience more difficult (e.g. limiting roadways) and showing value (ensuring that there are well-designed plans to move people from home to work, to restaurants & city life, to family-friendly activities) in a way that speaks to all audiences.

Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service

Do you agree with this Need statement?



Yes	62
No	3
Undecided	3

Why?

Every station should be thought of as an opportunity to build in an active employment, mixed use, or dense residential node. Every station should be a TOD.

Getting from downtown to UT during rush hour is near-impossible. Even the bus lanes are stacked up with people trying to make right turns. It takes me on average 40 minutes to go two miles and often I can walk the distance faster than the buses or cars can. We NEED transit that can bypass the bottlenecks and make central Austin travel more efficient and convenient.

Commuter focused transportation will allow better options to develop along the route rather than force transportation to accommodate activities.

Downtown has a lot of transit options and has the least amount of low income households. Why not let the city reverse their racist policies and help bring back some low income families in the core of the city.

Most use

Popular places = more cars traveling there. Makes sense to have rapid transit able to serve those areas.

as the City's population continues to grow more and more people are going to need adequate transportation that they can rely on in the future as well as be able to drop them off and pick them up from this location

More and more of these places are being visited by out-of-towners. It's harder for everyone to visit these areas easily. Especially with some streets being closed for construction or festivals. Sometimes, for weeks at a time. It makes it hard to go about life regularly.

Again, a balance; activity centers are needed in more parts of the City, with jobs and offices better distributed. We need less of a concentration downtown.

One of the best uses for public transportation is getting between homes and various activities centers, especially as it becomes more difficult to drive there. A strong public transportation system that meets this need would be highly used.

The transit service must be separated from automobile traffic, use high-capacity vehicles, and be grade-separated where possible to be reliable and efficient.

The places along this line include heavy traffic areas - SoCo, The Capitol, University, and more. These areas heavily back up with traffic on the regular because of how popular they are.

Public transit should connect people to wherever they need to go!

Frequent bus route service already services this corridor. Focus on high car traffic - Mopac and I-35.

If the buses / light rail were given priority, this would result in predictable service times, then people would opt to use transit rather than just jumping in their cars when they had to get somewhere.

Do it sooner! The city and region are growing so fast and we should shape that growth before we repeat the same mistakes of the past.

We already voted yes for Imagine Austin, using transit is the only way to make this happen and the ONLY way to get people out of their cars is to offer TRAIN service. Buses capture waaaaay too few choice riders and calling it ART is not going to convince anyone that it is so much better than normal buses, ONLY trains do this.

<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.360.9930&rep=re...>

<https://www.governing.com/topics/transportation-infrastructure/gov-publi...>

I wholeheartedly agree! Let us reduce car activity and increase human and transit activities!!

Access to many of our city's great institutions such as the capitol, CBD, and UT could use improved access capacity. Light rail would be very valuable toward this goal.

This north-south corridor is going to see increased traffic as people travel from their suburban homes to downtown offices. This group of people will be the large majority of people using the train as they opt to not use the car. Please target this population the most. All other population groups will be taken care of automatically.

Absolutely, as MoPac and I-35 continue to worsen during rush periods- I think that Lamar is going to continue to get worse overflow traffic from people commuting into inner Austin. This is a bad combo for areas with heavy pedestrian traffic like Rundberg, Crestview, and UT. I think it is inevitable that the city will need to look at redirecting regular automobile traffic from Lamar/Guadalupe to keep pedestrians safe- yet we will still need some way to access businesses and locations on this main corridor. I feel like a transit line, with its own right of way, and unimpeded by other drivers, would be the best solution at getting people North and South safely and painlessly.

It is becoming more challenging to get to and from downtown at any time of day due to traffic.

The parking situation anywhere near downtown is horrendous. But the walkability and other options for transportation (bicycles/scooters/etc.) make up for it. Take away the stress of having to worry about your car, and people would be more inclined to travel to these activity centers.

There is traffic everywhere we go, all the time. More people want to access the same great amenities, which tend to be centrally located.

Connections are absolutely horrible with transit services right now. Anytime I see a connection is required I roll my eyes because I know one of those is going to be either really late or potentially early. This requires leaving even early in hopes that is enough to make it on time.

build light rail

Construction has already started on roads like Mopac and I-35. It's clear that there is a need for different ways to commute in Austin. This would provide a much needed route that does not include sitting on I-35 slowly dying.

Providing cheaper more reliable options to access the city makes driving a less attractive option, encouraging more people to shift to other modes.

If important places, such as WIC office, hospitals, health clinics, county offices, grocery stores, and shopping centers were located along the Orange line lots of people could go car free or car lite saving tons of money that could then be saved or spent in the local economy (making car payments to GM does NOT support the local economy).

Having a transit corridor that has a dedicated lane would help to encourage people to use public transit b/c it will actually be faster.

The Orange Line is the obvious transit spine of Austin and deserves the highest and best investments, i.e. rail operating on uninterrupted dedicated pathways.

access to geographic mobility = access to economic prosperity /adaptability

The need statement is great. The headline about growth management is bunk. The argument that transit is THE growth management solution is a big reason why the light rail initiative failed (yeah, the alignment was horrible too). Existing residents don't want to hear about how transit will be used to activate new nodes. We got places we need to be, and if you ever want to pass a bond again I suggest that you make mobility for existing residents the linchpin of your proposals.

Parking on Congress is terrible. A rail that runs up and down Congress will bring people in to the SoCo area and we won't have to "fight" for parking.

We need to build where the traffic & activity are, not build out of the city - and increase ridership from the city.

Let's see the maps of other areas of town woefully underserved by current mass transit options. I guaranty that they'll be even more colorful. I know that with the last "remap", Cap Metro took away much-needed services for folks attempting to get to health care centers and other necessary places. **THIS SHOULD NOT BE THE FIRST PRIORITY.** Fix the broken parts of the mass transit system in areas where they are **REALLY NEEDED.** Stop trying to fix something that actually **WORKS** right now.

Austin remains unconstrained by the standard geographical limits of cities, and as a result, the city has a natural tendency to sprawl out. The combination of improved mass transit and rezoning for increased urban density in the West Campus/Orange Line area would prove a useful strategy to help fight sprawl.

Sprawl serves to be one of the biggest contributors to climate change at the urban planning level, and as a result should be a high priority among urban planners to manage. On top of that, upzoning and increased mass transit access serves to provide major economic benefit through attraction of jobs, increased workforce quality due to them not being priced out of the rent/housing market (see: San Francisco and their height restrictions causing a housing shortage and insane rent), and a general form of Keynesian stimulus.

Land use needs to accomodate transit and walkable, dense cities. People ought to have choices other thwn cars to get where they need to go

I wholeheartedly agree with the need statement and strongly support the orange line. We need fewer cars and more sidewalks, bicycle lanes, and public transportation offerings.

Yes!!!

Trains move more people, we already have buses that are not making a difference, and many people will not ride.

Do you have a personal story or comment to share that relates to this need statement?

Transit isn't that hard - you're drawing logical lines on a map that connects people, to the places they want to go. These should be straight lines that follow logical travel sheds, and connects destinations that people want to travel to.

We've seen the red line, slowly but surely, create these activity centers around them. The Red Line Brewery tour, Crestview, Highland Station(ACC), Plaza Saltillo and more.

These came around due to proximity to commute collection/distribution points, not for the purpose of activities.

Use to live along this corridor and it is very rapidly growing in density.

I've attended many concerts and events in other cities and utilized their light rail/subway systems. For example, attending the State Fair in Dallas, TX is much easier since you can take DART light rail to Fair Park Station and avoid driving (fighting traffic and struggling to find parking) or using a very expensive rideshare.

I personally needed Transportation when I was on my way to work at the Austin Free Net Center and the buses would not be on time so often I would get frustrated

Since I don't drive, I'd LOVE to be able to take my family to activity centers or places or restaurants or movies or anything without having to pay ridiculous rideshare fees that eat into our family finances rather quickly.

We lived close to Zilker Park. During ACL, it would have been great to have a Rapid Transit system so that we could bypass the pedestrians running across the streets or street closures. Even when we moved and went to ACL, it would've been incredibly nice to have a Rapid Transit so that we could ride to the park and back home in South Austin.

The existing shared lanes along downtown are often clogged during rush hour, delaying even Rapid buses. Dedicated lanes are needed to make transit more appealing to those residents who are skeptical or feel it may increase their commute times.

One of my favorite current uses for Cap Metro is taking the Rail from very near my home to the Domain to visit friends after work, shopping, entertainment, etc. More opportunities like this would be great

My favorite ice cream place is up on 35th street, but I never go because it's asinine to drive 40 minutes one way in the same city for ice cream.

I want to reiterate that any new transit should be high-capacity (ie, train, preferably separated from roadways (elevated or subway) so as not to constrain train length.

I chose to live in a small condo closer to where I work because I believe that is a more sustainable choice and it greatly enhances my life to be able to walk to work instead of having a long drive in traffic.

When I travel I use trains, wish I could do the same here.

I currently commute to my job near UT West Mall station, using the 801 from Rundberg. I feel it's a great alternative to dealing with driving to work at peak rush hour times- but there's a huge room for improvement to the system.

I'd be in favor of closing key parts of Lamar to regular traffic- I think it would have to be challenging for bus drivers to coexist with other motorists who are quite frankly unpredictable. This could also help pedestrians' safety around key transfer points, like Rundberg- where you'll see people rush across from the Quail Creek stop to the southbound 801, bypassing the two necessary crosswalks. Or Crestview where people are guided to walk across the train

tracks, then across the Airport Blvd/Lamar light just to transfer to the Metrorail/ where as a new traffic solution could make the transfer seamless.

The real key would be to find a way to raise capacity. A higher capacity line would hopefully mean less overcrowding, like trying to ride the bus home at 5:30PM, packed like sardines in between college students. I admit to feeling a wave of dread as the normal length bus pulls up to the West Mall stop in the evening, knowing that we'll still try to cram just as many students into the bus as the double length ones. I would hope this could also potentially mean higher frequency of vehicles on the line, preventing stops from queuing with nearly as many people.

I occasionally go downtown after work for appointments or events. My options for getting there are increasingly challenging. I can drive but my trip time will be unreliable, I'll struggle to find parking, and I'll contribute to congestion. Or I can take a bus that takes more than twice as much time and isn't well connected to my origin or destination.

I was visiting Houston one weekend and was able to maneuver around their downtown area and their museum district with ease by taking their light-rail system. I was also about to attend sporting events and the like. I don't think we can call ourselves a capital city with a transportation system that doesn't cater to the heart of the city and the people that want to spend more time there.

Yes, again with the example of the 300 to connect to the 801, 1, 350, or 550... It's not reliable to get connections in this city.

seriously, LIGHT RAIL

I used to drive it every day from South to North Austin. It's awful. If I had this I may not have quit my job.

I have seen my daughter struggle to get to the WIC office by bike and bus. It shouldn't be that hard for low income people to access services.

I've met construction workers on the bus who have to DRIVE into town, PAY for parking, and then PAY for a bus ride to get to work. That's shameful. THOSE are the people you should be trying to help here.

Renewed urban mass transit has been a point of political advocacy for me since high school when it was the 2012-2013 Policy Debate topic, and it would make me quite proud to live in a city that's taking steps in the right direction to address issues in urban planning.

Need #5: Create a Central Corridor for a Better Regional Transit System

Do you agree with this Need statement?



Yes	58
No	3
Undecided	5

Why?

The "regional" transit spine is IH-35. The Orange Line Corridor isn't regional.

Yes, but let's improve the quality of that spine, huh? I mean, Lamar itself is a nightmare to walk along. Yes, this should be our spine, but you wouldn't want your spine to be a place people are repulsed by. Let's do better on this. A lot better.

Central Austin needs a high capacity transit spine if only to keep central Austinites from getting in their cars. The region is growing and more and more people are driving in from elsewhere so not only will the people living central see the benefits by having convenient, reliable travel times, but the suburban folks will benefit from having central Austinites off the road.

As long as it connects to Blue Line at Congress and Riverside

You can't measure what doesn't exist yet. Providing an option to balance/complement other means will induce more usage rather than shift ridership in most cases. To that end, a spine is the means on which all other modals can work off of.

Look at Red Line ridership and plan to see how this will work.

The city has and will continue to do poor planning. CapMetro is no different, because they do not run buses and transit where it should be. The city needs more east/west buses so people of less means can get to work. Not everyone works downtown.

The spine provides connections to dense population centers and one of busiest bus routes. Will almost guarantee great ridership which will facilitate future projects in Project Connect vision.

Because right now, Mopac & IH35 are the main corridors used by people in single occupancy cars. With the anticipated growth of our region & the state's current view on how to add capacity to road corridors, the orange line will be the beginning of a central corridor for many commuters to use. This could be a connection for many people coming from Leander, Round Rock, Georgetown, Pflugerville, Hutto/Taylor.

As long as the Orange Line is a Rapid Transit (like Dallas' DART) and does indeed go from Tech Ridge all the way to Slaughter Line and, hopefully, extend past to better serve those displaced, then this will be good start.

We desperately need an autonomous Rapid Transit with multiple trains for each line to cut down on wait time between each train. The wait time between buses right now is FAR too long and you have to ride for hours to get to where you want to go.

Commuters are enticed by the high frequency capacity that the 801 Rapid route provides, and that shows in the data. By providing a more reliable and comfortable option, I believe this line could be immensely successful in laying the groundwork for real high capacity transit in Austin and keep cars off I-35 and Mopac by providing commuters with an option that is quicker and cheaper.

make it a backbone of a connected grid

The MetroRapid numbers have shown that a strong spine will be the first part of the system to see growth, and can help drive growth in other spokes of the system as well. The more access everyone can get to different components of the system, the more use they will get out of it

Because we need a way to get to and from downtown without the heavy congestion, and long travel times. Our infrastructure is terrible. For a city that wants to be green, we are failing to take initiative to provide even a basic public transit system to do so.

The mode choice should be able to handle significant ridership increases, since a more reliable, faster, and more comfortable option, like rail, would likely attract many more users.

We should be focusing on improving service on our best transit corridor. As long as it doesn't turn into regionalism for regionalism's sake it will be fine.

We need a good backbone. Worked in Houston.

Having a central corridor along the busiest North-South streets allows for efficient connection of the East-West lines later on. The next line could run along 5th or 7th street from Mopac to 183.

This is where everything is, it's where all the hub of activity is. Create a central artery for the future of our public transportation to branch off of.

Austin needs to be the center of a regional transit hub connecting all of central Texas!

Unimpeded north/south traffic flow through central Austin will allow better transit options branching off from there.

Create a Mopac and I-35 route north and south with bus service east-west to connect the two main car traffic corridors.

We need fast, efficient transit corridors to build out the system within the city.

What is the projected ridership for an at grade LRT line when compared to ART?

This passes through the two densest neighborhoods in Texas and needs to be high capacity. Lets do a survey with all the numbers laid out. Basically we need to see what the subsidy per rider is for full BRT, LRT at grade, LRT with a few above ground sections, and LRT with a small subway section. Couple that with ridership projections for each one and then ask the voters what they would be willing to vote for, this is not that hard, why can't capmetro/Austin ever get this right??

anything that gets me there faster!

Yes, a central LRT corridor would be helpful. Even more helpful would be an interconnected LRT system, but we must at least start with Orange. One such location of interconnectivity should be a new station at 6909 Ryan, connecting Red and Orange lines. A mixed-use development at that location can also include affordable housing, retail, and grocery.

This city will never stop growing. Ridership and population is expected to go up, according to your numbers. I believe you also accounted for infrastructure growth to be around 15%, correct? With numbers like that, it seems the only

option, or at least the strongest, is to improve public transit in order for people to have a reason to leave their cars at home.

I dream that one day we'll be able to take rail directly to the airport, just like the majority of major cities around the world.

Please make that dream come true

It can be difficult to get south to north in a reasonable time frame.

Because the corridor in question already exists. More corridors should be considered though.

I worry that focusing on only one central corridor--and not a matrix of them--will further isolate communities off the central corridor. So, I would agree with this if the Orange Line were one of two-four corridors so that we don't reconcentrate wealth, activity, growth at the expense of others' mobility.

This is the highest ridership corridor in the city and should be the first priority for a high-capacity transit line.

A central location that is easily accessible from all parts of Austin is needed! It will better connect routes and make transfers less

No brainer; transit makes people and the environment healthier and happier.

If we had a central corridor we could also put regional transit options along it. Mega bus and Greyhound could have stations at North Lamar Transit Center. Then more people would see that as an option to get to other cities. Those bus companies would benefit and so many more cars would be taken off the road saving us all money in costly road projects.

Since Austin is naturally constrained to a north/south geography, it makes sense to create a central corridor. Also, concentrating uses to a single corridor allows us to really utilize density and proximity.

Increased access to every-day destinations (aside from employment) around the heart of the city is needed before investing in getting more people into that city-center without a reliable way to run errands or visit multiple locations.

High capacity transit is just a great option for resident that can't or don't what to fight Austin traffic on their own.

Again, these numbers tell ME that this is already a central corridor that is functioning well. It's one of the only ones. You don't need to "CREATE" it. What needs more attention and growth are the other parts of Austin where people really rely on mass transit and have less options!!! If you built 2 or 3 monorail lines that went into far SE and SW Austin, and NE and NW, that would be serving way more residents in need of help. This is just fixing something that isn't broken and taking a lane of traffic out of an already congested roadway to do it.

This will create a dense spine for the City that will end up being walkable, bikeable, and accessible via mass transit. More people will be on the streets and will create demand for more small pedestrian-oriented small business and housing along the corridor. This is the best way to grow the population for the long-term future.

A trunk line in the city is absolutely essential, it will have the most ridership and make the most sense. The city needs a fast, dedicated "spine"

I wholeheartedly agree with the need statement and strongly support the orange line. We need fewer cars and more sidewalks, bicycle lanes, and public transportation offerings.

This is the best transit corridor now, has the most growth potential, and connects to all the other key areas of town with just one transfer. The proposed Orange Line needs to be the first major transit investment in Austin.

Because Lamar has the ability to come the city

We seem to have screwed up Lone Star Rail at this point, and our central corridor should be the backbone for not just transit in the city, but for connecting other regional systems into north/south transit.

Do you have a personal story or comment to share that relates to this need statement?

Austin desperately needs a transit system that can keep pace with the growing population. I've seen ridership increases this past year, firsthand and believe now is the time to look toward the future and be prepared for more growth.

I'm more of a loops man, myself. Big ol loop, maybe a double loop, then quartered. So if this is part of a quartering of an eventual double loop, cool.

Being a Colorado transplant- I habe to say it was a shock moving from an area where I could get halfway across the state in 3 hours on a bus, to barely being

able to move 20 miles. How can such a green city willing to ban grocery bags for the environment, not add decent public transportation?

Think #1 and #2 lines in Paris. The important thing, however, is the timing. The line needs to run AT LEAST every ten minutes all day long (at a minimum 6:00 a.m.-midnight) and every five minutes during crux hours in order to be truly useful. When they took the #5 Austin bus line from every 20 minutes to every 30 minutes, I almost completely stopped riding it. If ran every 5 minutes, I'd use it every day instead of just a few times a year.

Airport link is crucial...I hope the future BRT/ART/Train to the airport goes right to the terminal(s).

I love riding the Red Line but it is more of a commuter rail, a line running through major corridors in the city would greatly improve the ability to get around the city efficiently without a car.

Please extend the southern corridor until Slaughter Lane in the first phase itself. I live near Slaughter lane and travel every day to areas near downtown, auditorium shores, or sometimes up to tech ridge area. I travel to these areas for my job, recreation, and to meet friends.

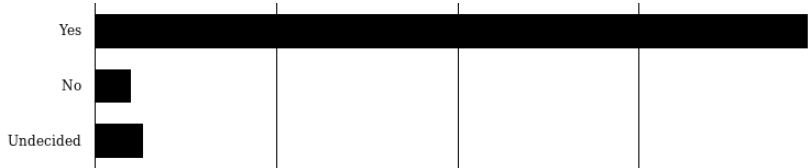
I use I-35 or south congress nearly every day of the week for these trips. If the orange line stopped at Stassney lane, I will have to use my car to park there and then take the train. I might not take the train at all. Moreover, there is a huge jobs centre near south park meadows and lots of rental apartments near slaughter and I-35 that will use the train every day I am sure to travel northwards. Please dont stop at Stassney and extend it until Slaughter lane in the first go.

I find myself driving along IH-35 wondering why I'm still driving on it. I always want to take public transit, and I do when I have class on campus at UT, but there are times during the weekend when a downtown stroll takes too much effort or when we have family visiting and we have to account for more bodies in the car. If Austin is a futuristic city, why aren't we looking at futuristic solutions?

I have traveled in Mexico using their excellent bus system. They have stations along major corridors that allow people to travel all over.

Need #6: Ensure Inter-Operability Between the Orange and Future Corridors

Do you agree with this Need statement?



Yes	59
No	3
Undecided	4

Why?

Seems right.
Compounding returns and efficiencies are a thing. It's why Southwest Airlines is so successful. They have a fleet of ONLY 737s so they only need to buy 737 parts, train workers on the 737 and it shows in the business returns. Also people value consistency. Having disparate systems is like having a million scooter companies and having customer confusion as to what app to download.
This is being used as an effort to 'require' BRT. Stop doing this. Austin has said over and over again that we need LRT on our transit spine. Austinites for Urban Rail Action will vigorously and publically oppose anything but LRT on this corridor.
Make sure Orange and Blue line intersect at Congress and Riverside
Using the same transit mode on Orange & Blue line will make it much more easy and simple to maintain in the future.
Yes, this is cheaper but what about when we need to update the system and something is out-of-date? We'd need to get rid of an entire fleet because of one or two trains? That would get voted down so quick. Just make sure that they are all the same kind. If one line is Autonomous Rapid Transit then they should ALL be ARTs.

The orange line presents a great opportunity for Red Line users to travel into the Capital/UT area with only one transfer, and the blue line an ideal rail line to bring airport passengers into downtown.

Of course... it all needs to be connected; transit is needed up and down, but also across the City

Absolutely critical to long-term health of the network

It just obviously makes sense. Of course I would want that.

Parts of the blue line would make a good spine to branch future expansions from

There is likely to be a savings/efficiency factor associated with keeping the Orange and Blue lines on the same rolling stock/technology. Lower maintenance costs and reduced operator and mechanic training is probably also to be expected. Additionally, there is an opportunity to use units from one line to supplement the other during especially busy times or special events along one of the routes.

It's obvious that a combo of north-south and east-west service is needed.

It's crucial that we plan for the future for future lines to branch off of a central corridor to create efficiency.

Taking transit should not be a -----shoot where you get to one station on time, then have to wait 15-30 minutes to transfer to a ride that takes you closer to your destination.

Plan for the long term. Ensure that this starter line will work with future lines!!

Obviously any and all routes need connectivity. The proposed Orange route does not address real car traffic zones.

Absolutely, it is critical to tie in all the systems, schedule buses and trains to link up, etc.

We need inter-operability on all future corridors if that means light rail transit everywhere. No BRT. Especially no ART. ART is a scam and do not want one cent wasted on this vaporware.

expands my ability to get to other places, like the airport seamlessly.

Yes. This is the key. We need multiple rail lines servicing our city's multiple employment and residential centers.

One line cant connect everywhere I will need to go. I will almost always use at least two different modes of transportation.

I am very supportive of the Project Connect plan. But I feel like this question is being asked in a way to get to the answer you're looking for. "Inter-Operability" does NOT mean that both corridors need the same vehicle. Orange like could be dedicated bus lanes and Blue could be rail and they would work perfectly fine together. Look at any other city that does transit right and you'll see a mix of vehicles with locations for easy transfers. Let's not limit our options here. Rail may just be the best fit for Riverside!

#bancars

I'm not understanding this need very well.

Austin needs a long-term vision for moving large amounts of people efficiently and without personal vehicles. The Orange Line will hopefully start a long overdue investment in our region's mobility, and smart planning to ensure funding goes to operating the line instead of re-work will make our investments work for future generations.

Only the lucky few will be able to access the places they need to access most via one line; most people will need to connect, so we should plan with that in mind.

See past needs, connecting to this main corridor is unreliable currently.

Absolutely. This is the best path for efficiency in the present and for anticipated and unanticipated growth in the future.

ELIMINATE NORTH LAMAR TRANSIT CENTER. Orange Line planners must recognize that the true North Lamar transit hub is now Crestview Station, not North Lamar Transit Center. The Red Line and #801/Orange Line cross there, and multiple high frequency and local buses also terminate or pass through that station (#1, #7, #300, #350). Meanwhile, NLTC has only a few local buses (#1, #323, #350, #383) and no high frequency ones. And the #350 should terminate at Crestview Station except for transfers to #323 and #383. Instead, if those two (#323, #383) terminated at Crestview Station, there would be no need for NLTC at all. That Station could be removed, since it is already too

close to Fairfield Station, and the land redeveloped into mixed-use to provide revenue to Capital Metro. Fairfield Station could be relocated a little bit farther south, since it is too close to Rundberg Station. There are only a handful of motor vehicles using the NLTC parking lot for Park & Ride. Those drivers could easily drive to the parking garages at Crestview Station. Eliminating NLTC would also eliminate the major detour the northbound #801/Orange Line is now required to make to service that station.

I would definitely want some connection to the MetroRail Red line to the new Orange Line. There is a lot of traffic in North Austin on Parmer and 183 headed south in the morning. Having an option to get from Leander/Lakeline Station to the domain which would then take the Orange Line could additionally help alleviate traffic and an excellent commute option.

Long-term planning is a must and has been lacking across the US when it comes to transit.

Does this even need to be a question?

Yes! A transit system really starts to work when it's part of an entire network.

Inter-operability in the long-term may be a fine idea, but for now the focus should be on delivering the highest and best investment in our natural transit spine. That means light rail for the Orange Line.

Without access to other corridors, daily-travel needs (outside of access to employment) won't be met, hence single-occupant-vehicle trips won't be significantly reduced if the ability to be fully mobile without a car isn't feasible.

It's a great needs statement but I have seen little vision from project connect about major east/west corridors. Gonna have to establish those before you can connect. Also, "inter-operability"?!?!?! Maybe save the inflated academic rhetoric for your internal staff meetings and go with the concept of "connections" so you don't come off as insufferable pricks to the public.

You need multiple hubs that allow riders to switch to other rail lines.

Let's do like the europeans and have a central station. It doesn't make sense to build it any other way!

But START with the others.

Both systems should be light rail to allow for greater capacity and avoid the bus rapid transit creep, whereby BRT is weakened over the course of many

individual sacrifices in service. Light rail is light rail, but BRT seems to vary considerably more.

Need a real interconnected mass transit system to manage our growth and improve quality of life.

I wholeheartedly agree with the need statement and strongly support the orange line. We need fewer cars and more sidewalks, bicycle lanes, and public transportation offerings.

By ensuring inter-operability, the two lines can be connected to create other lines (not dumb ones like the U-shaped gold line shown on planning maps, but smart ones like an additional route, with no additional track needed) for Lamar/Guad/Riverside/ABIA.

You have to be able to switch trains for other lines or it won't work

Do you have a personal story or comment to share that relates to this need statement?

It's important that transit travel in its own traffic free lanes.

I see many students using the Red Line to get to either UT or St. Edwards, and a connected Orange Line would give students the chance to get to those locations with much less transferring, opening up more opportunities for riders. Partnering with these campuses and getting students informed and involved could be key for Project Connect, because many of them already use CapMetro and want faster, more connected alternatives.

Light or heavy rail, grade separated in some way would serve this purpose. Elevated or subway would be ideal. Tweaks to the current 801 would be insufficient.

What is the blue line? Is that MetroRail? You need to show a map when you reference another line. I would go back and look at the map, but I don't want to lose my work and have to start all over again.

It would be very helpful for people on tight schedules if the buses/trains could be coordinated to reduce wait times between rides/transfers.

Having to wait a long time for a transfer is an unfair burden that makes transit usage less competitive and useful.

I often travel to the airport from my home in South Austin. There is just one cap metro route option that takes me there and it doesn't come to south Austin. I always use two different buses to get to the airport. It is a pity that there is no cap metro connecting south Austin to Airport. Very inconvenient for me always. If the train connected me to downtown from where I can take another train taking me to airport, I can definitely make the trip if changing trains is not very inconvenient.

I'm not anywhere near the proposed Orange Line. Or the Blue Line. But having a line that reduces reliance on personal vehicles be successful on these corridors will hopefully mean that one day, we're able to invest in a full scale network of dedicated lines. This includes rail for the Purple Line and Yellow Line, where there are increasingly dense neighborhoods that have some gaps that are just now being filled in.

Ensuring these lines have interchangeable vehicles and technology will make the procurement and design of future lines not simply a one-off event, as they'll benefit the whole system.

The connection I require to get to work significantly increases my commute time.

I would without a doubt take the Red Line to the Orange Line to get to my job at the triangle. I currently take a rapid commute bus that drops me off a mile away from my job. I don't mind the extra walk but in the summer it can get to be up to 100 degrees. I would prefer not to take my car from Cedar Park and having the train option would be more than ideal.

Yes, I once had two model train sets. One was HO scale and the other N scale. I could not make the N scale trains go on the HO scale track.

Make it light rail! Austin doesn't want small town solutions (like BRT) and ART isn't a real mode (it's just autonomous LRT or BRT...so make it autonomous LRT!!!).

Potential Alternatives

Do you have other feedback that you'd like the project team to know?

ART is vaporware, and this corridor will quickly outgrow any BRT solution. LRT is the only viable alternative because it allows the capacity of the line to scale as rapid growth continues in this corridor.

The focus should be on the quality of service AND the quality of the ride. Ride quality is really important and never discussed. Agnostic as to mode. If we choose BRT or ART, then they should run on smooth concrete roads that don't get destroyed like asphalt. They should have anti-sway technology that gives a train like ride. Every mode considered should be electric. Non-electric should be a non-starter. No more diesel.

Please go for LRT. I will support BRT but I truly believe for Austin to be a world-class city we need a central rail line. Also all those rubber tires and the wear and tear on Guadalupe's and Lavaca's pavement shows (and is felt). LRT is so much more comfortable and is also familiar for visitors. Going "halfsies" in this case is a bad move in my opinion and we need a big jump for people to see things happening.

Light rail does not have to be elevated or underground for this corridor. The continuing efforts by your consultants to claim otherwise is a clear and obvious attempt to make LRT appear too expensive and disruptive. Be honest; do what Houston did with their first line (elevate where absolutely necessary but take lanes on most of the corridor).

Consider removing car travel lanes to reduce project cost and duration of construction. It would help by further discouraging driving and make Guad/Lamar a more attractive urban space for pedestrians.

I encourage the project team to move forward with LRT along the Orange Line. I currently take the Red Line to work everyday and having the Orange Line would greatly help utilize public transportation more efficiently. Also, LRT is a much more efficient mode of transportation that has a much greater ability to provide reliable service with fewer delays. It also has a much higher ability to be expanded and moves more people at once when compared with a bus.

Orange and Blue need to be LRT. All other routes should be BRT with dedicated bus lanes and turning lanes for cars. I voted against the original "urban rail" because of it's alignment. I would easily vote for LRT and BRT for the routes outlined in this project. My only issue is the timeline. I would like us to roll out BRT before the 2020 vote and slowly replace the route with LRT. The quality of the roads are so terrible down Lamar and Guadalupe. We should start fixing these roads and making bus only lanes for Rapid TOMORROW. Do

we really need a vote to do that? Prove the line works now and clear the right-of-way while fixing the roads for drivers and bus.

The Orange Line Corridor is a solid but expensive plan. Commit to it and prepare for sound criticism and sacrifices to deliver something that will work for more folks than not.

BRT is much better to move people than high-capacity. It will take a lot less to build and maintain that high-capacity. If CapMetro was serious they would run high-capacity along MoPac. That way people from other jurisdictions can use transit. High-capacity to allow someone to move 4-5 stops in a 3 mile area is too costly. BRT is a smarter approach.

I think light rail (future autonomous light rail) is the best alternative as it is most proven.

Cap Metro should coordinate as much as possible with City of Austin Corridor Mobility projects which overlap with Orange Line and other future Project Connect projects (N. Lamar, Riverside, Burnet, S. Lamar, etc, etc). As a taxpayer, I don't want to pay for anything twice. At a minimum all necessary utility relocations and other design features to ensure easier construction/compatibility should be done NOW in Corridor Mobility project to facilitate Project Connect.

I prefer light rail. It works much better.

In keeping with Keep Austin Weird, CapMetro should let local graffiti artists or other artists paint the ART trains with AART on the side of them. Make them really stand out and truly unique to Austin, TX.

But ARTs should be the way that ALL of these major new CapMetro lines go. With buses complementing them. But ARTs should be the real major player for Austin.

Think long-term, as you put together the alternatives, but please... be sure they're well-communicated and affordable, so that the community will buy in. We don't need another failed transit bond!

This NEEDS to have dedicated lanes / pathways in order to be successful. Multiple *modes* of transportation would work (bus, light rail, autonomous) but the most important thing by far is to ensure there is a dedicated place for it to use for travel. The current dedicated lanes have allowed amazing progress in ridership numbers and acceptance of new public transportation options, and there is much to be gained (and little to lose) by converting current traffic-

clogged portions of streets with dedicated areas that could be used much more efficiently and cleanly.

I'd like people to start thinking of a similar project out east, or a big loop one outside-ish the city that will seem silly now but will probably be like a highway 71 of envelopment by the city in a decade.

Capital Metro should opt for light rail on a dedicated pathway on the orange line, to service more people and shift more people out of their cars. Removing car lanes shouldn't be off-limits.

A rail option would provide a more reliable, comfortable, and higher capacity service, and the perception of this tends to attract more users. Grade separation or light timing that responds to the trains to always give them a green should be used.

If this process doesn't result in dedicated light rail transit, it will have failed the city.

Must be fully dedicated. Grade-separated (elevated or subway) is preferred, but a separate lane for light rail is better than nothing. Human operated or autonomous is not particularly important, as long as the alternative is high-capacity (that is, rail is better than bus).

I've lived in Austin for 21 years. Before that, I lived near Richmond, Virginia. I huge difference that I note is that in Virginia, we built our road and other transportation infrastructure ahead of need, not waiting for the traffic to become unbearable and then making it worse for several years with construction and then having the new infrastructure be barely adequate (or not even improved, such as Mopac with the new toll lanes that only sometimes make the drive faster and make it just as slow as it was before when you are not in the toll lane). So I hope that we don't make the mistake of having so-called traffic-free above-ground transport (which won't really be traffic-free). Just spend the money to go underground and have plenty of cars for frequent service from day one (I'll gladly pay extra taxes for this), and do it right the first time.

A subway system is ideal. A subway would not impede on current auto traffic like any other solution will. It will eliminate any sort of noise pollution that a rail or bus would cause. And it will not ruin any sight lines on South Congress. Please explore subway as an option.

I would personally prefer to see a light rail or autonomous solution. Clearly we need to be doing something different beyond what we're doing now with buses. Making changes in our public transport would help.

Rail is the most logical and sensible solution. Asking voters to remove a whole lane to create a transit-dedicated pathway, only to be used by busses seems like a short-sighted half measure to solve the problem. Rail works. Every major metropolitan area in the world has rail, regardless of the cost, because it is proven to be an effective way to commute and bring communities together.

Get all the buses off the streets. They not only block traffic flow, they block vision and tear up the streets. Buses are an anachronism like communal bathrooms. Cars are the only real alternative.

Focus on Mopac and I-35.

If Boston can have light rail (the "T") sharing the streets at times with vehicles, I think that should be given a hard look. I'd prefer that to BRT, but understand there's a larger investment required up front for LRT (or ART for that matter).

Keep going! Think big, think frugally, think for the future!

I prefer an at-grade light rail transit line for the Orange Line Corridor, similar to the image of the Houston LRT shown in the image above. This will be the most cost-effective alternative that will deliver the highest ridership. I agree that dedicated pathway is a must for the entire line. Yes, this will mean sacrificing automobile lanes or parking in certain areas. I am okay with that. In fact, I encourage it. I feel most of the Guadalupe/Lamar corridor is currently unsafe for pedestrians, bikes, and scooter users. Transitioning away from such an automobile focused corridor will help encourage safe usage for other transit modes.

We cannot move fast enough to rapid transit for me. If the 801 and 803 busses could begin to operator like rail that would be a great intermediate step. By that I mean have fewer stops but flow without stopping between those stops. The express system works great for me during the week but I miss it on weekends. Also, the really fast express systems that use mopac for only a couple of hours per day don't align well with my times of travel.

Capital Metro needs to do all it can to obtain right to put a commuter rail line along the railroad in the middle of MoPac. At this point, that stretch would be much more helpful toward moving people than moving cargo.

Please extend the orange line until slaughter lane in the first phase itself. The area near slaughter and I-35 is always very busy. Lots of rental apartments, lots of jobs. Lots of economic activities happening here. And this neighbourhood needs the train here. The purpose of the orange line is to connect outer-city to downtown (jobs area). The slaughter and william cannon area's residents exactly fall into that group. If the orange line can't connect

such densely populated area to downtown, the line's purpose will not be solved.

I don't want to use the train to travel 2 miles along the north-south corridor. People will not use the train to travel 2-3 miles on this train. They will travel only if the distance is long enough to make their travel worthwhile. The slaughter lane area is precisely that need. Please extend it until slaughter lane which is rapidly growing. Also people from Buda, Kyle, San Marcos will use this train to travel further into the city.

Please don't limit your choices by requiring the same vehicle for Orange and Blue lines. If it turns out BRT is best for Orange and LRT is best for Blue, keep that as an option! Plenty of cities have a variety of vehicles on different lines and do it well.

I believe LRT should be heavily emphasized in this process. It is efficient, effective, and traffic free. We are rapidly running out of space to put viable transit solutions in, and must act on this now.

I believe that Austin needs to take aggressive action NOW, and put in a viable rail system along the orange line route, and with a rail connection to the airport. We are stuck 50 years in the past, and if we don't act soon, there will be no space for options that are free from traffic influence.

Another option that will help ease congestion is legalizing filtering for motorcycles within the city, and lane-splitting on the freeways. Filtering allows motorcycles to move between lanes of stopped cars, removing entire car spaces per bike from the traffic line, dramatically speeding up traffic lines compared to those bikes driving cars instead. It also removes bikes from the dangerous rear ending zone. For similar reasons, lane-splitting on freeways dramatically helps traffic. It is also dramatically safer, and studies have shown that should a rider wreck, the chance of death, head injury, or torso injury is approximately halved if the rider was splitting vs. if they were not. More information can be found at www.lanesplittingislegal.com.

Dedicated pathways are needed on several north-south and east-west routes. We're past the point of need and into desperation.

As traffic congestion grows, I believe we will have to look into BRT/LRT/ART alternatives, especially those that can be interchangeable like BRT/ART.

I came to Austin from a city in India(Ahmedabad) that reaped great benefits from a brts system and is also investing in a metro system. I'd love to be able to ride the metro and public transit to everywhere including work.

I live in the North Lamar corridor, and believe that light rail would be the best option for the Orange Line. Yes, it would take away a lane for cars, but I truly

believe that once it's built, people will see how much faster and less stressful it is and start using it.

I'm learning more towards light-rail simply because I've explored the systems that other cities (some of them smaller than Austin) have in place and they work extremely well for their citizens. Granted, I understand there is a cost to the set-up and maintenance of such a system, but I also believe that public transit is an investment that is probably never done. I like the idea of Austin being connected by a system that is constantly in motion, trying to get its citizens from one corner of the city to the other without them having to worry about their cars, which would probably be parked on a highway or gridlocked downtown. I'd love to cling to the idea of Austin still being a small town, but without these progressive moves (that might not make EVERYONE happy) we're basically putting a band-aid on a broken dam.

LRT with dedicated ROW is an absolute must for this line. High capacity, proven, and reliable will be a key for CapMetro voters to approve this line's funding. Eliminating standard north/south bus stops along the corridor and having routes stop on cross streets with a short walk to LRT stops would limit the effect on vehicular traffic when a lane is taken away - they're already being stopped behind busses today.

Must be coupled with smart signal improvements which allow LRT to depart from the light earlier than vehicles to reduce accidents where vehicles turn right across track (if track is in outer lane like Houston's METRO) or left across track (if track is along median like much of Seattle's Sounder train).

Pedestrian safety should also be paramount to reduce incidents and ensure consistent operation of the system. Railroad style crossings at pedestrian intersections with the line will reduce inattentive walkers and haphazard scooters from crossing while train is crossing the intersection.

We need fully dedicated pathways to have a successful high capacity transit project on the highest ridership corridor in the city.

Light rail is the preferred mode because it has enough capacity for current and future riders, and it will attract more riders than buses.

Please please please consider other corridors and connection options with other routes needing to be on time as well.

The first alternative isn't an alternative because there's nothing aside from dedicated lanes that will improve traffic conditions and make public transit an attractive alternative to solo car trips.

We need rail. It is the highest capacity, most comfortable, and most environmentally friendly option.

Please connect to the Red Line train or in some way to Lakeline/Leander Station. I will gladly take the Orange Line.

Yes to all options that prioritize transit with dedicated lanes / lines, etc. Yes to all options that couple this solution within the existing right of way and remove / narrow car lanes to minimize increased curb-to-curb impervious cover throughout town.

STOP with this idiotic ART garbage. It does not work. It will take decades to make it work. Let's pay people a living wage to drive buses and trains NOW. I think this ART talk is just a way to play games and kick the transportation ball down the road. If you are at all serious about providing public transportation get more buses on the road now.

Giving the 801 a dedicated lane would be great! Love the idea of ART.

I think a dedicated lane, BRT would be sufficient for this corridor. A dedicated-lane BRT is much cheaper and allows for more flexibility as service areas fluctuate over time (ie. stop placement changes, according to needs). In 10-20 years, if rail/street car is still desired, that ROW and infrastructure is nearly there. Meaning, a dedicated-lane BRT is the best way to "baby-step" into implementing a long term plan for rail.

Light rail for the Orange Line, please. 2020 presents a tremendous opportunity to truly go big on a transformative investment that this community has been dancing around for decades.

Let's do this, CapMetro!

Please invest all funding, resources, time, marketing, partner-projects etc. into the mode/technology that will move Austin the farthest away from its fossil-fuel-dependency which prioritizes infrastructure for single-occupancy-vehicles - and allow Austin to continue to divest in such infrastructure for the longest period of time into the future.

I'm rooting for you. I like using the MetroRapid services and think CapMetro does a bang up job given the physical and political hellish context that is

Austin. I don't envy the job that your planners and PR people have to do but I'm glad that you are so diligent and dedicated. Please focus your proposals on mobility for existing residents. Austinites are never going to support transit as a growth management tool to activate new developments for new residents. They will support it as a realistic mobility option (i.e. most of us know a bus isn't going to solve any congestion issues so don't go there either). Thanks for all your hard work.

I would be ok with a BRT system in dedicated lanes if it meant we could build more of the system out, sooner.

MONORAIL MONORAIL MONORAIL MONORAIL MONORAIL

Y'all are so backwards in your thinking.

I've actually appreciated the rapid buses lately (especially since you brought the fees into alignment.) And I've appreciated your improvements in service times. But please don't do this. Please focus on the parts of town that are less shiny and really need more services. The 801 and the #1 have, historically, been the only busses that work well. Why mess with them. Start with the parts of town that DON'T work. Where people live NOW who need help. Not where you expect them to be moving in later. If you build it, they will come, right? And North Lamar and South Congress are already highly congested roadways. Losing a lane of traffic is the worst possible solution. Monorail won't need that. You can be more creative with where it can be built and stay out of current roads.

I really think a city of Austin's size, growing as fast as Austin is, and with such a previous dearth of capital investment in transit projects should shoot for the moon here. Build light rail for the capacity and the ridership now rather than realize later and retool the BRT infrastructure.

Use the savings from not building an expensive to operate green line to Manor!

Very much support the Orange Line and will vote in favor in 2020 election. Most important design aspects in my view are:

1. Dedicated lanes for transit -- ridership and value for all socioeconomic classes will rise if this service is free of traffic

2. Free from traffic lights / stop signs -- important for mass adoption and regular ridership that this transit service is faster than driving or Uber, even during periods of light traffic

3. Frequency -- need to operate every 10 minutes or less

4. Comfort of stations / waiting areas -- Texas is HOT and HUMID in summer. All current 801 stations/shelters are insufficient. Small roofs don't provide effective shade all day and make in very uncomfortable, with direct sunlight hitting waiting rides most times of day other than high noon. People won't take transit if they are soaked in sweat before they even board it.

I strongly support the orange line. We need fewer cars and more sidewalks, bicycle lanes, and public transportation offerings. If the offerings I would most prefer the light rail offering.

I live in South Austin and there is not a train to this area. Also the train next to my work does not have any parking at all. In Dallas I was able to park just outside of downtown and ride it to work and back.

We want light rail! Make it autonomous and with long platforms to accommodate future capacity increases. Don't give us low capacity small town BRT (or autonomous BRT that you're pretending is a separate mode called ART).

I'd love to have a train of some sort with vast street improvements including street trees!!!

Light rail makes perfect sense. for the heart of our city, and as we watch cities like Minneapolis, Denver, and Phoenix lead here, I hope we don't find a way to once more screw up something obvious.

What is your zip code?

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78704

How did you hear about this open house?

social media

Online
Online.
I follow Project Connect.
Reddit
I keep with all major Austin construction/development projects. I regularly ride the Red Line for leisure (Cap Metro doesn't serve my work commute). I want this project to move forward as it will be major benefit to the city and region.
KXAN
Austin American Statesman
Twitter
Facebook
weekly mobility email
Cap Metro Twitter account
The interwebs
Twitter
Capmetro App
Email from Austin Energy colleague
Reddit
Reddit and Twitter
Also lived south, in circle-c. Fix Mopac and I-35 corridors first. Watch/listen to any local news traffic report and they focus on these main traffic corridors which is not the proposed Orange line route.

Statesman.
Social media.
Online.
email
Online.
Reddit
reddit.com/r/austin
Twitter
I'm very interested in transportation in the city of Austin. I believe I started reading about Project Connect as soon as the Austin Chronicle began writing about it.
AURA and Reddit among others.
Facebook
I'm on the email list for Project Connect et al.
twitter
Spectrum News.
Email
Not sure. I follow lots of transportation sites and emails.
cap metro email newsletter
online
I work in the transportation field.

Project Connect newsletters
Project Connect Newsletter.
KVUE News
Cap Metro Twitter
Twitter.
Internet
Cap metro's twitter
Regular interest in project connect
The news
email from cap metro.
Email
Email
Facebook.

Appendix E: Comments Received

Zip code	Form of Comment	What # Draft Need Statement are you commenting on?	Do you agree with the Draft Need Statement?	Question #1: Do you have a personal story of feedback to share that relates to this Draft Need Statement?	Question #2: What else would you like the Orange Line Project Team to know?
78757	Survey Form	4	Undecided	It seems the neighborhoods along the spine are doomed.	-
-	Survey Form	6	Yes	The ability to get to any major area of Austin without usage of a car is critical. More than anything, flexibility would personally lead to greater public transportation usage. It it operating late? It is reliable and regluar? How easy is it for me to change plans and destinations?	-
78752	Survey Form		2 Yes	As a car free austin. I believe the need to be unafraid to prioritize transit over vehicles travel because the latter cannot scale to future growth.	I believe 801 ridership proves the case for rail along the corridor. Its time to take transit seriously.
78751	Survey Form	2	-	Traveling on Guadalupe to Downtown is difficult with the increased traffic. Tunneling or some sort of aerial/elevated structure should be considered in the design/construction by UT and in other locations in North Austin to make the best use of the existing space.	We need light rail in Austin. We should do whatever is possible to expand mass transit in Austin. Ideally a light rail line running North/South all the way through the city.
78757	Survey Form	-	Yes	-	For Orange Line to be successful, I think it will be vitally important to keep conectivity in mind-with other CapMetro routes, other modes. Better and easier connections will increase ridership and make a more usable system. Also, strongly consider alternatives that avoid/minimize ROW takings and avoid removal of existing vehicular travel lanes. A better long term solution for Austin will be more options and more capacity not a trade off between modes.
78702	Survey Form	1	Yes	An effective transit system connects housing and business. The corridor for the Orange Line does just that. This is a very effective location for a transit corridor.	-
78702	Survey Form	2	Yes	In cases of limited R.O.W., I favor going below grade. As seen in the i-3 study downtown Austin favors below grade improvements as opposed to above grade. It is more important to stay "on alignment" with connecting housing and businesses than to deviate to avoid obstacles.	-
78702	Survey Form	5	Yes	I favor a rail line that will be the long term basis for a rail system for Austin. Each segment will take years to build, so we need to start now. The Orange Line will be the spine that the rest of the system will branch off of.	-
78757	Survey Form	6	Yes	"Establishing capabilities" should weigh heavily on future operational costs and operational buden for CapMetro. We should avoid choosing two different mode types. Lets bulid one facility for light rail maintenance and operation and not build two facilities for different mode determininations. The same is true for our mode choice. Pick what scale and scales well and be done.	-
78757	Survey Form	6	Yes	It would be great to have smoothe interoperability! It is somewhat hit and miss now-changing buses is a time waster.	-
78757	Survey form	5	Yes	With increased popoulation from people moving in from out of state "affordable" housing options are out of the city, requiring public transportation.	-
78757	Survey Form	3	Undecided	It is important to provide public transit to major employers but the city need to be aware that growth along existing corridors can only get so dense. Transit needs to be accessible across town.	-
78757	Survey Form	2	Yes	We do not need to figure out where to and how to increase lanes of traffic since we are "built out". By renewing inner city neighborhoods through our quality of life diminishes.	I don't think it is practical to go underground due to the geology of the area.
78757	Survey form	1	Yes	I would ask that the city respect existing neighborhoods and protect existing green areas and trees to prevent creation of heat islands with greater flooding.	Transit and land development must continue to assume their presence in our city. People will not give up cars.
78757	Survey Form	2	Yes	Respect exising businesses and access to their sites to prevent loss of small business atmosphere	-
78757	Survey Form	3	Yes	I do not agree with the adoption for Draft 2 of Code Next and 65 foot tall buildings to provide "affordable" housing. That code is based on false assumptions with little concern for lievability.	Transit is required but automobiles must also be integrated into future transit and land development plans. Define "better transit options." Provide better shelters at transit stops. Make them functional.
78757	Survey Form	4	Yes	Provide better "Shelters" at stops. Provide parking for those whose walk is more than 1/4 milke so they can drive to the main transit service.	-
78757	Survey Form	5	Yes	Obviously design parameters	-
78757	Survey Form	1	-	I am against the idea of increased density 1/2 mile in from transit areas-losing single family homes allowing for increased improvements and no parking regulations.	I agree that public tranportation along Lamar and Bennet is needed to downtown and to the airport for those of us who work. Assuming we do not need cars at all is impractical-you can't take a kayak on a bus.
78744	Survey Form	-	-	-	Expand hours of service
78757	Survey Form	-	Yes	Love 801/8013	Connecting the system. Less transfers more connected routes.
78757	Survey Form	4	Yes	I moved to Crestview for the transit options. These options allow me to spend more time enjoying my trips and less time in traffic.	Currently I don't go South of the river because of the traffic- concerns, relinking North and South Austin is vital to continued cultural growth of Austin.
78660	Survey comment card	-	-	I keep hearing about a possible CapMetro bus/program in Pflugerville like the one in Round Rock. The area is one of the only places with out connectivity to they system and a connector or circulation through Pflugerville with connections to Tech Ridge would be extremely beneficial.	Is there anything actually in planning for this?

78744	Survey form	-	-	-	Woud like additional stops and connectivity along Southeast.
78748	Survey form	2	Yes	Our family are very big proponents for mass transit. We use it for events and I use it for commuting.	I would like to see dedicated lanes with large buses.
78748	Suvey form	-	Undecided	Focus on chaning perception of riding on the bus. Appeal to environmental benefits. Barrell of oil or energy vs. of personal vs. bus. Guilt works!	If we are serious about public transport and fiscal responsibility we should dedicate a lane for rapid bus. This will impact personal autos but they have other alternatives and would drive ridership.
78745	Survey form	5	Yes	Austin is impoverished in transit compared to other places I have visited such as Seattle, Toronto, Vancouver, Portland, D.C and OSLO	Rail is desperately needed in this corridor
78701	Survey Form	6	Yes	-	Tunnel, don't take lanes. Have Orange and Blue lines overlap.
78746	Survey Form	-	Undecided	-	-
78701	Survey form	-	Yes	-	-
78701	Survey Form	-	Undecided	-	Go Up! Not Down
78702	Survey Form	-	-	BRT has fewer side effects on the surrounding land (from one rail project, so take with a grain of salt). Many opinion, BRT is a financially responsible way to accomodate growth without widening roads indefinetly. Specifically BRT with dedicated lanes.	I live right next to a Red Line station and almost never take it. There's almost always a bus that takes me closer to my destination for cheaper. Rail would be great but I don't think it would help the most.
78681	Survey Form	2	-	As of now the ROW lanes are only in DT and one called priority lanes.	ROW lanes need to be expanded all over the city.
78681	Survey Form	6	Yes	801 and 803 MetroRapid lines share stations in Downtown. This increases frequency of shuttles.	Many cities take advantage of compatibility.
78681	Survey Form	5	Yes	The spine tactic should work. Definitely shows with matches in data.	Spine tactic especially works in cities like Seattle.
78705	Survey Form	4	Yes	Bus is bad! As the new ACC Campus opened 801 wasn't reliable enough to get there so I stopped riding and started biking.	Light Rail is better than buses and people will vote for it.
78722	Survey Form	-	Undecided	-	The Southern portions of Orange and Blue need to swap places. So Orange will follow the same route as proposed, north of the river then turn east at Auditorium Shores. Follow Riverside to where the Blue line is now proposed to cross the river and and continue to ABIA. Then Blue will swap to the Southern part of proposed Orange, cross river same as Orange (1st Street). Turn East at Republic Square, meet Red at Downtown Station then trn North and follow proposed Blue route North on Red River or thereabouts.
78681	Survey Form	4	Yes	The lines as they are need to be improved exponentially to serve all activity centers. As of now, gridlock is caused by lack of transit access.	Expand even more North to serve Wilco. Put priorities on buses and shopping sectors as well as green spaces.
78758	Survey form	2	Yes	Right of Way constraints- there is a need in certain areas (i.e The Drag) of most likely needing grade separation. There can be bottlenecks with the red line at Lamar and Airport.	I like the idea of a route as it is denoted on the maps. I am in favor of moving forward with this project
78758	Survey Form	2	Yes	I currently work for UPS and we are currently try Autonomous droids and it started a good thing in rural areas but now, they want to cut almost 100 drivers and try in the city.	Please if you do choose autonomous system test it against how many drivers coul dlose their jobs. What good is a system if there is no one to ride it.
78753	Survey Form	-	-	-	Dedicated fast, reliable mass transit is now a necessity. Just do it now.
78709	Survey form	1	Yes	-	The orange line will not be successful if density is not increased along the corridor. The corridor is already relatively dense but apartments along Lamar will not suffice. There needs to be a change along the streets further away from Lamar and Guadalupe as well. Cap Metro cannot control this but this needs to be made a strong case during the code rewrite to change housing charicteristics along the corridor.
78702	Survey form	3	Yes	-	Please build grade-seperated transit on the Orange Line corridor
78701	Survey form	-	Undecided	Road improvements on Lavaca and especially Guadalupe needs to be addressed first!	-
78735	Survey form	2	Yes	As a project manager of major civil projects for the City of Austin (for 25 years), ROW (and utilities!) are major challenges which will require	If you plan bus and rail operations along individual streets, having both types use the same lane would help.
78757	Survey form	3	Yes	I want this line to provide at least light rail level of service in terms of frequency, reliability, capacity and comfort. But I do not want to be biased on mode. I am happy with Light rail or autonomous BRT if it can achieve service similar to Houston main street line.	-
78752	Survey form	3	-	Would love to take a train to work!	Rail over Bus
78704	Survey form	2	No	This is not a "need" it's a challenge.	As it was in the 2006 election. Lamar/Guadalupe is a natural light rail corridor.
78705	Survey form	5	Yes	I'm a daily 801 rider and it provides a necessary inevitable way to travelrs the city N to S. It also seems to serve a more economically diverse group than non-rapid route.	We must work towards a fully-functional convenient 24 Hour residual system. Light rail in this corridor is a step in the right direction. I also firmly believe that 24-hour service will open CapMetro as a potential commuting option for thousands.
78735	Survey form	2	Yes	inventive solutions and perhaps different operational rates to allow your concepts ot become designs and then actual installations. Public support and political support will be needed to create installation solutions that are more effective then the plodding construction techniques allowed for almost all C.I.P projects. Without an inventive approach, the construction through the heart of Austin will kill many businesses and create negativity among citizens.	-

78757	Survey form	4	Yes	We must prioritize the walkable surface experience for all users of all ages and abilities within 1/4 mile of all stations. A surface light rail type service with a little car priority as possible is the ideal.	Please allow for taking properties through purchase or what domain such as the burger joint on Guadalupe which I have patronized many times. This is way more important that any existing building along this route.
78723	Survey form	3	Yes	As a one-car family, transit is an important part of our family transportation strategy. In the past, it has been cumbersome and time consuming for me and my husband to plan our travel alone routes that are indirect and do not dedicate ROW.	I support going for the highest-capacity possible solutions to allow for future regional growth.
78744	Survey form	2	Yes	I travel along S. Congress between Stassney and Downtown daily. This has excessively wick rows but Campus/Capitol has constraints.	-
78701	Survey form	5	Undecided	I am concerned about a focus on work commutes which only make up 15% of trips. I live a long this proposed line and want to be able to go shopping out to dinner and to take my kid to a friends house etc.	How can we respect the need for work trip optimization while also including the need for access to all elements of the good life?
78758	Survey form	2	Yes	I take the 801 down N. Lamar form Braker to DT. Concerned about impact to 801 during construction. What plans will be used to minimize impact to 801 travel times?	I supported dedicated lanes even if it means removing current street lane numbers and widths. But I wonder if improvements will add bike lanes or Lamar or loose parallel street.
78705	Survey form	4	-	There is no "variation" for the Orange. CONCERN: Neighbors in residential neighborhoods will have limited availability to access Guadalupe. What are the warning sounds at stops? Will these be	It would be nice to inform the public in those 1st meetings that there no recommendations to share. Looking at maps on site is a waste of time/parking and money.
78745	Survey form	3	No	Trying to move from affordable housing corridor to Downtown/NOBS area requires excessive time to reach 801/803 access. This will increase that time.	There is more than one way to execute this type of access without tearing holes in our streets or restricting traffic with dual direction street lanes. Mayor says think out side of the box. CapMetro's is so small
78741	Survey form	2	Yes	-	Appreciates everything that the team is doing.
78745	Survey form	5	Yes	It is critical that any solution provide a speed advantage over personal automobiles and have a frequency that ensures short wait times and short transfer times to other services (10 minutes or less).	The only way we achieve this is with dedicated ROW for the entire length even if it removes personal automobile lanes. I think the technology (bus v. train) is not important if frequency and speed can be achieved.
78704	Survey form	2	Yes	-	If ever there was a case for greater good it is Guadalupe's Pinch points with a dirty Martin's Memorial Transit Stop. Same with 7-11 at MLK. We should be planning a future that prioritizes mobility and access, not preserving convenience stores and burger stands
78704	Survey form	4	Yes	Please consider burying the travel lanes on the Drag to allow Guadalupe to be a bike/ped/transit only. It would allow students, most of whom rarely drive to get to destinations downtown and elsewhere much more safely and easily.	It would also allow faculty and staff to travel more conveniently by transit reducing the burden on our roads.
78704	Survey form	3	Yes	-	The fact that the line serves the Rundberg area is one of the key benefits that I see from the proposed route. Having lived in the D.C. neighborhood of Petworth the addition of the rapid transit to the neighborhood caused a dramatic increase in the quality of the neighborhood in a very short amount of time.
78757	Survey form	2	Yes	If I am driving on taking 803 or 801 bus along Guadalupe there are often traffic back ups around rush hour. Having separate transit lanes which could even be underground subway would speed transit and reduce delays for cars.	I think rail would be preferable to bus if for no other reason that people expect trains to run on a more regular schedule than buses. Please consider these upgrades to the 803 route overtime. Thank you!
78723	Survey form	5	Yes	-	-
78704	Survey form	2	Yes	The most important conceptual hurdles that we cannot build enough lanes to meaningful congestion. Upgrading lanes to dedicated high capacity lanes is the most important step towards a successful high capacity system.	Whether bus, train, tram do not let the few Jigs and Jags of Guadalupe near UT derail this obvious and well polling alignment.
78701	Survey form	4	Undecided	Manage future growth? How? So much construction now but don't see it changing. This transit line should already be operational.	The plans all look fine but nothing will even happen for another 2-3 years. Not sure if this project will even go forward since it has to go for a vote first. Looks good in the planning state, hope it works out.
78701	Survey form	3	Yes	I have many friends who work in the service industry downtown who spend a ton of time and money on commutering to work from more affordable areas of town.	-
78705	Survey form	2	Undecided	The narrow spots along Guadalupe with back in parking/large numbers of driveways are both often delay points for bus trip and the most dangerous on the 6.	Consider expanding the right of way along Guadalupe between 29th and 26th to improve safety and reliability and multimodal options!
78701	Survey form	5	Yes	I live one block from Guadalupe and would love to see rail on the Guadalupe/Lamar corridor. The buses on this corridor are often jam packed.	I'd be fine with taking out car lanes to provide dedicated transit lanes. A lane for rail would carry a lot more people than a lane for cars.
78741	Survey form	2	Yes	I fully support using any needed right of way and adding to that space by using eminent domain if necessary to implement rapid high capacity transit in dedicated lanes.	Don't rule out taking "through lanes" currently used for general traffic as well as turn lanes and parking. High capacity transit in dedicated lanes should be a priority.
78752	Survey form	4	Yes	I am a transportation planner working in bike/ped planning. Ensure modal interconnectivity at and along all corridors being considered. Dedicated staff to coordination with city zoning efforts to ensure appropriate land use investment and building types.	Go transit
78731	Survey form	3	Undecided	-	It's really important that the initial segment includes the area from Tech Ridge to the North Lamar Transit Center. These are both the poorest parts of Austin and one of the highest transit ridership parts.
78705	Survey Form	2	Yes	-	Work with the City to eliminate street parking along the Orange line to allow for transit space, bike space, pedestrian space and auto space. Tunneling underground would be horrendously expensive and delay the project. Cars only need one lane each way.

78660	Survey form	5	Yes	So many people I know want light rail. They say they would use public transportation but right now the bus is 3x's slower than driving and it doesn't go far enough so they drive.	If the Orange Line could be light rail and not much slower than driving with dedicated lanes with no traffic, people I know would choose this over driving. Choosing a high ridership corridor like this to make light rail has proved successful in other cities because it guarantees early success and buy in.
78702	Survey form	2	Undecided	This is amazing work y'all. So Pumped. I would loved to see Need: recognition at the ills of car use beyond no more space for them. Pedestrian safety is important.	Would there be any way to fast-track development of the line? Perhaps with a 2019 vote?
78705	Survey form	4	Yes	I travel frequently along the existing 1/801 corridor and when I am on the bus it is frequently delayed so I bike which is faster than the bus.	Biking along the these streets is very dangerous. As most of my destinations are along the corridor the choices are very limited and compromising.
78704	Survey form	3	Yes	-	Beyond "need" this bus is exceptional
-	Illustration	-	-	Map that is hand drawn	-
78759	Survey form	5	Yes	Please help decisions makers such as elected officials information so they can make difficult decisions	Dallas is 20 plus years ahead of Austin for transit.
78745	Survey form	2	Yes	-	Its comparatively easy to dig through limestone right? Building a subway is a good solution to limited road width. Lets build now before we grow any more.
78745	Survey form	4	No	Restructure of traffic patters as in London and other cities with extreme traffic limitations appear beyone the scope of this authority to understand and recommend there are far more effective ways to structure than this Orange Line.	We will be replacing this system within 10 years of completion. Never time to do it right, always time to do it over.
78705	Survey form	3	Yes	I live and work along this corridor and rely daily on mobility through Guadalupe. I want a transit option that is so easy I don't have to plan ahead. I want to be able to walk out of my stop in a comfortable beautiful space and catch my train within 3-5 minutes no stress or hassel.	Dedicated pathways are essential. Autonomous vehicles are all hype. Maintain stable and quality jobs for bus/train operators.
78701	Survey form	2	Yes	Don't be shy about taking lanes from cars if you need to.	-
78745	Survey form	5	Yes	Former resident of Boston Mass.	Planning proposals should not dismiss the benefits of dedicated sections of elevated and subsurface structures for the N/S Regional Corridor
78752	Survey form	2	Yes	-	-
78704	Survey form	4	Yes	Connecting activity centers is critical as it satisfies demmand.	Appreciate the public meeting and building of support early- ahead of asking for money.
78660	Survey form	3	Yes	I live on the edge of Pflugerville on the 243 bus line, and many people in my neighborhood could have much more job options if there was a fast/more efficient way to get from North of Downtown going South.	A real story: When you connected the 243 to 392 so that we could take just one bus directly to the Domain, it finally convinced my husband to take the bus there when he would always drive because before. It was so much slower and the wait between buses did not make it feasible.
78757	Survey form	2	Undecided	I object to this part: "New roadway capacity will only grow". This implies that add 159 more capacity-aradical proposal is good thing and disempowers the people who might want a more sustanible future will less roadway capacity.	Maybe just say "new roadway capacity will grow by up to 15% if not less".
78757	Survey form	5	Yes	As a daily commuter by bus, I've seen how our major spine on Guadalupe/Lamar is at capacity for bus based solutions. We need rail based transit on this corridor.	The public is ready for a rail network. Do not kick the can down the road waiting on ART. Lets build a robust system of rail now.
78758	Survey form	2	Yes	I am strongly in favor of replacing car infrastructure with mass transit infrastructure. It's the only way to build a system that people feel encouraged to use.	It should be foregone conclusion that we simply cannot and should not invest in mass transit without causing some inconvenience to SOVs. Sacrificing lanes is on of the most tangible examples of this.
78723	Survey form	1	Yes	There must be a commitment to densify this corridor via LAD use code.	Getting to NCTC is dangerous
78756	Survey form	3	Yes	I ride transit every single day... So I see a lot.	An orange line going east to west would be beneficial. We really need more frequent buses on the 801 line during rush hour!
78705	Survey form	2	Undecided	This is a dangerous corridor to bike along. Active transportation safety should be considered closely.	Prioritize taking parking turn lanes through car lanes over bike facilities. Add improved bike facilities where possible.
78741	Survey form	6	Yes	Last Mile/First Mile considerations as well as notifications intended to take bus downtown for a concert. The time for four buses passed. I assumed there was an accident so we drove but there was no way to know so we drove.	Comfort, convenience, cost. Have structures with roof covered by solar panals and fans and phone charges and bus status showing road closures, jams, that shows why buses are late.)
78704	Survey form	4	Yes	It is time to densify along our corridors	Dedicated transit lanes-YES! Doesn't have to be rail. BRT's are full now.
78701	Survey form	1	Yes	Build the Orange Line Autonomous Bus NOW!!!	Line up as much of the work ahead of time to make the project get completed quicker. This is an opportunity for Austin to move ahead in becoming a truly great city. City with thriving, connected communities. And help the planet at the same time, the public wants it!
78752	Survey form	3	No	No but it seems to be pandering on the political fashion of the day. No doubt this line would be used for work commutes but this characterization overstates (seems to this social aspect of the benefits feels like a sales pitch).	I would like to see a need added that addresses the need to protect and enhance the quality of life in Austins historic neighborhoods and impacted communities.
78745	Survey form	2	Yes	South Congress routing would be an easier build than either S. First or S. Lamar. Our family prefers a rail system rather than a bus.	We live off Stassney Lane and will need transit once we no longer drive. Right now, we only go North of the river perhaps once every three weeks due to traffic issues.
78660	Survey form	6	No	The Orange Line route is the backbone of the cities mobility needs and most offer the highest capacity option without being limited by lower ridership in other routes.	LRT with dedicated guideway is the only solution that can meet the demand and we cannot risk the cities future on technology.
78701	Survey form	4	Yes	-	The orange line needs to have frequent enough stops in the UT/Downtown area. Also should hook up with Blue and Red Lines at the stops near the project. But No bridge for red line. Tunnel UNDER river and Cesar Chavez. Traffic is bad enough with out disruption of major work.

78701	Survey form	1	Yes	Please Please make the orange line a reality soon!	Please put much effort into marketing and educating the vision of the less expensive autonomous rapid transit (bus) to the public. Your presentation today was way too complex with too many different options and stations. The public is ready for a green and high tech solutions. Giving too many options and decisions will lead to stalling the project.
78704	Survey form	-	Undecided	Your needs/problems are not numbered. Environmental impact needs to be on the list. I am concerned that the City may not be working to plan ahead for the corridor. HEB's plans at Oltorf and Riverside provide a great opportunity for positive development with affordable housing but is the city working with HEB?	I am concerned that you are using CAMPO projections at the gross level and not looking at the region and corridor with a finer grain. It would be really helpful if your maps also could be downloaded in 203 sections.
78745	Survey form	2	No	Although the lane widths may be restricted the use of the assets for cooperative coordinated transit execution certainly aren't other European cities face far more restrictive situation but cope with these limitations in a far more effective way.	We need a guy from Austin, not Boston!
78745	Survey form	6	No	What part of no means no? We voted light rail for the blue line. Gentrification and other advocacy groups have clearly spoken yet the authority persists. The 3.7 million spent on this initiative could have supplied transit for the grove for 3 years.	No light rail, don't dig holes!
78660	Survey form	4	Yes	I live in the Tech Ridge area and if the train didn't come to tech ridge, I wouldn't be able to use it.	Build the full length ASAP! Also trains over buses. I am a short bike ride away from tech ridge station. My commute would be 243 to Tech Ridge to Orange Line to Crest View to red Line to Plaza Saurivo. The gold line train would be awesome too
78756	Survey form	1	Yes	801 and 803 are always packed to the walls during rush hour near UT campus.	-
78735	Survey form	5	Yes	A central alignment serving population and job density would more likely be successful. Central "spine" is only logical way to grow extensions to NW, NE, SE and SW	Trying to "BS" the public about the challenges of construction, funding and operation proposed systems will badofire- that is why previous bond proposals failed.
78701	Survey form	-	-	I was not aware of any draft need statements	This existing rail must connect to the airport before we fund any more trains. Focus should be on connecting SA realistically.
78701	Survey form	-	-	-	This looks like an excellent route. I am excited to see the next steps.
78757	Survey form	2	Yes	I just want to emphasize the importance of dedicating right of way to transit only. Without this Orange Line is destined to fail.	Please don't listen to the mayor! Its far cheaper to take the ROW from cars than create new ROW to make sure cars have the same number of lanes.
78704	Survey form	6	Yes	I strongly believe the failure of 2014's Project Connect vote was because the network vision was not properly conveyed (if it even existed). Please always talk about Project Connect in terms of vision and networks and phases and outcomes.	-
78751	Survey form	4	Yes	I've lived along or within of the 801 MetroRapid route but I don't ride the bus consistently because the service just isn't reliable during the peak hours and is slower than driving in the off peak. Also I get free parking downtown CapMetro and CoA need to discourage driving downtown.	Personally the specific doesn't matter as long as there is a continuous dedicated pathway for transnit for the entire length of the route. Do that and do it well and you will gain a consistent transit user.
78745	Survey form	1	Yes	We are a one car family and are moving to Congress/Little Texas. We love the 801 and look forward to dedicated lines.	An extensions 1 stop to Little Texas down South would be amazing!
78703	Survey form	-	Yes	I am for it if it helps reduce traffic and parking issues in downtown Austin.	Need to have more than North and South run of operations.
78723	Survey form	2	-	Consider all alternatives including right of way acquisition as well as removing car lanes.	-
78701	Survey form	6	Yes	-	-
78704	Survey form	4	Yes	Look at Manchesters Englands Metrolink at how to develop a fantastic light rail system and transform a city!	Look about longer term and integration with other plans. Don't do different technologies for the high transit routes.
78703	Survey form	6	Yes	There's very little East/West that is quick and reliable. The #4 doesn't even go down to Lake Austin Blvd. anymore.	I dunno. I live West propably should have skipped this.
78757	Survey form	-	Yes	I personally ride the 803 and I think the service is good and could greatly improve with dedicated pathways.	Keep up the good partnership with ATD/COA. I like seeing better sidewalks/crosswalks/pedestrian improvements that make the transit/pedestrian connected network to functional and than you for all the upcoming streets!!!
78756	Survey form	1	Yes	I have chosen not to have a car for money reasons: cost, environmental impact. Most people I know will not consider it a possibility because they have experienced being stuck in traffic on bus or the bus is not reliable etc. But more often they just see me as exceptional and don't have a vision for a car free life style.	I suggest advertising campaign of a wide variety of cool "normal looking" people talking about the benefits of their car free lifestyle. We need to get more people out of single occupancy cars.
78736	Survey form	-	Yes	When I ride the "rapid" 803, they get stuck in traffic and go very slow. Bus is not competitive with other modes of transportation in this corridor.	Orange Line needs to be rail and have it's own guidway. Take vehicles lanes if needed. Rail accomodated so many more riders than single occupancy vehicles. Move lots of people faster. Bus will not be supported by the public in this corridor. A referendum on this project will fail unless rail is the mode. BRT may be appropriate for other corridor, but not this one. Only rail can attract and trasport hte numbe rof riders needed to keep up with the growth. You need the political will to get this done, take vehicle lanes, use rail, ride the best route.
78756	Survey form	4	Undecided	There are many activities I would like to participate in not on this corridor and recent changes in the bus routes have made some more complicated to get to. In many cases I just don't go I even felt forced to changed churches.	We need better service in East Austin. There should not be big gaps there unserved by our transit system. But I do support and appreciate the fairly good connectivitiy along this corridor for many of my activities.
78753	Survey form	2	Yes	The statement from needs #2 really did ring to me. Austin is lacking in that its enjoying a lot of economic activity. There has to be a point when job growth exceeds housing supply.	Consider implementing the rail lines from North to South or vice versa.

78756	Survey form	6	Yes	Sometimes the 801 is too full to get on. As an older person with a foot injury it is challenging to have to stand or wait even longer for a bus with safe room for my wheeled cart.	Make them high capacity.
78745	Survey form	1	Yes	Congress to South of Ben White has grown drastically in the past five years because of the availability of land.	There is also land available to increase roadway capacity right now, good timing! Excited to see what new ideas come out of this process.
78723	Survey form	3	Yes	I have been a transit advocate since 1995- first in San Antonio and in Ausitn since 2000 (and the 2000 LRT referendum). I also helped found our rail and am now Treasurer of our Rail PAC. We have known since 2000 that light rail is the correct mode and choice for this route.	Every Project Connect effort over the past few years and EIS efforts before that has published matrix tables of transit modes and light rail is always the highest capacity by far. Light rail is the mode for the entire Orange Line length.
78701	Survey form	1	Yes	Some of the number and graphics are misleading.	We have specific comments on affordable housing growth and activity centers to share.
78757	Survey form	3	Yes	I had a challenge finding affordable housing. I have a professional job and still pay a third or more of my take home pay for my "affordable" housing expenses. I see many people foreced out of the city to areas where they must drive (expensive) road clogging cars to get to jobs.	Public transportation needs to extend further out. More education migh help people understand the relative costs invovled in personal transportation options.
78701	Survey form	3	Yes	I would love to take transit to work if it is faster and more reliable.	I want this project to happen- need more clarity from maps and with a few reps about specifics.
78727	Survey form	-	-	I come from a city with great transit... London. Austin is sadly lacking.	The rail line is very important and we need it now!
78757	Survey comment card	-	-	Great start! I hope the voters agree. Please call if I can be any help for the neighborhood or along the Red Line in Crestview.	Thanks!
78705	Survey form	5	-	I live one block form Guadalupe and in 2014 my service was dramatically decreased. Ridership generally went way down. CapMetro is incompetent and not to be trusted.	The ballot language in 2020 needs to clearly articulate what will be built. I don't trust that all that is mapped could be build. The public should KNOW exactly what is being voted on.
-	Survey form	-	-	I haven't memorized the "Draft Need Statement".	-
78741	Survey form	3	Yes	A main demographic would really benefit from transportation in lower income areas. We should put with the lowest wages and need to save anywhere that we can.	The word on this really needs to be better spread. I only knew about today's forum because my boss brought me. Especailly since I am someone who works in this field and I still almost missed it.
78727	Survey form	-	Undecided	I would love to see the Sillow come back and downtown to Zilker Capital etc. I used to use them all the time.	Integration of the other lines. Please look at the domain, this is Austin North, we need a way to get to the airport and to get downtown. Also, I can take the train downtown from the Kramer station but if I take the 803 bus It doesn't stop at the station where my car is.
78741	Survey form	-	No	There should be no question- the Orange Line must operate in a dedicated lane. Light rail would be most effective so I support that option.	-
78731	Survey form	-	Yes	Fixed guidways is critical. How will bike infrastructure will be impacted?	Expanding the transit base is most critical since political will tend to be the biggest ticking point at this project.
78726	Survey form	3	No	I don't know exactly what the Draft Need Statement is. I reckon the Orange line.	I use Lamar as a North/South transit for private, personal and professional use while traveling in autos. I would not like to give up any lanes on those streets that are required for safe turning and driving. Turning lanes shoulders on the side of the street, etc.
78747	Survey form	-	Undecided	I would love to see 24 hour service form North Austin to South since I have to use public transit and I work.	North to South service line 24 hours. 318 bus line needs a bus stop by River Ridge. I would pay more money for these conviences.
78723	Survey form	-	-	I live in University Hills and it takes one hour to get downtown. I love the red line train but there are few E-W routes.	Kiss and Rides are everywhere except Austin
78748	Survey form	-	-	-	On Downtown, Run the line up Congress Avenue. Close Congress Ave from Cesar Chavez to 11th to SOV! The turn could happen at 11st Street. More park and rides.
-	Survey form	-	-	-	Restore 240 and 392 Routes to original format. Nobody wanted them changed. Cannot get to MLK Northern
78749	Survey form	-	-	-	Don't be afraid to take away car lanes.
78741	Survey Form	1	Yes	Bus #801 is nearly empty mid day at first 5-8 stations at each end. Only West Campus is really busy. Seems not a cost-effective solution.	I think buses are more flexible than trains; drive around a crash; better end to end connectivity for few transfers, even for a major corridor.
78681	Survey Form	1	Yes	The areas with highest amounts of gridlock correlate with this graph.	-
78681	Survey Form	3	Yes	As a forward thinking and progressive city, Austin should head the way on environmental and social justice issues. Sustainable cities should increase transit access to jobs and affordable housing.	-
78701	Survey form	4	Yes	-	-
78756	Survey form	4	Yes	I would like to see better transit between Austin and Georgetown and Austin and San Marco. If I want to go to San Marco now, I have to take the Greyhound or a megabus. How about better intracity transit???	-
78756	Survey form	4	Yes	Currently there is no easy way to get to Austin Film Society near the old Highland Mall (the onld Lincoln area)	It's a long walk to the Convention Center from the 801 or 803
78745	Survey form	4	Yes	-	-
78723	Survey form	4	Yes	Current growth of the Domain has resulted in my company moving their office locations. As property values increase, businesses (as well as residents) will be pushed further from what is currently the central city. Our infrastructure needs to support our city in getting to and from work reliably on time.	Important to have dedicated transit lanes to improve on-time performance and service reliabililty. Today's improvements need to be able to support the future need of our city (growth!). I support light rail improvements
78702	Survey form	4	Yes	I live in the MLK area by the red line station. The addition of that line has created opportunities for dense, transit connected development that was not there before.	The team should coordinate with city council to maximiaze housing potential along this line with the upcoming land code reform
78660	Survey form	5	Yes	The Vancouver Skytrain is an off the SHEIG option that is automated and allows high frequency service at peak and off peak times at minimun incremental costs.	CapMetro should pick the lowest technological risk option with high capacity which is LRT need to pick something and build it.

78748	Survey form	1	-	#1 Purpose. The purpose of proposal for the orange line should be valued and if that requires a higher fee that would be ok with me. I want to have access to reliable transportation and be on time.	Value. I would support and pay higher fare rates if I get better service for my fair.
78723	Survey form	3	Yes	Need to have LT sustainable, affordable options along the corridor as area continues to grow.	-
78746	Survey form	-	Undecided	Reduce spending on Red Line and Park and Ride. Move all that spending to Orange Line	Stops must be in must better locations that 801/803/Redline.
78722	Survey form	5	Yes	I ride the 801 MetroRapid regularly and it needs improvement to be a true rapid service. Why are we stopping at red lights? End to End times but be reduced. The bus forces light changes in order to stay on schedule. Lately there have been a lot of breakdowns and 30 minute waits. Unacceptable! Sad!	#1 Put in on rails and put it UNDER ground. BRT just wont cut it. #2 Fast! Loading times are too longs. Bus pull outs are a disaster because traffic never has a gap to allow the bus to get back in the lane. #3 frequent the current 15 minute headways are too long even when they are maintained which often are not. CapMatro should have a goal to reduce headways to under 10 minutes.
78703	Survey form	5	Yes	We tried to do a central line in 2000. The failure of that bond election set Austin transit back by 30-50 years. STUPID!	Don't fall for the argument that we are trying to reduce auto congestion. That leads to conservation rabbit trails. What we are trying to do is provide people with a better way of getting around. We don't really care about people in their cars. Auto congestion will never go away in a city.
78701	Survey form	5	Yes	-	-
78723	Survey form	5	-	My kids and I are tired of taking buses that don't show up on time and sitting in traffic because there isnt a dedicated right of way.	I want a very fast bus. Actually a train. -my five year old.
78756	Survey form	5	Yes	Seems so Yes, Many times I wish there were more easier and quicker east to west routs along the central corridor.	-
78745	Survey form	5	Undecided	Central corridor does not serve regional mandates given lack of the services downtown. Try having luggage to the airport on current system. How will this improve from downtown or northern districts for out of town business travelers?	You need a fully functional HUB and missed the opportunity with Satillo Plaza. When and how will you fix the issue?
78660	Survey form	1	Yes	Austin and the surrounding areas are growing at incredible rates. As a forward thinking Texas city, Austin prides itself on environmental social responsibility. Austin Energy Green Building is a requirement for most all new construction. LEED Building design and the WELL Building standard are also becoming increasingly popular. Some of the things that help push these programs along regular transit oriented design. Austins current public transit is a sad imitation of what it could and should be. It is hard to push sustainable development without adequate transit.	Integrate with the building industry. Architects, engineers, contractors, zoning committee's etc. All influence the development and direction of the city. Get them involved and interested and support of developments will continue to grow. Reach out to the AIA or other local chapters of national organizations to help push this to the people who design the city around the streets.
78701	Survey form	1	Yes	Make it quickly	Make it electric
78757	Survey form	1	Undecided	The 2040 CAMPO RTP Includes questionable regional growth forecast and the first draft of 2045 forecast presented to the TAC in late 2018 shows a dramatic shift in regional growth pattern with several hundreths more population expected in Travis and much less expected in Williamson	The Orange Line needs to be based on the new RTP especially in terms of the selection of location and potential ridership
78701	Survey form	1	Yes	Please build the orange line as soon as possible. Use only bond funds if possible to make it happen faster.	Please call it an autonomous rapid transit car or something other than a bus.
78702	Survey form	1	Undecided	The chart shows growth on the corridor as less (65%) than city as a whole (69%). That is against Austin goals.	-
78705	Survey form	2	No	Roadway width should not be increased as this facilitates increase usage.	Light rail should be for the Orange and Blue lines at least (higher capacity and people like it better)
78704	Survey form	2	Undecided	I believe we should take passenger car lanes away in favor of center, street-running vehicles to build a better pedestrian environment, reduce costs and be more likely to attract riders than elevated.	I strongly support light rail as the mode chose and oppose autonomous buses.
78704	Survey form	2	Undecided	Give up traffic lanes to allow faster rail/BRT.	I'm for rail and BRT regardless. It must speed past traffic via dedicated lanes or underground or why bother?
78660	Survey form	2	Yes	Given the limited ROW options, the Orange Line needs to be the highest capacity option and not limited by uproven future technology that can delay progress.	The LRT in Vancouver was the nicest line I've ever ridden and we should be able to just copy at minimal project risk.
78723	Survey form	2	Yes	Dedicated right of way for transit is critical for improving speed of service to the level that people will choose not to drive.	The most important factor in the success of this project is maintaining competitive travel times with driving.
78752	Survey form	2	Yes	There is limited ROW so we need to prioritize uses correctly. Tunneling/elevating will dramatically increase costs which will either limit the length of the line or kill the project at the ballot box	Please consier either taking away car lanes or eminent domain on the drag. Im also ok with eliminating bike lanes were appropriate, even though I am a cyclist.
78752	Survey form	2	Yes	I have biked heading North on the drag in the area between 29th and 27th and have almost gotten hit by cars due to how little non-car space there is.	I think removing properties or roadsapce in tight areas along the Orange line is very important to do- transit needs the ROW to become the default commute method.
78704	Survey form	3	Yes	Yes. North Lamar from US 183-Braker is one of the most vibrant commercial sections in Austin. It would be a shame and a little irresponsible to not include this area in the immediate proposal for the Orange Line.	Need #3 clearly shows a high concentration of need (low income, zero car households) in North Lamar. This must be included in the first iteration of the Orange Line. And finally ,this city needs dedicated Bus/Rail lanes!!! And add bike facilities connecting to Orange Line.
78703	Survey form	3	No	You show low income housing in Pemberon Hts. You need to fix your map!!	You need to define all your terms. Like regional center (Need #4). Not everyone is familiar. Keep the #803 and bendy buses- they can manuever the Orange lline must better than a rail line through the University area on Guadalupe.
78756	Survey form	2	Yes	I see this as the biggest challenge! Public transportation is almost non-functional at rush hour.	Dedicated lanes separate from car traffic are essential! Public transportation in this corridor will need to be high capacity.

78756	Survey form	5	Yes	To be a regional system we need to extend out of the city too, as the Red line does. I would like to see lines South to San Marcos and eventually San Antonio.	There is a much more useful corridor to me than the Red line that doesn't go close to anywhere I go. This is the right place to start.
78701	Survey form	2	Undecided	The problem we are trying to solve is lack of access to daily needs using sustainable transportation modes.	The pinch point at Guadalupe's 2800 block is solvable via ROW acquisition and not just elevation or funneling.
-	Survey form	-	-	-	-
	Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes	I live and work in this area.	My issue is distance to get to the bus in particular when I tore my ACL while exiting a bus. Walking a mile or less was very painful.
78738	Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes		
	Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes	Along this corridor is one of the most heavily trafficked locations in Austin - the University. With limited parking options and an over abundance of traffic, not to mention the constant road maintenance needs for such heavily driven roads, this is a clear problem in our city. The orange line would solve a MASSIVE number of problems, allowing for transit to/from UT to locations with more widely available parking options (for those coming from far away) as well as to / from activities downtown - which are also currently just as rapidly declining in terms of travel time and comfort / access.	We travel this corridor by car every day. Coming from Europe, where we lived for the last 7 years, I could easily travel the same distance via a friendly streetcar with it's own lane and regular cadence. The experience was IMMENSELY better - I could work, read, or talk to fellow citizens aboard the streetcar, or just watch the world go by. I tense up when I have to drive this corridor, vs looking so forward to a relaxing ride on the tram. It's not just for travel times and modes, but for our health and mental health that we need a transit solution!!
78723	Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes	High capacity transit is essential to meet the challenges of growth and increased congestion.	
	Virtual Open House Participant	Need #1: Growth Along the Orange Line	Undecided	All travel modes are not being impact bike and pedestrian travel time are not impacted, so we do not need to expand these modes infrastructure. Second, in general if there are no incidences I have consistent travel times. The city needs to focus on clearing traffic incidence quicker.	
78731	Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes		
78757	Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes		
	Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes		
	Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes	Current public transit options are not frequent enough to sustain Austin's growth. The current 801 does not have "pull-off" stops, so it blocks auto traffic at almost every stop. It's also not reliable due to sharing lanes with auto traffic. It doesn't save any time.	I took the 801 from the Oltorf and Congress stop to Republic Square for a year or 2 intermittently. It was much faster and more reliable to drive, take a ride-share, or ride a bike. I stopped taking the bus because of the time it took for my commute and because it was not reliable.
	Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes		
78757	Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes	When the traffic is slow, the buses don't run on schedule...can't make it to your train on time, etc. Train or dedicated BRT / ART to airport would be very helpful.	I used to have a reverse commute from Northwest Hills to south Wilco (Parmer / 45) and would observe the traffic jams on 183 heading south out of Williamson County, wondering where all these cars were coming from. I also took the train regularly for over a year and noticed similar congestion patterns as I observed the cars on the roads.
78748	Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes		Honestly I'd try to take the line all the way down to 1626 before it gets too built up down there. Already tons of people living in that area.
78702	Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes	As more and more people move to Austin, we are seeing strain on the roads and public transportation. As the roads get worse, efficient public transportation will become more popular.	Tons of friends spend way too much time stuck in traffic already, and this is almost certain to get worse
	Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes		
	Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes	ask to stay in the charts the population surrounding Austin and when in the Austin area continues to grow as more businesses are coming into town pretty soon we'll have to be the number one destination in terms of Commerce for population and Technology	No
78758	Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes	Austin is going to continue growing, especially in desirable areas such as Orange line corridor. Rapid transit will alleviate a lot of the growing pains for all modes of transportation.	
	Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes	Traffic is getting worse and we need to be more environmentally responsible in our choices about development (more density!) and transportation (more alternatives to the private automobile and less dependence on fossil fuels).	Yes, I change my habits and choose not to go to certain areas of the city if the traffic is bad, I am fortunate to be able to walk, scoot, or take the train but many others are not.
78759	Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes	Simple, car traffic must be reduced and mass transit needs to be increased. I do believe the population increase will continue. The transit system must be faster than car travel	I use the express system and 803 and 801. Having them run faster would be a wonderful thing. I live a mile from Pavillion and use the express during weekdays and during weekends, ride my bike to the Domain to catch the 803. I sometimes ride to Kramer and catch the train.
	Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes		
78752	Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes	Traffic, transit needs its own lane	

78681	Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes	Austin's transportation system as a whole has not kept up with the growing population. The roads can only grow so much, so I feel we need a more high-capacity network than what's available.	I ride the Red Line two times a week and I've witnessed firsthand the development that has sprung about at rail stations as well as the increased traffic in those areas. Any new connections to downtown will hopefully elivate a lot of congestion on existing roads/transit.
78729	Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes	If you need this to be explained, then you need to review the data again. Providing faster commutes also will induce growth.	
78701	Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes	I wholeheartedly agree with the need statement and strongly support the orange line.	
78757	Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes	The Orange corridor captures an important segment of both employment and residential population. Any increased transit capacity, particularly a light rail system, would be helpful for metro congestion at large.	
78751	Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes	Traffic is getting worse by the day, year over year. More congested roadways impact not only drivers, but also transit users as buses are stuck in traffic. They also impact cyclists and pedestrians from a safety standpoint, leading to fewer people opting to use active transportation out of fear of life safety, which in turn increases traffic congestion from cars.	
	Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes		
78727	Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes	We need better connectivity in north Austin. Run the #803 to Howard station with a stops at Parmer/Mopac and St Davids. This would bring the #803 to the #50 allowing someone to get all the way from north Round Rock to Leander or south Austin. And all that is missing to do this right now is a 3 miles of bus route and a couple of stops.	
78752	Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes		
	Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes	Yes growth increases the travel times on this route as there currently is no alternatives besides the bus, which is stuck in the same traffic as personal vehicles. I think it would be more interesting to see a 2040 growth projection based on the inevitable increase in growth along the corridor that comes with a transit investment. What will the difference in growth be if we build this vs. if we do nothing? If a transit system is built on this corridor, the city should do everything possible to encourage growth along the corridor to relieve stress on other areas.	
	Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes		
	Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes	I've lived along the orange line (Midtown Commons) for about 1.5 years and it's obvious more and more apartments are coming up. However, on-time bus service has gone WAY down. BUT, it affects crosstown routes, like the 300 WAY more than the North/South corridor. Not saying the N/S corridor doesn't need a dedicated pathway but it seems other corridors/routes have been forgotten about.	Yes, the 801 S is never on time. The electronic boards are always wrong, the predictive live map is generally off and the next departure might as well be re titled next best guess.
	Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes	Unless people will work in places next door to where they live, they will travel, along with all the others already traveling	
	Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes	More people utilizing the same infrastructure with the same capacity= more congestion	I gave up driving in favor of the bus, but even my buses get stuck in traffic with all of the other cars, so it makes me wonder if I am helping at all by leaving my car at home. Traffic causes my connections to arrive late/off schedule, which worsens my commute.
	Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes		
	Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes	So many people are moving to Texas, in general. Because of that, there's more people either living in Austin or visiting Austin. This means more cars. We can't keep adding more lanes. We need a Rapid Transit system like the DART system in Dallas. We need a transit system that is constantly going and moving just like Austinites.	I live in Austin and we are constantly trying to make it to doctor's appointments. It's hard to make it on time because you can't always plan for wrecks, traffic, or new construction. A Rapid Transit system with a definite, reliable, prompt schedule would help mitigate those issues.
	Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes	I notice more and more people on the bus, as well as more traffic on slaughter. I think this especially affects public transit simply because it seems as though people don't respect the buses, and when you combine public transit that uses the same lanes that other cars do, it becomes a toxic combination.	I live in SE Austin but take the 801 regularly. I tried driving the same route once and it took me twice as long. For one thing, buses are still subject to traffic lights, which takes up a lot of time. Bus drivers also have to deal with plenty of people who think they can cut buses off. Not to mention the fact that multiple buses in the same lane sometimes adds to congestion.
	Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes		
	Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes	Too many cars on the road, which isn't sustainable both logistically and environmentally.	N/A
	Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes		
	Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes		
	Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes	I wholeheartedly agree with the need statement and strongly support the orange line.	

Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes		
Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes		
Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes		
Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes	The numbers are clear as is, and that doesn't account for possibly even more dense development as Austin builds taller.	Nothing beyond what everyone in Austin experiences daily
Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes		
Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes		
Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes	It's certainly making single occupancy car travel slower. We need more frequent high-capacity transit options.	Yes, I now ride my bike to avoid sitting in traffic. I also ride the 803 and it's faster, but needs to come more often.
Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes		
Virtual Open House Participant	Need #1: Growth Along the Orange Line	Undecided	I'd prefer to see studies in areas that are currently underserved by our current transportation options!!! THIS line is currently well-served by mass transit while other parts of town with equal or less income have little or none. Y'all need to be a lot more creative in your approaches towards improvement. I don't personally believe that a dedicated lane on North Lamar for mass transit is the answer. It is already SO congested and impossible to drive on much of the time. But if you must change what's there, I'd highly prefer MONORAIL as it can go ANYWHERE, not just in a lane of traffic.	
Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes		
Virtual Open House Participant	Need #1: Growth Along the Orange Line	Undecided	The growth is in a pattern that appears arbitrary. How did CapMetro decide what neighborhoods will be gaining growth and which ones will not? Again, arbitrary. I believe growth will continue along Lamar Blvd, but the pattern doesn't make sense.	I like the idea of the Orange Line in theory, but in practice I see several problems. 1) portions of Lamar are narrower than other parts. 2) how will CapMetro resolve the narrower lanes? 3) what will CapMetro do to help small businesses handle lost of customers during the construction process? 4) will CapMetro help small businesses when larger companies move in to push out the smaller businesses?
Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes		
Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes	You can see the growth. Numbers don't lie, nor does traffic.	
Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes	Austin is not just growing centrally, but in our outer regions as well. This growth increases the demand for our limited infrastructure. I live 11 miles south of the UT campus (where I work) and it takes on average 45-55 minutes to get to and from work. On a bad day, it has taken two hours to travel 11 miles. We are far beyond the point where we need to debate whether to act. Adding an orange rail line will be a game changer for the entire city and the route will serve our largest employers, the city, the state, and both St. Edwards and UT Austin. Getting a sizeable chunk of these employees on the rail and off the road (myself included) is needed. Not to mention the impact this will have for folks who cannot drive and must rely on Uber or other means of getting around this crowded city.	
Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes	As we are seeing the inevitable increases in density more traffic congesting has occurred. With an abysmal street network that significantly lacks the connectivity that other cities have, it is even more important to have high capacity transit options.	I work on South Lamar. From Barton Springs to Ben White there are two streets that connect to other arterial roads (only to the east). It's a massive corridor with a ton of higher density development just coming on line. S. Lamer is screwed forever. I'd rather sit in traffic on the 803 reading news and rage tweeting John Cornyn then pounding my fist against my steering wheel. That said the 803 can't move in rush hour either.
Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes	As population and jobs grow along the corridor, the roads are going to get more congested and travel time between two points along the corridor is going to increase drastically. People are going to refrain from travelling along the corridor if they have the option to or waste their time sitting in traffic burning gas and time.	
Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes	Of course growth has an impact on transportation networks. But what is really impacting us is the type of growth we are engaging in, auto-dependent sprawl, is way more challenging by creating vastly more VMT/capita. Single occupied cars are an incredibly inefficient use of the ROW and building infrastructure to support them is destructive of the urban fabric and ultimately fails every time.	It is possible to build in ways that contribute less VMT/ca and can be well served by vastly more efficient transit. I live in such a place - we still have a cars, but they are very rarely used (relative) to someone people who have no option because they live in an auto-dependent place that cannot be served well by transit.
Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes	The lack of options for transit forces people to travel in single-occupant-vehicles (SOV), so it's only logical that as the population grows so does SOV monopolization of existing roadways.	
Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes		
Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes		
Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes	Our streets are crowded. It's time we give dedicated transit lanes the chance to share a piece of the road.	I paid an ungodly amount of money for a tiny little place I call home. Why? Because I refuse to sit in traffic for hours. Help me get to where I need to go more easily and more affordably.

Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes	The pressures of growth are exacerbated by a distinct lack of mobility options. The primacy that cars hold in our planning is the singular cause of congestion, the reason we see so many deaths and serious injuries each year, and the largest impediment to a functional transit system.	
Virtual Open House Participant	Need #1: Growth Along the Orange Line	No	Areas outside of the 1/2 mile buffer are excluded. Colors selected (shades of purple and gray) do not help show differences in areas. Would be more statistically honest to study entire city of Austin and show different categories (0-100, 101-500, 501-1000, 1001-5000, 5001-6926) in different colors to truly show the data.	
Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes	More people are traveling, obviously.	
Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes		Fix Mopac and I-35 first.
Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes		
Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes		
Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes		
Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes	Yes, immigration is negatively impacting our quality of life.	
Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes	We know growth is happening in Austin and it makes the most sense to me to grow and add density along corridors that are already developed and can provide transit connections. The worst thing that could happen is that we continue to allow growth to happen as suburban sprawl that destroys undeveloped land and exacerbates all our problems.	I live in the study area (south of Ben White in the Battle Bend neighborhood) and I think growth in my area would be positive.
Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes	Rail not bus!	
Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes	Rapid growth is changing the "alternative" modes of travel the city must take seriously to better manage transportation demand and climate change impacts. It is affecting car travel in that users must start paying a premium for their detrimental impact on our environmental and social conditions.	
Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes	Even in the few year I have been in Austin, the growth is dramatic. At one point, my commute had little to no backups, but now it's a norm to have heavy traffic during my commute. It's noticeable and it's not going away and it'll just keep getting worse. We need a solution besides widening roads which often doesn't sort the problem. We need a line that is efficient and goes where people are going.	Even in the few year I have been in Austin, the growth is dramatic. At one point, my commute had little to no backups, but now it's a norm to have heavy traffic during my commute. It's noticeable and it's not going away and it'll just keep getting worse. We need a solution besides widening roads which often doesn't sort the problem. We need a line that is efficient and goes where people are going.
Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes	The Austin area has seen unprecedented growth, and traffic has grown right along with it. Rush hour spans later and later into the night. The need for alternatives for driving are passing from a want to a need. It will greatly benefit everyone in Austin for an additional orange line.	I commute on Parmer. My job is 5 miles away and usually takes me at a minimum 20 minutes. With more people taking public transit, this will hopefully reduce the amount of people on the road and the congestion they bring.
Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes		
Virtual Open House Participant	Need #1: Growth Along the Orange Line	Yes	Increased driving due to poor land use and lack of alternatives for most people is increasing congestion for all modes.	
78738 Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes	Car lanes are going to have to be sacrificed for greater mobility, otherwise congestion will lock up the city's grid and force development out	
78724 Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes		
Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	No	I think that if we remove lanes / spaces for cars on the road, and use that to force in transit space, we will also change behavior. See: https://www.npr.org/2019/05/07/720805841/city-dwellers-dont-like-the-ide... sometimes we need to force change to make it happen faster.	We need to look at how other countries do this. In Mainz, Germany, funding was approved for a new tram line and construction started almost immediately following. In THREE years (not 20) this was built and active, and shuttled people to and from the city centre to the university (also about 50,000 people large). How did they do it? By cutting out car lanes, shutting down large, heavily trafficked parts of the city on a scheduled cadence for construction work, and forced people to work around the construction in order to build something that then won a ton of national awards for excellence in construction, staying on budget, and transit use (people were riding it instead of driving!) . It's already clear that lack of transit is a problem in Austin, but most people I speak to here say, well that's just how it is. Which means change won't happen until people are made to be really uncomfortable and can no longer just accept it like Austinites historically have.

78723	Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes	This is particularly true along the Drag. We should seriously explore an underground transit tunnel in this segment. This would be transformational, and highly appropriate.	
78731	Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes		
78757	Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes	There is limited ROW, but existing car lanes should be repurposed, if necessary, to transit if that can move more people than a car lane.	
78757	Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes		
	Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Undecided	I wish you would be frank about the effect this proposal will have on existing road users, home owners, and business located near the proposed right of way.	I just don't trust you.
	Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes	Widening the roads will not make a difference. It just means that more people will take those roads. Dedicated public transit right-of-way is what is needed, preferably subway.	
	Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes		
78757	Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes	Where would the ROW needed for the Orange line be taken from? It seems between the existing sidewalks, travel lanes and businesses that line the corridor, the only options are to go above or below or remove travel lanes for cars...which people could adjust to.	
78748	Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes	There's a river there. And a bunch of buildings. Pretty obvious.	
78702	Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes	Even if we COULD increase road width, there is little evidence to show that we SHOULD. Massive interstates built in Dallas and Houston have only made traffic worse; the future is in more efficient use of the space we have, so that we have more room for things that are NOT roads. Roads do very little for the health of a city, whereas housing, parks, offices, etc are all better.	Have driven on the Katy interstate in Houston and its a nightmare. We don't want or need that in Austin.
	Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes		
78758	Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes	The ROW constraints will only get harder as development increases.	
	Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes	There is already a lot of existing development.	Yes, many places in Austin do not have a sufficient width for a safe sidewalk or bike lane, let alone space for transit to flow unimpeded by car traffic.
78759	Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes	The limited width needs to be used efficiently. Reduce car lanes and increase transit and bicycle and sidewalk.	
78752	Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes	Because there are already buildings on the streets.	We need more street retail that is serviced by the transit.
78681	Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes	Adding lanes for a full fledged BRT line would be difficult given these restrains, though I do believe it would be the favorable option for votes since the existing 801 Rapid route already runs this route.	
78729	Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes	ROW is the biggest pressing issue. The time to have acquired them was decades ago before the need was clearly known. Delaying this only makes a tough problem worse. Creative and possibly costly implementations will be needed as a fact of attempting to implement the Orange Line.	
78757	Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes		
78701	Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes	I wholeheartedly agree with the need statement and strongly support the orange line.	
78757	Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes	As Capital Metro says, metro population will increase 100% while roadway capacity can increase 15%. It seems clear that we need higher capacity on existing ROWs. An extensive and interconnected LRT system will be best to add additional capacity, particularly with the Orange Line. Light rail in this corridor is the answer. I won't directly benefit, as I do not live on this corridor, but all added capacity will help me and everyone in Austin combat congestion citywide.	

78751	Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes		It is essential that any new transit along the orange line be high-capacity (see previous need), and separated from traffic (elevated or subway would be best). This will remove buses from the already congested traffic mix and also make transit the faster option during rush hours, special events, weather events, and the like (in other words, most of the time in Austin!)
	Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes		
78727	Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes	No need to increase road width. STOP inducing demand. TAKE AWAY car lanes and run a light rail system instead.	I grew up in London and Den Haag. I have seen public transport done right. Stop kowtowing to car drivers and tear up some lanes and put in a train!
78752	Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes		
	Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Undecided	I don't know, I have never studied it. But my observation is that no matter how many new roads/lanes we add or road projects we complete, none of it seems to alleviate traffic congestion.	HOV lanes are the only roadway strategy that seems to make a difference. We need to encourage more efficient commuting. As long as the population in and around Austin continues to grow and those people want to access the city traveling along in a car, we will never be able to provide enough infrastructure to accommodate them.
	Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes		
	Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes	I ride the 803 and pick it up to go home at Guad and Dean Keeton, where probably 8 or so buses pick people up. I see how much congestion is caused just by the right lane backing up. Sometimes the light changes fully and nobody can go through or move up at all because a bus is picking folks up at the corner. I can see how much pullover lanes would help. Once you get going, there's not necessarily a need for a dedicated lane. But it's a particular form of public transit to watch your bus 100 yards away not move an inch even though there's a green light because someone else is picking up.	
	Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes	The map shows the biggest constraints in red... so yes, there are some. But if Development Services prevents rebuilding in those areas, we can probably take out existing structures without a lot of global impact.	
	Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes	The closer you get to the city the tighter the gridlock. The bus begins to drive slower and slower because traffic is so backed up or people aren't respecting the ROW rule. This becomes dangerous for buses, cars, and people on bicycles as well.	There is a stretch between William Cannon and Slaughter along South Congress where the bus usually drives uninterrupted and at high speed. Paying no attention to unpaved roads, the bus glides smoothly along and this is my favorite stretch of the 801 bus ride because it is so quick. If something like that existed throughout the city, transit would be much more efficient. But this brings us back to need #2.
	Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes		
	Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	No	Where there is political will, there is always a way.	
	Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Undecided	I'm not 100% about the width at these specific areas. But why can't we lift the transit system up? Or close down a lane for transit? The more stations and the more trains you have going, the more people will ride this. Rapid Transit.	
	Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes	Streets, especially in the core of the city, should be for pedestrians first, then also bikes and transit. Cars should have less, not more, space.	
	Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Undecided	The ability doesn't seem so limited that I'd frame it that way. Let's stress that there are some possibilities rather than some limits.	Transit needs to be more reliable and consistent
	Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes		
	Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes	I wholeheartedly agree with the need statement and strongly support the orange line.	
	Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes	Geometry.	

Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes		
Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes		
Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes	As population grows, the City runs out of options for transit. Unfortunately, Austin's regressive policies of the past have made life that much more difficult for present day Austin.	I believe that Austin needs to take aggressive action NOW, and put in a viable rail system along the orange line route, and with a rail connection to the airport. We are stuck 50 years in the past, and if we don't act soon, there will be no space for options that are free from traffic influence. Another option that will help ease congestion is legalizing filtering for motorcycles within the city, and lane-splitting on the freeways. Filtering allows motorcycles to move between lanes of stopped cars, removing entire car spaces per bike from the traffic line. It also removes bikes from the dangerous rear ending zone. For similar reasons, lane-splitting on freeways helps traffic. It is also dramatically safer, and studies have shown that should a rider wreck, the chance of death, head injury, or torso injury is approximately halved if the rider was splitting vs. if they were not. More information can be found at www.lanesplittingislegal.com .
Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes	Better use of roadways to move more people is important for the livability of a city and the health of a city.	
Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes		
Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Undecided	This is a trick question. CapMetro is looking for a Bond Election to purchase ROW. What they don't purchase they will use eminent domain. CapMetro are lazy transit planners.	
Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes	I agree, but the map seems backwards. It seems like the most major ROW constraints would be through UT and downtown. Am I reading this right?	
Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes	On these major corridors, vehicle lanes for single occupancy vehicles is not the best use of space. The most cost-effective Orange Line would take lanes from Lamar/Guadalupe/S. Congress (and remove parking) to create transit-only lanes.	
Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes	The constraints are visible. There's nowhere to build on the drag and it's getting harder to build elsewhere as the city develops.	
Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes	This is why I whole-heartedly believe that MONORAIL is the answer to Austin's transportation woes and always has been. It doesn't necessitate a lane of traffic, it can be put anywhere. I also just disagree with this route being the priority. Y'all keep trying to do this and get voted down because it currently has one of the only highly functional mass transit routes in the city. So why improve IT when there are so many other corridors that are in more need???? Please don't take away a lane of traffic for another stupid fancy project here. These are the only places in town where mass transit actually works already. Improve the rest of town for folks who really need it!	I walk much of the northern part of this area regularly and occasionally hop on a bus to get home. I know it well and have lived along it for most of my 36 years in Austin. I think that what is there now works for most of the people who live along it. I think you are approaching this issue backwards. If usage along this corridor is already high, why not improve other ones to make them BETTER?
Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes	Adding more lanes or expanding roads is not the solution for a city like Austin which is facing rapid growth. No amount of extra lanes, roads or bridges is going to be sufficient for such growth. If you build a new road, it WILL get congested within a few months and the residents will complain again of congestion. Only high capacity public transportation can solve the problem of congestion. People will opt to take public transportation as it will save them a lot of time. Each person who takes public transportation is one less car off the road and reduced congestion. I don't need to be actively paying attention while using the train. I can read, listen or do something which I can't do while I am driving in car. Time saved.	
Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes	Our major corridors are bloated auto-sewers that are too wide as they are. Not only would it be prohibitively expensive to widen them further, it would be an awful idea regardless of the cost.	Yeah, it's depressing to spend time on our corridors - they're just awful places.
Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes		

Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes		
Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes		I believe there is limited ability to increase roadway width without resorting to eminent domain, which I am not opposed to under certain situations. Primarily, if the use of eminent domain to acquire properties makes possible at-grade light rail transit in its own dedicated lane on this corridor, I think it would be appropriate. I support removing automobile lanes for LRT.
Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes		Because for 3 decades the City of Austin abdicated their responsibility to plan for the growth pressures we were experiencing. Now the City and it's partners are trying but it way too late. High capacity transit at least gives us the option of not sitting in a car frustrated and we can sit on the 801 frustrated and email our City reps about how crappy the roadway network is in Austin. Anyone who has ever tried to walk somewhere in Austin in an area that isn't in the CBD has a story about limited PROW. Sidewalks anyone?
Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	No		If we reduce parking and car-lanes in favor of moving away from single-occupant vehicles there is no need to increase roadway width. This "need" seems to be predicated on maintaining the priority currently given to single-occupant-vehicles.
Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	No		
Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes		
Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes		
Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes		This is true, but it's immaterial. In areas where ROW is constrained, the mode that is capable of moving the most people should be given priority. We should certainly consider dedicated pathways both above and below grade, but must also look at at-grade dedications in order to limit construction costs. Instead of "taking away car lanes," we should frame the change as "upgrading existing capacity."
Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes		
Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	No	Just leave the road alone, add some bike lanes. When it gets congested and bikes are passing the cars people will change their habits	Yeah, I live in Leander and the train service is sad. Why no service on the weekends and why such limited service to the Leander station. The cost of living is very high downtown. Where do you think the people that give you a coffee or sweep the floors live?
Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes		Use elevated or tunneled rail in areas where space is extremely limited!
Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes		
Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes		Much of this area is fully developed with businesses and activities. It would probably be difficult to do much roadway width improvement through the majority of this corridor.
Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Undecided		I'm a bit confused on what the need is, this is written as "there is limited ability", so is the need to "increase road width"? In which case, I do not agree. I am against increasing road widths and would like to see us just use the space we already have more efficiently, give less room to single-occupancy vehicles and give some of that room to other modes (like a dedicated BRT lane or train).
Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes		Increasing roadway width leads to unsafe roads and ethically irresponsible for the inequity and environmental damage it inflicts on our city and its residents.
Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes		Some of the roads in Austin are VERY narrow. There are large trucks and SUV's that drive through the city pretty consistently. In these little 2 lane roads, having a bus on them is very difficult to navigate and makes me nervous. Having a bus lane or just extra width on some of these roads will really help ease congestion. I do not.
Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Undecided		

Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	No	This is poor framing. There is plenty roadway width to convert some of that space to dedicate transit lanes in almost the entirety of the corridor.
Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes	
Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes	
Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes	Nearly all roadway space is allocated to personal automobiles. This space should be shifted to more efficient modes that have higher capacity than automobile lanes.
Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Undecided	Is it a question of removing lanes for car traffic? Is it a matter of there physically not being enough space given the configuration of road, sidewalk, and residence or business? I need to know the reasons for "limited ability" to respond.
Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes	If it's a matter of removing a lane for car traffic, I don't think there's "limited ability." More lanes = more cars. Take away a lane and people are more likely to adjust their commutes and commute modes.
Virtual Open House Participant	Need #2: Limited Ability to Increase Roadway Width	Yes	You can't increase the width because you'd take out the sidewalks.
78738 Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes	
78724 Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes	
78731 Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes	
Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes	
78757 Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes	
Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes	I believe the a rail car of some sort would be the best option for the orange line. Permanent, affixed, and one like the grey rail car on your home page.
Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes	It's important for all residents to be able to have better transit options.
Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes	
78757 Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes	I live in a relatively affordable neighborhood (Brentwood) and we, a family of four, get by with one car and public transit, with some ride share, scooter, bike and walking mixed in. I can definitely see a huge opportunity to reduce car traffic by having a more reliable and predictable transit service running throughout the corridor.
78748 Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Undecided	See above.
78702 Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes	I don't really care about "affordable housing" as a government program. I feel like it's usually a boondoggle. But connecting places with affordable housing with job areas, sure.
Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes	While not personally affecting me, I think this is great for the long-term health of the city. We don't want Austin to become like New York or San Francisco and be for "only the rich". A city built for everyone is a healthy, vibrant city.
Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes	
78758 Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes	This takes cars off the road in the busiest times of day (rush hour) and allows lower income families to not have a car or have less cars. This would reduce traffic for other modes of traffic and reduce environmental impact of more cars.
Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes	More of the city should be accessible to those who choose to get around without using a private car.
Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes	I do not own a car and prefer to get around without using one.

78759	Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes	I want waiters in restaurants to available to serve me. They should be able to live nearby.	
78752	Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes	It creates equality between people in the city! People don't have to have a car to go to work	
78681	Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes		I see many students and employees taking the existing 801 Rapid route to get to school/work, and a higher capacity, more reliable system would transform many low income residences commute times.
78729	Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Undecided	The existence of the line will induce growth along it rather than possibly meet an existing need.	I personally chose to live where I do partially because it has reasonable access to a Red line park and ride.
78701	Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes	I wholeheartedly agree with the need statement and strongly support the orange line. We need fewer cars and more sidewalks, bicycle lanes, and public transportation offerings.	
78757	Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	No	Ideally, we should encourage a percentage of all income brackets onto mass transit, not just low income. Not only do I not trust the perceived longevity, operating costs, and capacity of bus rapid transit, but I suspect that 'branding' of BRT will not appeal to enough people. We need light rail on the Orange corridor.	
78751	Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes	Transit needs to link where people live to where they want to go.	
	Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes		
78727	Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes	Cars keep a lot of people in poverty, and a lot of others on the edge of poverty. Cars are too expensive and make NO sense. We have had this stupid car dependency forced on us by people who use it to take away a lot of our hard earned money.	By being car free I have saved about \$400/ month for the last 10 years. That is \$48,000 that has gone into my retirement that otherwise would have gone to a bank or car company. Even if I had to pay an extra \$200 a month on a special transit tax, I STILL would have come out ahead by \$24,000. Imagine if we all paid even \$100 extra tax dollars a month for transit?!! We would have a public transit system that would put The Netherlands to shame! And we would ALL b
78752	Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Undecided	It is important to provide better transit links between affordable housing and jobs, but it is more important to provide and retain more affordable housing in the city. If a high-capacity line is built, property values will increase, as they have throughout the country; and unless there is a concerted effort to build and retain affordable housing along the line, many people will be displaced. It is not enough to consider the affordable housing that is located along the line now, you should also consider how much affordable housing there will be once the project is built.	
	Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes		I think there needs to be more than one bus route (currently 801 and 1, which are effectively one bus route) that travels along the corridor south of the river. Right now you can get from UT campus to downtown on a vast variety of routes (801/1, 803/3, 7, 10, 17, 19, 20, 171, etc etc), but no such option exists south of that. So when the 801, for instance, is running late (I've seen it being as late as 50 minutes), you are simply stuck south of the river. More options need to exist at least extending to Oltorf (the HEB) or St Ed's.
	Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes	This should be an essential consideration of rail and other public transit development.	
	Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Undecided	Might it be more economically feasible to put the work where the people live? That is, encourage businesses to develop in areas where there is a lot of affordable housing?	

Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes	While I agree that more jobs and housing are along this line I still think you are forgetting those people that live outside that line but need to get to it (for example from home to job or vice versa. While a dedicated line is needed, what about those connections?	I'll be living outside the orange line study area very soon. But, to get to work I need to get to that orange line (to get to work). The 300 thus far is the only option and it's always LATE LATE LATE (one time it didn't even show up after an hour)
Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes	owning and maintaining a car is extremely expensive. I think we will have less traffic congestion if we provide people the realistic option to live without a vehicle (and save that money for rising housing costs).	I live in a 1-car household and use the bus to commute. I feel like those of us that do not commute by car are treated as less important, through policy choices and other attitudes and behaviors, despite making a significant contribution to easing traffic.
Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes	Austin housing prices have continued to push middle- and low-income residents further outside of Austin. We need a full Orange Line that consistently runs all night to transport people to their jobs in the city and back. Especially if people don't have a car or have only one car and must rely on public transit.	I cannot drive. I would love to be able to go back to school and get a higher paying job to contribute financially to my family. But because we live in an area that is not served by CapMetro, I'd have to pay considerable fees to rideshare to school and back. That's cutting into family finances. I'd love CapMetro to serve the entire AISD area, at the VERY least.
Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes	The red line right now does not connect housing to all of the major commercial areas of the city. The orange line might do that if it is able to avoid the congestion of the streets	
Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes	It makes sense to take away at least one stress factor to individuals that need it.	This is not a story of affordable housing but certainly regarding a low-paying job. When I first moved to the city, I had a low-paying job downtown and I was also a student. I had a car but hardly wanted to use it because of the charges for parking. Public transit made it much easier for me to get around the city. This was in 2014 - CapMetro has made tremendous improvements to their system. Public transit should serve the citizens of the city, regardless of their financial status. But if there's an opportunity to provide help to those most in need, we should take it.
Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	No	The data is deceiving, once again. The large pockets of low income households are college students who live in the UT area and only part of the year. The large pockets of low income household data for the Allandale and Brentwood neighborhoods are wrong. That area is some of the highest income levels in the city and has a very low indicator of low income families.	The CapMetro data is way off and staff is using the false data to steer voters into voting for another Transit Bond. The data can be easily disputed by using local jurisdictions, regional, state and US Census data.
Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes	I both live and work along this line in South Austin.	
Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	No	Too much focus on low income household. People that live in houses within the core are not "low income," they just pay less for housing. Focus on building more housing for ALL along the corridor. Focusing on "low income" is not a good idea and will turn off voters.	I make just above the wage needed for "affordable housing" but I pay almost twice as much housing. We need more housing for all, not just "low income".
Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes	seems clearly relevant here, per the data	
Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes		
Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes	Folks in affordable housing cannot afford the very expensive transportation expenses required to live and commute to the core. Transit will allow more low income folks to get to work for less money.	
Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes	People are being pushed out of central Austin due to affordability. Linking downtown and other employment centers with reliable, high frequency transit is one way to help defray that.	
Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes		

Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes	Those needing to move further and further away from work due to affordability are also the least able to afford the increase in transportation cost, both in time and money, that comes with being further away from work. Viable transit options are needed just as much as affordable housing is needed.	Having a viable public transport option allows people to not need cars, and not needing space for parking can increase revenue to square footage for developers, allowing for more affordable living options. I believe that Austin needs to take aggressive action NOW, and put in a viable rail system along the orange line route, and with a rail connection to the airport. We are stuck 50 years in the past, and if we don't act soon, there will be no space for options that are free from traffic influence. Furthermore, Austin seriously needs to expand the areas in which highrises can be build. Highrises can be a major solution to the housing problem we have. A plot that could only support a small number of houses could instead support hundreds of homes, thus increasing housing supply, and helping lower cost. Another option that will help ease congestion is legalizing filtering for motorcycles within the city, and lane-splitting on the freeways. Filtering allows motorcycles to move between lanes of stopped cars, removing entire car spaces per bike from the traffic line. It also removes bikes from the dangerous rear ending zone. For similar reasons, lane-splitting on freeways helps traffic. It is also dramatically safer, and studies have shown that should a rider wreck, the chance of death, head injury, or torso injury is approximately halved if the rider was splittine vs. if Underappreciated is the quality of the ride - if people understand that they're not going to have to sit on a loud bus, that rattles their teeth out and strains their back, and they're going to have a pleasant walk to a quiet station they're going to be loads more likely to take the transit.
Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes	The key is frequency. If people know that a bus or train is going to show up in a few minutes, and there's no need to check schedules, they'll be glad to use the transit - because it will create a much better option than fighting traffic and having to deal with parking.	
Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes		
Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes	These are the homes that need public transit the most and to their jobs.	
Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes		
Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes		
Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	No	I like the pretty pictures, but I believe that you are creating your own reality here. I can see how this would be the easy place to put your attention because it's a nice straight line up and down the central corridor of Austin. But it's all those other areas that need more transportation solutions and need help getting folks out of their cars. This does nothing to limit car usage in the suburbs where it's needed most. Or helping folks in Northeast or Southeast Austin without resources get to their jobs, if they have them. To say nothing about SW Travis County where so many folks are being forced to live due to high cost of living in the city. THAT is where we should be investing mass transit money and time. And again, I strongly believe that MONORAIL should be considered as it doesn't require being built on a previously established road. I think it's really the only mass transit option that makes sense in our already over-congested city.	
Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes	Better to not have a car note, insurance, gas, upkeep, etc....Better for the environment.	

Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	No	While I do fundamentally agree with this - affordable housing and jobs should be accessible - we need this to be a universally desired thing. Yes, of course, low-income and zero-car households should have more access to transit. But guess what: we need the high income and multiple-car citizens to desire transit and USE it for it to work and be worth the investment. This needs to be about improving our quality of life as Austin citizens, for everyone and not just for low income / zero car families. We need to pitch it as that in order to make a stronger case for disrupting traffic to build something, and present it as a way to make Austin stand out. We can be a more exciting tech hub than San Francisco! Why? Because our transit is new, efficient, and made for ALL people to get around.	Marketing this will matter and I think we need to consider whose minds need to be changed in order to meet this need (the people who do have cars, not the people who don't). We need to make it compelling for them, and that will require making their driving experience more difficult (e.g. limiting roadways) and showing value (ensuring that there are well-designed plans to move people from home to work, to restaurants & city life, to family-friendly activities) in a way that speaks to all audiences.
Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes		
Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Undecided	If the goal is to get cars off the road and transition people to rail and bus then you need to focus on adding metro centers near large planned communities and high schools. I live on East Slaughter where a lot of new development is being built and a new high school will be added to this area. This is a prime area that would benefit from an inter-connected station that provides access to rail and bus as well as a parking lot or garage. Think of how it is done up north. People drive to the train station and board the train to travel to work.	
Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes	I mean many of us are choice riders, but let's be honest, these services should first and foremost serve existing residents that rely on them for their primary mode of transportation. The 1/2 mile buffer on your map is generous particularly on the extremities of the study area corridor. Your faith in accessible pathways to the corridor is almost laughable. 1/4 mile is more realistic particularly in the Austin summer (mid-May to October).	
Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	No	Target heavy car usage areas first, Mopac and I-35. There is already regular and frequent bus service on the proposed orange line route.	
Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes	Land-use entitlements should be included in policy considerations for the future of these buffer zones in order to increase ridership and serve populations with the most need for increased access to mobility.	
Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes		
Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Undecided	There is no reason to think that the Orange line will be any better than the 801 BRT line that we have. The station placements show that staff is simply forgetting about the added stations that were needed to make the 801 function effectively. None of the new stops should be skipped on the "Orange line".	
Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes		
Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes		
Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes	People should not have to rely on just using a car. Public transit should assist people by connecting them to both their work and home.	
Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes	There is currently no viable link between what you are doing and a large part of West Austin. Many low income people work in this area during the day, but because of the lack of connector service along the length of West 24th/Windsor Road those people must walk blocks, in fact miles, to their places of work. There are also many seniors in this unserved area, and they cannot capitalize on the benefits of what you are doing because you have removed bus service from the core of this area. Please add a connector bus service along the length of Windsor Road, from Rockmoor to Lamar.	I watch domestic and landscape workers climb the 24th Street hill west of Lamar every day going to their work, often more than a mile from that bus stop at 24th and Lamar. This is especially onerous in the heat of the summer. Why isn't bus service available to them to go into Pemberton and Tarry Town? (The service on Enfield and 38th in no help).

Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes	Many business - restaurants and bars especially - are hurting for employment. It's getting more and more difficult for people working at restaurants and bars to be able to afford to be anywhere near their job or have reliable transportation to their jobs. Increase transit from affordable housing, and businesses will be able to have many of their employees have cheap and reliable transport to get to work.
Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes	
Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes	
Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes	Yes, linking housing to jobs, especially affordable housing, I think is really important in creating equality and access and gives people the opportunity to reduce their household spending by not needing a car (which is usually the second biggest cost for a household behind housing, due to payments, insurance, maintenance and gas costs).
Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes	Transportation costs are a hidden cost of housing and providing lower cost, healthier, more environmentally friendly transportation options beyond a singular car improves not only housing affordability but also quality of life and environmental impact.
Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes	
Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes	In order to make Austin a fun place to visit, the restaurants, small shops, and various other service industries need staff. If you are low income or don't have a car, it would really help to have access to public transit. That way it's easier for people to get to their jobs and maybe help people live in areas where rent is getting higher.
Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes	
Virtual Open House Participant	Need #3: Provide Better Transit Options Linking Affordable Housing and Jobs	Yes	
78738 Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes	Land use needs to accomodate transit and walkable, dense cities. People ought to have choices other thwn cars to get where they need to go
78724 Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes	
78731 Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes	
Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes	
78757 Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes	
Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes	
Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes	

78757	Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes	If the buses / light rail were given priority, this would result in predictable service times, then people would opt to use transit rather than just jumping in their cars when they had to get somewhere.	
78748	Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes		My favorite ice cream place is up on 35th street, but I never go because it's asinine to drive 40 minutes one way in the same city for ice cream.
78702	Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes	One of the best uses for public transportation is getting between homes and various activities centers, especially as it becomes more difficult to drive there. A strong public transportation system that meets this need would be highly used.	One of my favorite current uses for Cap Metro is taking the Rail from very near my home to the Domain to visit friends after work, shopping, entertainment, etc. More opportunities like this would be great
	Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes	as the City's population continues to grow more and more people are going to need adequate transportation that they can rely on in the future as well as be able 2 drop them off and pick them up from this location	I personally needed Transportation when I was on my way to work at the Austin Free Net Center and the buses would not be on time so often I would get frustrated
78758	Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes	Popular places = more cars traveling there. Makes sense to have rapid transit able to serve those areas.	I've attended many concerts and events in other cities and utilized their light rail/subway systems. For example, attending the State Fair in Dallas, TX is much easier since you can take DART light rail to Fair Park Station and avoid driving (fighting traffic and struggling to find parking) or using a very expensive rideshare.
	Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes	Do it sooner! The city and region are growing so fast and we should shape that growth before we repeat the same mistakes of the past.	I chose to live in a small condo closer to where I work because I believe that is a more sustainable choice and it greatly enhances my life to be able to walk to work instead of having a long drive in traffic.
78759	Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes	I wholeheartedly agree! Let us reduce car activity and increase human and transit activities!!	
	Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes		
78752	Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes	Yes!!!	
78681	Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes		The existing shared lanes along downtown are often clogged during rush hour, delaying even Rapid buses. Dedicated lanes are needed to make transit more appealing to those residents who are skeptical or feel it may increase their commute times.
78729	Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	No	Commute focused transportation will allow better options to develop along the route rather than force transportation to accommodate activities.	We've seen the red line, slowly but surely, create these activity centers around them. The Red Line Brewery tour, Crestview, Highland Station(ACC), Plaza Saltillo and more. These came around due to proximity to commute collection/distribution points, not for the purpose of activities.
78701	Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes	I wholeheartedly agree with the need statement and strongly support the orange line. We need fewer cars and more sidewalks, bicycle lanes, and public transportation offerings.	
78757	Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes	Access to many of our city's great institutions such as the capitol, CBD, and UT could use improved access capacity. Light rail would be very valuable toward this goal.	
78751	Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes		I want to reiterate that any new transit should be high-capacity (ie, train, preferably separated from roadways (elevated or subway) so as not to constrain train length.
	Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes		

78727	Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes	If important places, such as WIC office, hospitals, health clinics, county offices, grocery stores, and shopping centers were located along the Orange line lots of people could go car free or car lite saving tons of money that could then be saved or spent in the local economy (making car payments to GM does NOT support the local economy).	I have seen my daughter struggle to get to the WIC office by bike and bus. It shouldn't be that hard for low income people to access services.
78752	Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes		
	Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes	Construction has already started on roads like Mopac and I-35. It's clear that there is a need for different ways to commute in Austin. This would provide a much needed route that does not include sitting on I-35 slowly dying.	I used to drive it every day from South to North Austin. It's awful. If I had this I may not have quit my job.
	Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Undecided		
	Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Undecided	Again, a balance; activity centers are needed in more parts of the City, with jobs and offices better distributed. We need less of a concentration downtown.	
	Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes	build light rail	seriously, LIGHT RAIL
	Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes	More and more of these places are being visited by out-of-towners. It's harder for everyone to visit these areas easily. Especially with some streets being closed for construction or festivals. Sometimes, for weeks at a time. It makes it hard to go about life regularly.	Since I don't drive, I'd LOVE to be able to take my family to activity centers or places or restaurants or movies or anything without having to pay ridiculous rideshare fees that eat into our family finances rather quickly. We lived close to Zilker Park. During ACL, it would have been great to have a Rapid Transit system so that we could bypass the pedestrians running across the streets or street closures. Even when we moved and went to ACL, it would've been incredibly nice to have a Rapid Transit so that we could ride to the park and back home in South Austin.
	Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes		
	Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes	Most use	Use to live along this corridor and it is very rapidly growing in density.
	Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes	Connections are absolutely horrible with transit services right now. Anytime I see a connection is required I roll my eyes because I know one of those is going to be either really late or potentially early. This requires leaving even early in hopes that is enough to make it on time.	Yes, again with the example of the 300 to connect to the 801, 1, 350, or 550... It's not reliable to get connections in this city.
	Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Undecided	Downtown has a lot of transit options and has the least amount of low income households. Why not let the city reverse their racist policies and help bring back some low income families in the core of the city.	
	Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes	There is traffic everywhere we go, all the time. More people want to access the same great amenities, which tend to be centrally located.	
	Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes		
	Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes		

Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes		
Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes	Trains move more people, we already have buses that are not making a difference, and many people will not ride.	
Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes	The parking situation anywhere near downtown is horrendous. But the walkability and other options for transportation (bicycles/scooters/etc.) make up for it. Take away the stress of having to worry about your car, and people would be more inclined to travel to these activity centers.	I was visiting Houston one weekend and was able to maneuver around their downtown area and their museum district with ease by taking their light-rail system. I was also about to attend sporting events and the like. I don't think we can call ourselves a capital city with a transportation system that doesn't cater to the heart of the city and the people that want to spend more time there.
Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes	Getting from downtown to UT during rush hour is near-impossible. Even the bus lanes are stacked up with people trying to make right turns. It takes me on average 40 minutes to go two miles and often I can walk the distance faster than the buses or cars can. We NEED transit that can bypass the bottlenecks and make central Austin travel more efficient and convenient.	
Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes	Every station should be thought of as an opportunity to build in an active employment, mixed use, or dense residential node. Every station should be a TOD.	Transit isn't that hard - you're drawing logical lines on a map that connects people, to the places they want to go. These should be straight lines that follow logical travel sheds, and connects destinations that people want to travel to.
Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes		
Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes	It is becoming more challenging to get to and from downtown at any time of day due to traffic.	I occasionally go downtown after work for appointments or events. My options for getting there are increasingly challenging. I can drive but my trip time will be unreliable, I'll struggle to find parking, and I'll contribute to congestion. Or I can take a bus that takes more than twice as much time and isn't well connected to my origin or destination.
Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes		
Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes	Absolutely, as MoPac and I-35 continue to worsen during rush periods- I think that Lamar is going to continue to get worse overflow traffic from people commuting into inner Austin. This is a bad combo for areas with heavy pedestrian traffic like Rundberg, Crestview, and UT. I think it is inevitable that the city will need to look at redirecting regular automobile traffic from Lamar/Guadalupe to keep pedestrians safe- yet we will still need some way to access businesses and locations on this main corridor. I feel like a transit line, with its own right of way, and unimpeded by other drivers, would be the best solution at getting people North and South safely and painlessly.	I currently commute to my job near UT West Mall station, using the 801 from Rundberg. I feel it's a great alternative to dealing with driving to work at peak rush hour times- but there's a huge room for improvement to the system. I'd be in favor of closing key parts of Lamar to regular traffic- I think it would have to be challenging for bus drivers to coexist with other motorists who are quite frankly unpredictable. This could also help pedestrians' safety around key transfer points, like Rundberg- where you'll see people rush across from the Quail Creek stop to the southbound 801, bypassing the two necessary crosswalks. Or Crestview where people are guided to walk across the train tracks, then across the Airport Blvd/Lamar light just to transfer to the Metrorail/ where as a new traffic solution could make the transfer seamless. The real key would be to find a way to raise capacity. A higher capacity line would hopefully mean less overcrowding, like trying to ride the bus home at 5:30PM, packed like sardines in between college students. I admit to feeling a wave of dread as the normal length bus pulls up to the West Mall stop in the evening, knowing that we'll still try to cram just as many students into the bus as the double length ones. I would hope this could also potentially mean higher frequency of vehicles on the line. preventing
Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes		

Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes		
Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes	This north-south corridor is going to see increased traffic as people travel from their suburban homes to downtown offices. This group of people will be the large majority of people using the train as they opt to not use the car. Please target this population the most. All other population groups will be taken care of automatically.	
Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes	Austin remains unconstrained by the standard geographical limits of cities, and as a result, the city has a natural tendency to sprawl out. The combination of improved mass transit and rezoning for increased urban density in the West Campus/Orange Line area would prove a useful strategy to help fight sprawl. Sprawl serves to be one of the biggest contributors to climate change at the urban planning level, and as a result should be a high priority among urban planners to manage. On top of that, upzoning and increased mass transit access serves to provide major economic benefit through attraction of jobs, increased workforce quality due to them not being priced out of the rent/housing market (see: San Francisco and their height restrictions causing a housing shortage and insane rent), and a general form of Keynesian stimulus.	Renewed urban mass transit has been a point of political advocacy for me since high school when it was the 2012-2013 Policy Debate topic, and it would make me quite proud to live in a city that's taking steps in the right direction to address issues in urban planning.
Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes		
Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes	We already voted yes for Imagine Austin, using transit is the only way to make this happen and the ONLY way to get people out of their cars is to offer TRAIN service. Buses capture waaaaay too few choice riders and calling it ART is not going to convince anyone that it is so much better than normal buses, ONLY trains do this. http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.360.9930&rep=re... https://www.governing.com/topics/transportation-infrastructure/gov-publi...	When I travel I use trains, wish I could do the same here.
Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	No	Let's see the maps of other areas of town woefully underserved by current mass transit options. I guaranty that they'll be even more colorful. I know that with the last "re-map", Cap Metro took away much-needed services for folks attempting to get to health care centers and other necessary places. THIS SHOULD NOT BE THE FIRST PRIORITY. Fix the broken parts of the mass transit system in areas where they are REALLY NEEDED. Stop trying to fix something that actually WORKS right now.	I've met construction workers on the bus who have to DRIVE into town, PAY for parking, and then PAY for a bus ride to get to work. That's shameful. THOSE are the people you should be trying to help here.
Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes		
Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes	We need to build where the traffic & activity are, not build out of the city - and increase ridership from the city.	
Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes	Parking on Congress is terrible. A rail that runs up and down Congress will bring people in to the SoCo area and we won't have to "fight" for parking.	
Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	No	Frequent bus route service already services this corridor. Focus on high car traffic - Mopac and I-35.	

Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes	The need statement is great. The headline about growth management is bunk. The argument that transit is THE growth management solution is a big reason why the light rail initiative failed (yeah, the alignment was horrible too). Existing residents don't want to hear about how transit will be used to activate new nodes. We got places we need to be, and if you ever want to pass a bond again I suggest that you make mobility for existing residents the linchpin of your proposals.
Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes	
Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes	access to geographic mobility = access to economic prosperity /adaptability
Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes	
Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes	The Orange Line is the obvious transit spine of Austin and deserves the highest and best investments, i.e. rail operating on uninterrupted dedicated pathways.
Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes	Public transit should connect people to wherever they need to go!
Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes	
Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes	The places along this line include heavy traffic areas - SoCo, The Capitol, University, and more. These areas heavily back up with traffic on the regular because of how popular they are.
Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes	
Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes	Having a transit corridor that has a dedicated lane would help to encourage people to use public transit b/c it will actually be faster.
Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes	Providing cheaper more reliable options to access the city makes driving a less attractive option, encouraging more people to shift to other modes.
Virtual Open House Participant	Need #4: Connect Activity Centers and Manage Future Growth With Better Transit Service	Yes	The transit service must be separated from automobile traffic, use high-capacity vehicles, and be grade-separated where possible to be reliable and efficient.
78738 Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes	A trunk line in the city is absolutely essential, it will have the most ridership and make the most sense. The city needs a fast, dedicated "spine"
78724 Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes	
78723 Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes	
78731 Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes	

Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes	It can be difficult to get south to north in a reasonable time frame.	
78757 Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes		
Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes		
Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes		
Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes	Having a central corridor along the busiest North-South streets allows for efficient connection of the East-West lines later on. The next line could run along 5th or 7th street from Mopac to 183.	Think #1 and #2 lines in Paris. The important thing, however, is the timing. The line needs to run AT LEAST every ten minutes all day long (at a minimum 6:00 a.m.-midnight) and every five minutes during crux hours in order to be truly useful. When they took the #5 Austin bus line from every 20 minutes to every 30 minutes, I almost completely stopped riding it. If ran every 5 minutes, I'd use it every day instead of just a few times a year.
78757 Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes	Unimpeded north/south traffic flow through central Austin will allow better transit options branching off from there.	Airport link is crucial...I hope the future BRT/ART/Train to the airport goes right to the terminal(s).
78748 Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Undecided		I'm more of a loops man, myself. Big ol loop, maybe a double loop, then quartered. So if this is part of a quartering of an eventual double loop, cool.
78702 Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes	The MetroRapid numbers have shown that a strong spine will be the first part of the system to see growth, and can help drive growth in other spokes of the system as well. The more access everyone can get to different components of the system, the more use they will get out of it	
Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes		
Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes	Because right now, Mopac & IH35 are the main corridors used by people in single occupancy cars. With the anticipated growth of our region & the state's current view on how to add capacity to road corridors, the orange line will be the beginning of a central corridor for many commuters to use. This could be a connection for many people coming from Leander, Round Rock, Georgetown, Pflugerville, Hutto/Taylor.	
78758 Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes	The spine provides connections to dense population centers and one of busiest bus routes. Will almost guarantee great ridership which will facilitate future projects in Project Connect vision.	
Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes	We need fast, efficient transit corridors to build out the system within the city.	I love riding the Red Line but it is more of a commuter rail, a line running through major corridors in the city would greatly improve the ability to get around the city efficiently without a car.
78759 Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes	anything that gets me there faster!	
78752 Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes	Because Lamar has the ability to come the city	
78681 Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes	Commuters are enticed by the high frequency capacity that the 801 Rapid route provides, and that shows in the data. By providing a more reliable and comfortable option, I believe this line could be immensely successful in laying the groundwork for real high capacity transit in Austin and keep cars off I-35 and Mopac by providing commuters with an option that is quicker and cheaper.	Austin desperately needs a transit system that can keep pace with the growing population. I've seen ridership increases this past year, firsthand and believe now is the time to look toward the future and be prepared for more growth.

78729	Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes	You can't measure what doesn't exist yet. Providing an option to balance/complement other means will induce more usage rather than shift ridership in most cases. To that end, a spine is the means on which all other modals can work off of. Look at Red Line ridership and plan to see how this will work.
78701	Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes	I wholeheartedly agree with the need statement and strongly support the orange line. We need fewer cars and more sidewalks, bicycle lanes, and public transportation offerings.
78757	Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes	Yes, a central LRT corridor would be helpful. Even more helpful would be an interconnected LRT system, but we must at least start with Orange. One such location of interconnectivity should be a new station at 6909 Ryan, connecting Red and Orange lines. A mixed-use development at that location can also include affordable housing, retail, and grocery.
78751	Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes	We need a good backbone. Worked in Houston.
	Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes	
78727	Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes	If we had a central corridor we could also put regional transit options along it. Mega bus and Greyhound could have stations at North Lamar Transit Center. Then more people would see that as an option to get to other cities. Those bus companies would benefit and so many more cars would be taken off the road saving us all money in costly road projects. I have traveled in Mexico using their excellent bus system. They have stations along major corridors that allow people to travel all over.
78752	Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes	This is the highest ridership corridor in the city and should be the first priority for a high-capacity transit line.
	Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes	A central location that is easily accessible from all parts of Austin is needed! It will better connect routes and make transfers less
	Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes	
	Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes	make it a backbone of a connected grid
	Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Undecided	As long as the Orange Line is a Rapid Transit (like Dallas' DART) and does indeed go from Tech Ridge all the way to Slaughter Line and, hopefully, extend past to better serve those displaced, then this will be good start. We desperately need an autonomous Rapid Transit with multiple trains for each line to cut down on wait time between each train. The wait time between buses right now is FAR too long and you have to ride for hours to get to where you want to go.
	Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Undecided	I worry that focusing on only one central corridor--and not a matrix of them--will further isolate communities off the central corridor. So, I would agree with this if the Orange Line were one of two-four corridors so that we don't reconcentrate wealth, activity, growth at the expense of others' mobility.
	Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Undecided	Because the corridor in question already exists. More corridors should be considered though.
	Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes	
	Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Undecided	The city has and will continue to do poor planning. CapMetro is no different, because they do not run buses and transit where it should be. The city needs more east/west buses so people of less means can get to work. Not everyone works downtown.
	Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes	I dream that one day we'll be able to take rail directly to the airport, just like the majority of major cities around the world. Please make that dream come true

Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes	As long as it connects to Blue Line at Congress and Riverside
Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes	This city will never stop growing. Ridership and population is expected to go up, according to your numbers. I believe you also accounted for infrastructure growth to be around 15%, correct? With numbers like that, it seems the only option, or at least the strongest, is to improve public transit in order for people to have a reason to leave their cars at home. I find myself driving along IH-35 wondering why I'm still driving on it. I always want to take public transit, and I do when I have class on campus at UT, but there are times during the weekend when a downtown stroll takes too much effort or when we have family visiting and we have to account for more bodies in the car. If Austin is a futuristic city, why aren't we looking at futuristic solutions?
Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes	
Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes	Central Austin needs a high capacity transit spine if only to keep central Austinites from getting in their cars. The region is growing and more and more people are driving in from elsewhere so not only will the people living central see the benefits by having convenient, reliable travel times, but the suburban folks will benefit from having central Austinites off the road.
Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes	Yes, but let's improve the quality of that spine, huh? I mean, Lamar itself is a nightmare to walk along. Yes, this should be our spine, but you wouldn't want your spine to be a place people are repulsed by. Let's do better on this. A lot better.
Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes	
Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes	We seem to have screwed up Lone Star Rail at this point, and our central corridor should be the backbone for not just transit in the city, but for connecting other regional systems into north/south transit.
Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes	Please extend the southern corridor until Slaughter Lane in the first phase itself. I live near Slaughter lane and travel every day to areas near downtown, auditorium shores, or sometimes up to tech ridge area. I travel to these areas for my job, recreation, and to meet friends. I use I-35 or south congress nearly every day of the week for these trips. If the orange line stopped at Stassney lane, I will have to use my car to park there and then take the train. I might not take the train at all. Moreover, there is a huge jobs centre near south park meadows and lots of rental apartments near slaughter and I-35 that will use the train every day I am sure to travel northwards. Please don't stop at Stassney and extend it until Slaughter lane in the first go.
Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	No	The "regional" transit spine is IH-35. The Orange Line Corridor isn't regional.
Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes	This is the best transit corridor now, has the most growth potential, and connects to all the other key areas of town with just one transfer. The proposed Orange Line needs to be the first major transit investment in Austin.
Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes	What is the projected ridership for an at grade LRT line when compared to ART? This passes through the two densest neighborhoods in Texas and needs to be high capacity. Lets do a survey with all the numbers laid out. Basically we need to see what the subsidy per rider is for full BRT, LRT at grade, LRT with a few above ground sections, and LRT with a small subway section. Couple that with ridership projections for each one and then ask the voters what they would be willing to vote for, this is not that hard, why can't capmetro/Austin ever get this right??
Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes	

Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes	
Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes	This will create a dense spine for the City that will end up being walkable, bikeable, and accessible via mass transit. More people will be on the streets and will create demand for more small pedestrian-oriented small business and housing along the corridor. This is the best way to grow the population for the long-term future.
Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	No	Create a Mopac and I-35 route north and south with bus service east-west to connect the two main car traffic corridors.
Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	No	Again, these numbers tell ME that this is already a central corridor that is functioning well. It's one of the only ones. You don't need to "CREATE" it. What needs more attention and growth are the other parts of Austin where people really rely on mass transit and have less options!!! If you built 2 or 3 monorail lines that went into far SE and SW Austin, and NE and NW, that would be serving way more residents in need of help. This is just fixing something that isn't broken and taking a lane of traffic out of an already congested roadway to do it.
Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes	
Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes	
Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes	
Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes	High capacity transit is just a great option for resident that can't or don't what to fight Austin traffic on their own.
Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes	Austin needs to be the center of a regional transit hub connecting all of central Texas!
Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes	Increased access to every-day destinations (aside from employment) around the heart of the city is needed before investing in getting more people into that city-center without a reliable way to run errands or visit multiple locations.
Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes	This is where everything is, it's where all the hub of activity is. Create a central artery for the future of our public transportation to branch off of.
Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes	
Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes	
Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes	We should be focusing on improving service on our best transit corridor. As long as it doesn't turn into regionalism for regionalism's sake it will be fine.
Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes	Since Austin is naturally constrained to a north/south geography, it makes sense to create a central corridor. Also, concentrating uses to a single corridor allows us to really utilize density and proximity.
Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes	The mode choice should be able to handle significant ridership increases, since a more reliable, faster, and more comfortable option, like rail, would likely attract many more users.

Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes	Because we need a way to get to and from downtown without the heavy congestion, and long travel times. Our infrastructure is terrible. For a city that wants to be green, we are failing to take initiative to provide even a basic public transit system to do so.	Being a Colorado transplant- I habe to say it was a shock moving from an area where I could get halfway across the state in 3 hours on a bus, to barely being able to move 20 miles. How can such a green city willing to ban grocery bags for the environment, not add decent public transportation?
Virtual Open House Participant	Need #5: Create a Central Corridor for a Better Regional Transit System	Yes	No brainer; transit makes people and the environment healthier and happier.	
78738 Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes	Both systems should be light rail to allow for greater capacity and avoid the bus rapid transit creep, whereby BRT is weakened over the course of many individual sacrifices in service. Light rail is light rail, but BRT seems to vary considerably more.	
78724 Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes		
78731 Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes		
78723 Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes	Austin needs a long-term vision for moving large amounts of people efficiently and without personal vehicles. The Orange Line will hopefully start a long overdue investment in our region's mobility, and smart planning to ensure funding goes to operating the line instead of re-work will make our investments work for future generations.	I'm not anywhere near the proposed Orange Line. Or the Blue Line. But having a line that reduces reliance on personal vehicles be successful on these corridors will hopefully mean that one day, we're able to invest in a full scale network of dedicated lines. This includes rail for the Purple Line and Yellow Line, where there are increasingly dense neighborhoods that have some gaps that are just now being filled in. Ensuring these lines have interchangeable vehicles and technology will make the procurement and design of future lines not simply a one-off event, as they'll benefit the whole system.
78757 Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes		
Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes		
Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes	It's obvious that a combo of north-south and east-west service is needed.	What is the blue line? Is that MetroRail? You need to show a map when you reference another line. I would go back and look at the map, but I don't want to lose my work and have to start all over again.
78757 Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes	Taking transit should not be a -----shoot where you get to one station on time, then have to wait 15-30 minutes to transfer to a ride that takes you closer to your destination.	It would be very helpful for people on tight schedules if the buses/trains could be coordinated to reduce wait times between rides/transfers.
78748 Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes	It just obviously makes sense. Of course I would want that.	
78702 Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes	Absolutely critical to long-term health of the network	
Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes		
78758 Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes	Using the same transit mode on Orange & Blue line will make it much more easy and simple to maintain in the future.	
Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes	Absolutely, it is critical to tie in all the systems, schedule buses and trains to link up, etc.	Having to wait a long time for a transfer is an unfair burden that makes transit usage less competitive and useful.
78759 Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes	expands my ability to get to other places, like the airport seamlessly.	

Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes		
78752 Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes		You have to be able to switch trains for other lines or it won't work
78681 Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes		The orange line presents a great opportunity for Red Line users to travel into the Capital/UT area with only one transfer, and the blue line an ideal rail line to bring airport passengers into downtown. I see many students using the Red Line to get to either UT or St. Edwards, and a connected Orange Line would give students the chance to get to those locations with much less transferring, opening up more opportunities for riders. Partnering with these campuses and getting students informed and involved could be key for Project Connect, because many of them already use CapMetro and want faster, more connected alternatives.
78729 Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Undecided		
78701 Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes		I wholeheartedly agree with the need statement and strongly support the orange line. We need fewer cars and more sidewalks, bicycle lanes, and public transportation offerings.
78757 Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes		Yes. This is the key. We need multiple rail lines servicing our city's multiple employment and residential centers.
78751 Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes		Light or heavy rail, grade separated in some way would serve this purpose. Elevated or subway would be ideal. Tweaks to the current 801 would be insufficient.
Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes		
78727 Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes		Does this even need to be a question? Yes, I once had two model train sets. One was HO scale and the other N scale. I could not make the N scale trains go on the HO scale track.
78752 Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes		
78757 Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes		There is likely to be a savings/efficiency factor associated with keeping the Orange and Blue lines on the same rolling stock/technology. Lower maintenance costs and reduced operator and mechanic training is probably also to be expected. Additionally, there is an opportunity to use units from one line to supplement the other during especially busy times or special events along one of the routes.
Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes		Yes! A transit system really starts to work when it's part of an entire network.
Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes		Long-term planning is a must and has been lacking across the US when it comes to transit.
Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes		Parts of the blue line would make a good spine to branch future expansions from
Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes		I would definitely want some connection to the MetroRail Red line to the new Orange Line. There is a lot of traffic in North Austin on Parmer and 183 headed south in the morning. Having an option to get from Leander/Lakeline Station to the domain which would then take the Orange Line could additionally help alleviate traffic and an excellent commute option. I would without a doubt take the Red Line to the Orange Line to get to my job at the triangle. I currently take a rapid commute bus that drops me off a mile away from my job. I don't mind the extra walk but in the summer it can get to be up to 100 degrees. I would prefer not to take my car from Cedar Park and having the train option would be more than ideal.
Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes		
Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes		Of course... it all needs to be connected; transit is needed up and down, but also across the City

Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes	ELIMINATE NORTH LAMAR TRANSIT CENTER. Orange Line planners must recognize that the true North Lamar transit hub is now Crestview Station, not North Lamar Transit Center. The Red Line and #801/Orange Line cross there, and multiple high frequency and local buses also terminate or pass through that station (#1, #7, #300, #350). Meanwhile, NLTC has only a few local buses (#1, #323, #350, #383) and no high frequency ones. And the #350 should terminate at Crestview Station except for transfers to #323 and #383. Instead, if those two (#323, #383) terminated at Crestview Station, there would be no need for NLTC at all. That Station could be removed, since it is already too close to Fairfield Station, and the land redeveloped into mixed-use to provide revenue to Capital Metro. Fairfield Station could be relocated a little bit farther south, since it is too close to Rundberg Station. There are only a handful of motor vehicles using the NLTC parking lot for Park & Ride. Those drivers could easily drive to the parking garages at Crestview Station. Eliminating NLTC would also eliminate the major detour the northbound #801/Orange Line is now required to make to service that station.	
Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Undecided	Yes, this is cheaper but what about when we need to update the system and something is out-of-date? We'd need to get rid of an entire fleet because of one or two trains? That would get voted down so quick. Just make sure that they are all the same kind. If one line is Autonomous Rapid Transit then they should ALL be ARTs.	
Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes	Absolutely. This is the best path for efficiency in the present and for anticipated and unanticipated growth in the future.	
Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes	See past needs, connecting to this main corridor is unreliable currently.	
Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes	Only the lucky few will be able to access the places they need to access most via one line; most people will need to connect, so we should plan with that in mind.	The connection I require to get to work significantly increases my commute time.
Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes	Make sure Orange and Blue line intersect at Congress and Riverside	
Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes		
Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Undecided	I'm not understanding this need very well.	
Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	No	This is being used as an effort to 'require' BRT. Stop doing this. Austin has said over and over again that we need LRT on our transit spine. Austinites for Urban Rail Action will vigorously and publically oppose anything but LRT on this corridor.	
Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes		
Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes	Compounding returns and efficiencies are a thing. It's why Southwest Airlines is so successful. They have a fleet of ONLY 737s so they only need to buy 737 parts, train workers on the 737 and it shows in the business returns. Also people value consistency. Having disparate systems is like having a million scooter companies and having customer confusion as to what app to download.	
Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes	#bancars	
Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes	Seems right.	It's important that transit travel in its own traffic free lanes.

Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	No	I am very supportive of the Project Connect plan. But I feel like this question is being asked in a way to get to the answer you're looking for. "Inter-Operability" does NOT mean that both corridors need the same vehicle. Orange like could be dedicated bus lanes and Blue could be rail and they would work perfectly fine together. Look at any other city that does transit right and you'll see a mix of vehicles with locations for easy transfers. Let's not limit our options here. Rail may just be the best fit for Riverside!	
Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes	By ensuring inter-operability, the two lines can be connected to create other lines (not dumb ones like the U-shaped gold line shown on planning maps, but smart ones like an additional route, with no additional track needed) for Lamar/Guad/Riverside/ABIA.	Make it light rail! Austin doesn't want small town solutions (like BRT) and ART isn't a real mode (it's just autonomous LRT or BRT...so make it autonomous LRT!!!).
Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes	One line cant connect everywhere I will need to go. I will almost always use at least two different modes of transportation.	I often travel to the airport from my home in South Austin. There is just one cap metro route option that takes me there and it doesn't come to south Austin. I always use two different buses to get to the airport. It is a pity that there is no cap metro connecting south Austin to Airport. Very inconvenient for me always. If the train connected me to downtown from where I can take another train taking me to airport, I can definitely make the trip if changing trains is not very inconvenient.
Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes		
Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes	Need a real interconnected mass transit system to manage our growth and improve quality of life.	
Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes	We need inter-operability on all future corridors if that means light rail transit everywhere. No BRT. Especially no ART. ART is a scam and do not want one cent wasted on this vaporware.	
Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes		
Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Undecided	But START with the others.	
Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes	Obviously any and all routes need connectivity. The proposed Orange route does not address real car traffic zones.	
Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes	Let's do like the europeans and have a central station. It doesn't make sense to build it any other way!	
Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes		
Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes	You need multiple hubs that allow riders to switch to other rail lines.	
Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes		
Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes	It's a great needs statement but I have seen little vision from project connect about major east/west corridors. Gonna have to establish those before you can connect. Also, "inter-operability"?!?!?! Maybe save the inflated academic rhetoric for your internal staff meetings and go with the concept of "connections" so you don't come off as insufferable pricks to the public.	

Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes	Plan for the long term. Ensure that this starter line will work with future lines!!
Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes	Without access to other corridors, daily-travel needs (outside of access to employment) won't be met, hence single-occupant-vehicle trips won't be significantly reduced if the ability to be fully mobile without a car isn't feasible.
Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	No	Inter-operability in the long-term may be a fine idea, but for now the focus should be on delivering the highest and best investment in our natural transit spine. That means light rail for the Orange Line.
Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes	It's crucial that we plan for the future for future lines to branch off of a central corridor to create efficiency.
Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes	
Virtual Open House Participant	Need #6: Ensure Inter-Operability Between the Orange and Future Corridors	Yes	
Virtual Open House Participant	Potential Alternatives	N/A	I live in South Austin and there is not a train to this area. Also the train next to my work does not have any parking at all. In Dallas I was able to park just outside of downtown and ride it to work and back.
78738 Virtual Open House Participant	Potential Alternatives	N/A	I really think a city of Austin's size, growing as fast as Austin is, and with such a previous dearth of capital investment in transit projects should shoot for the moon here. Build light rail for the capacity and the ridership now rather than realize later and retool the BRT infrastructure. Use the savings from not building an expensive to operate green line to Manor!
78724 Virtual Open House Participant	Potential Alternatives	N/A	I would be ok with a BRT system in dedicated lanes if it meant we could build more of the system out, sooner.
78757 Virtual Open House Participant	Potential Alternatives	N/A	We need rail. It is the highest capacity, most comfortable, and most environmentally friendly option.
78723 Virtual Open House Participant	Potential Alternatives	N/A	LRT with dedicated ROW is an absolute must for this line. High capacity, proven, and reliable will be a key for CapMetro voters to approve this line's funding. Eliminating standard north/south bus stops along the corridor and having routes stop on cross streets with a short walk to LRT stops would limit the effect on vehicular traffic when a lane is taken away - they're already being stopped behind busses today. Must be coupled with smart signal improvements which allow LRT to depart from the light earlier than vehicles to reduce accidents where vehicles turn right across track (if track is in outer lane like Houston's METRO) or left across track (if track is along median like much of Seattle's Sounder train). Pedestrian safety should also be paramount to reduce incidents and ensure consistent operation of the system. Railroad style crossings at pedestrian intersections with the line will reduce inattentive walkers and haphazard scooters from crossing while train is crossing the intersection.
78757 Virtual Open House Participant	Potential Alternatives	N/A	As traffic congestion grows, I believe we will have to look into BRT/LRT/ART alternatives, especially those that can be interchangeable like BRT/ART. I came to Austin from a city in India(Ahmedabad) that reaped great benefits from a brts system and is also investing in a metro system. I'd love to be able to ride the metro and public transit to everywhere including work.
Virtual Open House Participant	Potential Alternatives	N/A	A subway system is ideal. A subway would not impede on current auto traffic like any other solution will. It will eliminate any sort of noise pollution that a rail or bus would cause. And it will not ruin any sight lines on South Congress. Please explore subway as an option.

Virtual Open House Participant	Potential Alternatives	N/A	I've lived in Austin for 21 years. Before that, I lived near Richmond, Virginia. A huge difference that I note is that in Virginia, we built our road and other transportation infrastructure ahead of need, not waiting for the traffic to become unbearable and then making it worse for several years with construction and then having the new infrastructure be barely adequate (or not even improved, such as Mopac with the new toll lanes that only sometimes make the drive faster and make it just as slow as it was before when you are not in the toll lane). So I hope that we don't make the mistake of having so-called traffic-free above-ground transport (which won't really be traffic-free). Just spend the money to go underground and have plenty of cars for frequent service from day one (I'll gladly pay extra taxes for this), and do it right the first time.
78757 Virtual Open House Participant	Potential Alternatives	N/A	If Boston can have light rail (the "T") sharing the streets at times with vehicles, I think that should be given a hard look. I'd prefer that to BRT, but understand there's a larger investment required up front for LRT (or ART for that matter).
78748 Virtual Open House Participant	Potential Alternatives	N/A	I'd like people to start thinking of a similar project out east, or a big loop one outside-ish the city that will seem silly now but will probably be like a highway 71 of envelopment by the city in a decade.
78702 Virtual Open House Participant	Potential Alternatives	N/A	This NEEDS to have dedicated lanes / pathways in order to be successful. Multiple *modes* of transportation would work (bus, light rail, autonomous) but the most important thing by far is to ensure there is a dedicated place for it to use for travel. The current dedicated lanes have allowed amazing progress in ridership numbers and acceptance of new public transportation options, and there is much to be gained (and little to lose) by converting current traffic-clogged portions of streets with dedicated areas that could be used much more efficiently and cleanly.
78758 Virtual Open House Participant	Potential Alternatives	N/A	I think light rail (future autonomous light rail) is best alternative as it is most proven. Cap Metro should coordinate as much as possible with City of Austin Corridor Mobility projects which overlap with Orange Line and other future Project Connect projects (N. Lamar, Riverside, Burnet, S. Lamar, etc, etc). As a taxpayer, I don't want to pay for anything twice. At a minimum all necessary utility relocations and other design features to ensure easier construction/compatibility should be done NOW in Corridor Mobility project to facilitate Project Connect.
Virtual Open House Participant	Potential Alternatives	N/A	Keep going! Think big, think frugally, think for the future!
78759 Virtual Open House Participant	Potential Alternatives	N/A	We cannot move fast enough to rapid transit for me. If the 801 and 803 busses could begin to operate like rail that would be a great intermediate step. By that I mean have fewer stops but flow without stopping between those stops. The express system works great for me during the week but I miss it on weekends. Also, the really fast express systems that use mopac for only a couple of hours per day don't align well with my times of travel.
78752 Virtual Open House Participant	Potential Alternatives	N/A	I'd love to have a train of some sort with vast street improvements including street trees!!!
78729 Virtual Open House Participant	Potential Alternatives	N/A	The Orange Line Corridor is a solid but expensive plan. Commit to it and prepare for sound criticism and sacrifices to deliver something that will work for more folks than not.
78701 Virtual Open House Participant	Potential Alternatives	N/A	I strongly support the orange line. We need fewer cars and more sidewalks, bicycle lanes, and public transportation offerings. If the offerings I would most prefer the light rail offering.
78757 Virtual Open House Participant	Potential Alternatives	N/A	Capital Metro needs to do all it can to obtain right to put a commuter rail line along the railroad in the middle of MoPac. At this point, that stretch would be much more helpful toward moving people than moving cargo.
78751 Virtual Open House Participant	Potential Alternatives	N/A	Must be fully dedicated. Grade-separated (elevated or subway) is preferred, but a separate lane for light rail is better than nothing. Human operated or autonomous is not particularly important, as long as the alternative is high-capacity (that is, rail is better than bus).

Virtual Open House Participant	Potential Alternatives	N/A	ART is vaporware, and this corridor will quickly outgrow any BRT solution. LRT is the only viable alternative because it allows the capacity of the line to scale as rapid growth continues in this corridor.
78727 Virtual Open House Participant	Potential Alternatives	N/A	STOP with this idiotic ART garbage. It does not work. It will take decades to make it work. Let's pay people a living wage to drive buses and trains NOW. I think this ART talk is just a way to play games and kick the transportation ball down the road. If you are at all serious about providing public transportation get more buses on the road now.
78752 Virtual Open House Participant	Potential Alternatives	N/A	We need fully dedicated pathways to have a successful high capacity transit project on the highest ridership corridor in the city. Light rail is the preferred mode because it has enough capacity for current and future riders, and it will attract more riders than buses.
Virtual Open House Participant	Potential Alternatives	N/A	Yes to all options that prioritize transit with dedicated lanes / lines, etc. Yes to all options that couple this solution within the existing right of way and remove / narrow car lanes to minimize increased curb-to-curb impervious cover throughout town.
Virtual Open House Participant	Potential Alternatives	N/A	Please connect to the Red Line train or in some way to Lakeline/Leander Station. I will gladly take the Orange Line.
Virtual Open House Participant	Potential Alternatives	N/A	Think long-term, as you put together the alternatives, but please... be sure they're well-communicated and affordable, so that the community will buy in. We don't need another failed transit bond!
Virtual Open House Participant	Potential Alternatives	N/A	
Virtual Open House Participant	Potential Alternatives	N/A	In keeping with Keep Austin Weird, CapMetro should let local graffiti artists or other artists paint the ART trains with AART on the side of them. Make them really stand out and truly unique to Austin, TX. But ARTs should be the way that ALL of these major new CapMetro lines go. With buses complementing them. But ARTs should be the real major player for Austin.
Virtual Open House Participant	Potential Alternatives	N/A	I prefer light rail. It works much better.
Virtual Open House Participant	Potential Alternatives	N/A	The first alternative isn't an alternative because there's nothing aside from dedicated lanes that will improve traffic conditions and make public transit an attractive alternative to solo car trips.
Virtual Open House Participant	Potential Alternatives	N/A	BRT is much better to move people than high-capacity. It will take a lot less to build and maintain that high-capacity. If CapMetro was serious they would run high-capacity along MoPac. That way people from other jurisdictions can use transit. High-capacity to allow someone to move 4-5 stops in a 3 mile area is to costly. BRT is a smarter approach.
Virtual Open House Participant	Potential Alternatives	N/A	Please please please consider other corridors and connection options with other routes needing to be on time as well.
Virtual Open House Participant	Potential Alternatives	N/A	Orange and Blue need to be LRT. All other routes should be BRT with dedicated bus lanes and turning lanes for cars. I voted against the original "urban rail" because of it's alignment. I would easily vote for LRT and BRT for the routes outlined in this project. My only issue is the timeline. I would like us to roll out BRT before the 2020 vote and slowly replace the route with LRT. The quality of the roads are so terrible down Lamar and Guadalupe. We should start fixing these roads and making bus only lanes for Rapid TOMORROW. Do we really need a vote to do that? Prove the line works now and clear the right-of-way while fixing the roads for drivers and bus.
Virtual Open House Participant	Potential Alternatives	N/A	I encourage the project team to move forward with LRT along the Orange Line. I currently take the Red Line to work everyday and having the Orange Line would greatly help utilize public transportation more efficiently. Also, LRT is a much more efficient mode of transportation that has a much greater ability to provide reliable service with fewer delays. It also has a much higher ability to be expanded and moves more people at once when compared with a bus.

Virtual Open House Participant	Potential Alternatives	N/A	I'm learning more towards light-rail simply because I've explored the systems that other cities (some of them smaller than Austin) have in place and they work extremely well for their citizens. Granted, I understand there is a cost to the set-up and maintenance of such a system, but I also believe that public transit is an investment that is probably never done. I like the idea of Austin being connected by a system that is constantly in motion, trying to get its citizens from one corner of the city to the other without them having to worry about their cars, which would probably be parked on a highway or gridlocked downtown. I'd love to cling to the idea of Austin still being a small town, but without these progressive moves (that might not make EVERYONE happy) we're basically putting a band-aid on a broken dam.
Virtual Open House Participant	Potential Alternatives	N/A	Consider removing car travel lanes to reduce project cost and duration of construction. It would help by further discouraging driving and make Guad/Lamar a more attractive urban space for pedestrians.
Virtual Open House Participant	Potential Alternatives	N/A	I live in the North Lamar corridor, and believe that light rail would be the best option for the Orange Line. Yes, it would take away a lane for cars, but I truly believe that once it's built, people will see how much faster and less stressful it is and start using it.
Virtual Open House Participant	Potential Alternatives	N/A	Light rail does not have to be elevated or underground for this corridor. The continuing efforts by your consultants to claim otherwise is a clear and obvious attempt to make LRT appear too expensive and disruptive. Be honest; do what Houston did with their first line (elevate where absolutely necessary but take lanes on most of the corridor).
Virtual Open House Participant	Potential Alternatives	N/A	Please go for LRT. I will support BRT but I truly believe for Austin to be a world-class city we need a central rail line. Also all those rubber tires and the wear and tear on Guadalupe's and Lavaca's pavement shows (and is felt). LRT is so much more comfortable and is also familiar for visitors. Going "halfsies" in this case is a bad move in my opinion and we need a big jump for people to see things happening.
Virtual Open House Participant	Potential Alternatives	N/A	
Virtual Open House Participant	Potential Alternatives	N/A	The focus should be on the quality of service AND the quality of the ride. Ride quality is really important and never discussed. Agnostic as to mode. If we choose BRT or ART, then they should run on smooth concrete roads that don't get destroyed like asphalt. They should have anti-sway technology that gives a train like ride. Every mode considered should be electric. Non-electric should be a non-starter. No more diesel.
Virtual Open House Participant	Potential Alternatives	N/A	Dedicated pathways are needed on several north-south and east-west routes. We're past the point of need and into desperation.
Virtual Open House Participant	Potential Alternatives	N/A	I believe LRT should be heavily emphasized in this process. It is efficient, effective, and traffic free. We are rapidly running out of space to put viable transit solutions in, and must act on this now. I believe that Austin needs to take aggressive action NOW, and put in a viable rail system along the orange line route, and with a rail connection to the airport. We are stuck 50 years in the past, and if we don't act soon, there will be no space for options that are free from traffic influence. Another option that will help ease congestion is legalizing filtering for motorcycles within the city, and lane-splitting on the freeways. Filtering allows motorcycles to move between lanes of stopped cars, removing entire car spaces per bike from the traffic line, dramatically speeding up traffic lines compared to those bikes driving cars instead. It also removes bikes from the dangerous rear ending zone. For similar reasons, lane-splitting on freeways dramatically helps traffic. It is also dramatically safer, and studies have shown that should a rider wreck, the chance of death, head injury, or torso injury is approximately halved if the rider was splitting vs. if they were not. More information can be found at www.lanesplittingislegal.com .
Virtual Open House Participant	Potential Alternatives	N/A	Light rail makes perfect sense. for the heart of our city, and as we watch cities like Minneapolis, Denver, and Phoenix lead here, I hope we don't find a way to once more screw up something obvious.

Virtual Open House Participant	Potential Alternatives	N/A	Please don't limit your choices by requiring the same vehicle for Orange and Blue lines. If it turns out BRT is best for Orange and LRT is best for Blue, keep that as an option! Plenty of cities have a variety of vehicles on different lines and do it well.
Virtual Open House Participant	Potential Alternatives	N/A	Please extend the orange line until slaughter lane in the first phase itself. The area near slaughter and I-35 is always very busy. Lots of rental apartments, lots of jobs. Lots of economic activities happening here. And this neighbourhood needs the train here. The purpose of the orange line is to connect outer-city to downtown (jobs area). The slaughter and william cannon area's residents exactly fall into that group. If the orange line can't connect such densely populated area to downtown, the line's purpose will not be solved. I don't want to use the train to travel 2 miles along the north-south corridor. People will not use the train to travel 2-3 miles on this train. They will travel only if the distance is long enough to make their travel worthwhile. The slaughter lane area is precisely that need. Please extend it until slaughter lane which is rapidly growing. Also people from Buda, Kyle, San Marcos will use this train to travel further into the city.
Virtual Open House Participant	Potential Alternatives	N/A	We want light rail! Make it autonomous and with long platforms to accommodate future capacity increases. Don't give us low capacity small town BRT (or autonomous BRT that you're pretending is a separate mode called ART).
Virtual Open House Participant	Potential Alternatives	N/A	I prefer an at-grade light rail transit line for the Orange Line Corridor, similar to the image of the Houston LRT shown in the image above. This will be the most cost-effective alternative that will deliver the highest ridership. I agree that dedicated pathway is a must for the entire line. Yes, this will mean sacrificing automobile lanes or parking in certain areas. I am okay with that. In fact, I encourage it. I feel most of the Guadalupe/Lamar corridor is currently unsafe for pedestrians, bikes, and scooter users. Transitioning away from such an automobile focused corridor will help encourage safe usage for other transit modes.
Virtual Open House Participant	Potential Alternatives	N/A	Very much support the Orange Line and will vote in favor in 2020 election. Most important design aspects in my view are: 1. Dedicated lanes for transit -- ridership and value for all socioeconomic classes will rise if this service is free of traffic 2. Free from traffic lights / stop signs -- important for mass adoption and regular ridership that this transit service is faster than driving or Uber, even during periods of light traffic 3. Frequency -- need to operate every 10 minutes or less 4. Comfort of stations / waiting areas -- Texas is HOT and HUMID in summer. All current 801 stations/shelters are insufficient. Small roofs don't provide effective shade all day and make in very uncomfortable, with direct sunlight hitting waiting rides most times of day other than high noon. People won't take transit if they are soaked in sweat before they even board it.
Virtual Open House Participant	Potential Alternatives	N/A	
Virtual Open House Participant	Potential Alternatives	N/A	Focus on Mopac and I-35.

Virtual Open House Participant	Potential Alternatives	N/A	MONORAIL MONORAIL MONORAIL MONORAIL MONORAIL Y'all are so backwards in your thinking. I've actually appreciated the rapid buses lately (especially since you brought the fees into alignment.) And I've appreciated your improvements in service times. But please don't do this. Please focus on the parts of town that are less shiny and really need more services. The 801 and the #1 have, historically, been the only busses that work well. Why mess with them. Start with the parts of town that DON'T work. Where people live NOW who need help. Not where you expect them to be moving in later. If you build it, they will come, right? And North Lamar and South Congress are already highly congested roadways. Losing a lane of traffic is the worst possible solution. Monorail won't need that. You can be more creative with where it can be built and stay out of current roads.
Virtual Open House Participant	Potential Alternatives	N/A	Get all the buses off the streets. They not only block traffic flow, they block vision and tear up the streets. Buses are an anachronism like communal bathrooms. Cars are the only real alternative.
Virtual Open House Participant	Potential Alternatives	N/A	Rail is the most logical and sensible solution. Asking voters to remove a whole lane to create a transit-dedicated pathway, only to be used by busses seems like a short-sighted half measure to solve the problem. Rail works. Every major metropolitan area in the world has rail, regardless of the cost, because it is proven to be an effective way to commute and bring communities together.
Virtual Open House Participant	Potential Alternatives	N/A	
Virtual Open House Participant	Potential Alternatives	N/A	I would personally prefer to see a light rail or autonomous solution. Clearly we need to be doing something different beyond what we're doing now with buses. Making changes in our public transport would help.
Virtual Open House Participant	Potential Alternatives	N/A	I'm rooting for you. I like using the MetroRapid services and think CapMetro does a bang up job given the physical and political hellish context that is Austin. I don't envy the job that your planners and PR people have to do but I'm glad that you are so diligent and dedicated. Please focus your proposals on mobility for existing residents. Austinites are never going to support transit as a growth management tool to activate new developments for new residents. They will support it as a realistic mobility option (i.e. most of us know a bus isn't going to solve any congestion issues so don't go there either). Thanks for all your hard work.
Virtual Open House Participant	Potential Alternatives	N/A	Please invest all funding, resources, time, marketing, partner-projects etc. into the mode/technology that will move Austin the farthest away from its fossil-fuel-dependency which prioritizes infrastructure for single-occupancy-vehicles - and allow Austin to continue to divest in such infrastructure for the longest period of time into the future.
Virtual Open House Participant	Potential Alternatives	N/A	Let's do this, CapMetro!
Virtual Open House Participant	Potential Alternatives	N/A	Light rail for the Orange Line, please. 2020 presents a tremendous opportunity to truly go big on a transformative investment that this community has been dancing around for decades.
Virtual Open House Participant	Potential Alternatives	N/A	If this process doesn't result in dedicated light rail transit, it will have failed the city.
Virtual Open House Participant	Potential Alternatives	N/A	I think a dedicated lane, BRT would be sufficient for this corridor. A dedicated-lane BRT is much cheaper and allows for more flexibility as service areas fluctuate over time (ie. stop placement changes, according to needs). In 10-20 years, if rail/street car is still desired, that ROW and infrastructure is nearly there. Meaning, a dedicated-lane BRT is the best way to "baby-step" into implementing a long term plan for rail.
Virtual Open House Participant	Potential Alternatives	N/A	A rail option would provide a more reliable, comfortable, and higher capacity service, and the perception of this tends to attract more users. Grade separation or light timing that responds to the trains to always give them a green should be used.
Virtual Open House Participant	Potential Alternatives	N/A	Giving the 801 a dedicated lane would be great! Love the idea of ART.

Virtual Open
House Participant

Potential Alternatives

N/A

Capital Metro should opt for light rail on a dedicated pathway on the orange line, to service more people and shift more people out of their cars. Removing car lanes shouldn't be off-limits.

Orange Line Round 2 Outreach

Engagement Summary



August 27, 2019

Engagement Approach

The Orange Line team planned and conducted a series of one-on-one meetings with key stakeholders interested in the project as well as presentations to neighborhood associations located on the Orange Line corridor. The team sent inquiries to all identified neighborhood associations along the corridor to request time on the neighborhoods' meeting agenda or to allow for tabling before and/or after the meeting. The team followed up with additional emails and phone calls. The Orange Line presented introductory information, and in some cases, information about the Step 1 analysis developed for the workshops, to the neighborhood associations shown in the table below. In addition to sharing introductory information about the project, these meetings were designed to drive interest in three workshop-style events held along the proposed Orange Line on July 17, July 18 and July 24, 2019.

Neighborhood/Key Stakeholder Meeting Details

Neighborhood/Organization	Meeting Location	Meeting Date
Crestview Neighborhood	1300 Morrow Street	Monday, June 10
Dawson Neighborhood	3001 S. 1 st	Monday, June 10
District 7 Partners	Northwest Recreation Center	Tuesday, June 11
Highland Neighborhood	405 Denson Drive	Tuesday, June 11
Shopcore Properties	901 S. MoPAC	Friday, June 14
Rosedale Neighborhood	40 th and Lamar	Monday, June 17
St. Edwards University	3001 S. Congress Avenue	Wednesday, June 19
University Area Partners	2026 Guadalupe Street	Tuesday, June 25
Urban Land Institute	515 Congress Avenue	Thursday, June 27
North Loop Neighborhood	55 th and Avenue G	Thursday, July 1
North University Neighborhood	3701 Grooms Street	Thursday, July 1
Brentwood Neighborhood	1103 Justin Lane	Wednesday, July 10
SoCo Working Group	1412 S. Congress Avenue	Friday, July 12
Windsor Park Neighborhood	6100 Berkman	Saturday, July 13
West Campus Neighborhood	2406 Guadalupe Street	Monday, July 15
Guadalupe Working Group	1801 Lavaca Street	Monday, July 15
Georgian Acres Neighborhood	200 W. Anderson Lane	Saturday, July 27
Workers Defense Organization	5604 Manor Road	Tuesday, July 30
Hill Country Conservancy	Conference Call	Tuesday, July 30

Engagement Goals

Three community workshops (North Austin, Central Austin, and South Austin) comprised the primary outreach mechanism for the second round of stakeholder engagement on the Orange Line. This outreach was designed to inform the public about the process deployed for the Step One (conceptual) analysis, and to receive feedback on the results of this phase of analysis. Workshop discussions and activities were focused on Transitway Types (street-level, elevated, cut and cover, and tunnel), Station Locations, and Orange Line Q&A.



Community Workshop Event Details

To better facilitate the workshop format and meet a critical number of participants (approximately 30) at each, three workshops were held to draw traffic from multiple corridor segments. Each workshop was set up similarly, with doors opening at 5:00 p.m., a presentation from 5:30 – 6:00 p.m. and a rotation between each of three discussion tables from 6:00 – 6:45 p.m. From 6:45 – 7:00 p.m., the project team summarized discussion at each table and attendees completed community surveys. Though the Virtual Open House does not support the workshop component, the information presented was designed to reflect the in-person presentation as closely as possible. Materials used, including the facilitator guide, are included in Appendix A. Event photos are included in Appendix B.

Set-up included:

- A sign-in table with an assortment of program handouts and maps
- An Orange Line project fact sheet in English and Spanish
- Three clusters of tables and chairs with seating for at least 12 participants at each
- 17 exhibits arranged for reference at discussion tables
- One facilitator and one technical expert at each of three discussion tables
- Flip charts and other notetaking materials at each discussion table
- Community surveys distributed during the wrap-up component of each event

Segment Location	Event Location	Event Date/Time
Central	Central Library, 710 W. César Chávez Street	Wednesday, July 17
South	St. Edwards University, 3001 South Congress	Thursday, July 18
North	North Austin YMCA, 1000 Rundberg	Wednesday, July 24
Virtual Open House	https://www.capmetroengage.org	Thursday, July 18 - Thursday, August 1

Event Notifications

In addition to providing notification of workshops at neighborhood presentations and stakeholder one-on-ones, the project team deployed email and paid advertising to drive interest and attendance to community workshops. Due to an issue with Capital Metro’s social media management tool, Facebook and Twitter were not used to promote these events. Example notifications are included in Appendix C.

Notification	Dates	Number of Recipients	Performance
E-blast to Project Connect/Orange Line contact database	June 27; July 12	4,951 each	Open: 28%; Click: 2% Open: 31%; Click: 3%
Newspaper ads	El Mundo: July 4 Villager: July 5 Statesman: July 7 Chronicle: July 15 La Prensa: July 18	Approx. 2 million total circulation	N/A
Radio ads	KUT/KUTX: July 2 – August 1 KOOP: July 3 – August 1 KAZI: July 3 – August 1	Approx. 500,000 total circulation	N/A
Inclusion of event information in Project Connect e-newsletter	July 3	4,955	Open: 25%; Click: 7%

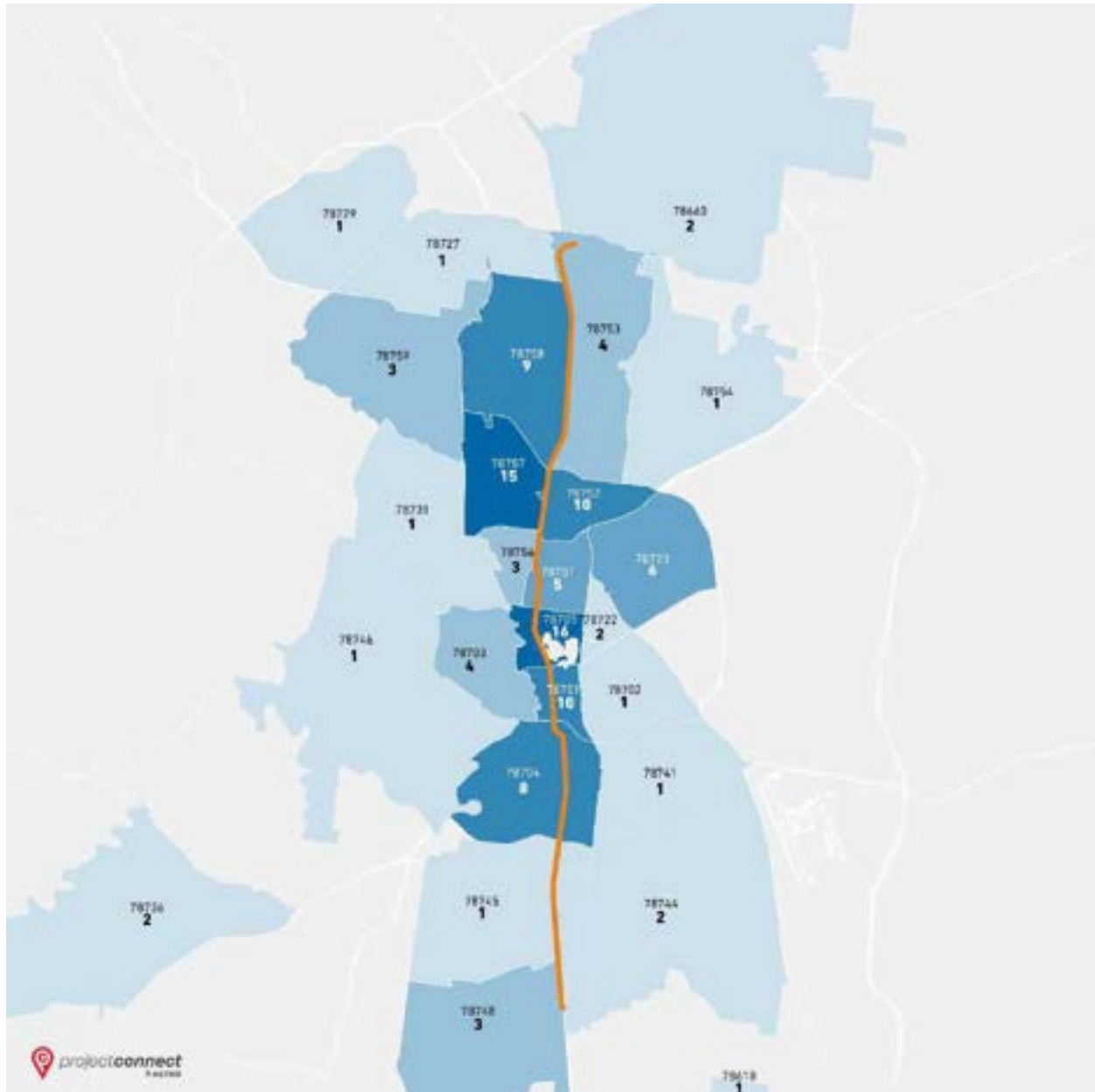
Participation

The participation statistics of the Community Workshops have been incorporated into the overall Project Connect outreach dashboard and tracker. These statics are shown in the table below. A summary of the Virtual Open House engagement results is included in Appendix D. Virtual Open House users are not required to submit a zip code to interact with the site. As such, the zip codes in the table and map below represent primarily in-person participants.

Segment Location	Attendance	Number of Comments Received	Zip Codes Represented
Central	82	51	78660, 78701, 78703, 78704, 78705, 78706, 78715, 78722, 78723, 78737, 78741, 78744, 78745, 78746, 78749, 78751, 78752, 78756, 78757, 78758, 78759
South	15	14	78704, 78705, 78736, 78744, 78748
North	37	31	78610, 78705, 78722, 78723, 78731, 78751, 78752, 78753, 78754, 78756, 78757, 78758
Total In-Person	134	96	
Virtual Open House	1,442 site visits; 1,183 unique site visits	298	78758, 78757, 78752, 78751, 78748, 78745, 78741, 78736, 78729, 78727, 78722, 78705, 78704, 78703, 78702, 78701, 78660 (gathered from the 42% of users who opted to complete an online profile)
TOTAL	1,317	394	

Participation by zip code residence along the corridor was highest in central segments, followed by northern segments. (Figure 1).

Figure 1 Open House Comment Participation by Zip Code



What We Heard

The Project Connect team offered participants the opportunity to comment through three channels: (1) workshop discussion; 2) community survey made available at meetings; and, (3) online survey format made available through the Project Connect Virtual Open House.

Our observation on program status is that the public is beginning to grasp the concept that Project Connect is a large-scale endeavor that comes with trade-offs. The survey results reflect this sentiment as shown below.

The following summarizes the combined feedback gathered through both survey tools; 394 participants interacted with the survey in whole or in part. The *n* values above each graph demonstrate the number of responses analyzed by question. Record of all comments received, including open response comments, is included in Appendix E.

Figure 2 It is important to ensure that the Orange Line operates in its own dedicated space (transitway), free of other conflicts. (n=207)

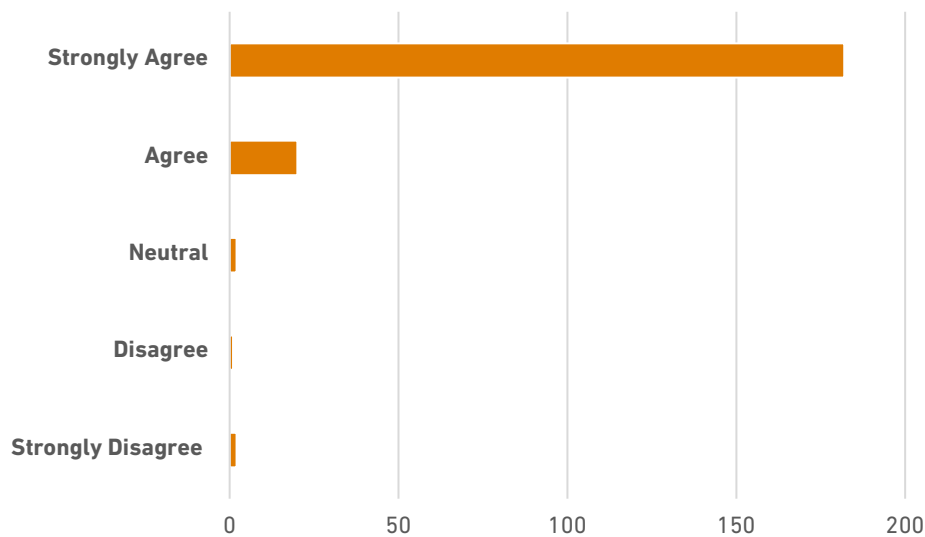


Figure 3 The approach to early evaluation of transitway options for detailed analysis using a combination of right-of-way and station area evaluations is appropriate. (n=167)

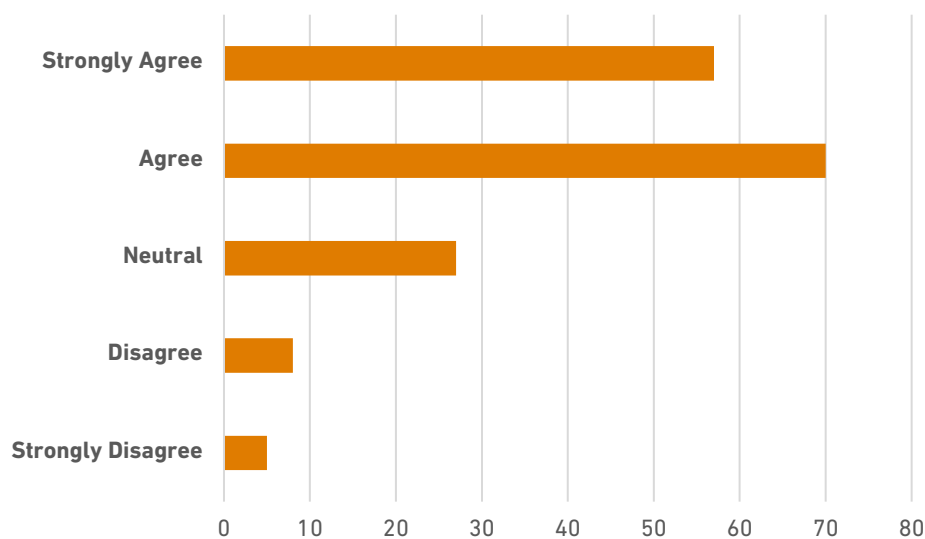


Figure 4 It is important that the Orange Line connects with other lines to form a comprehensive, high-capacity and frequent transit network. (n=208)

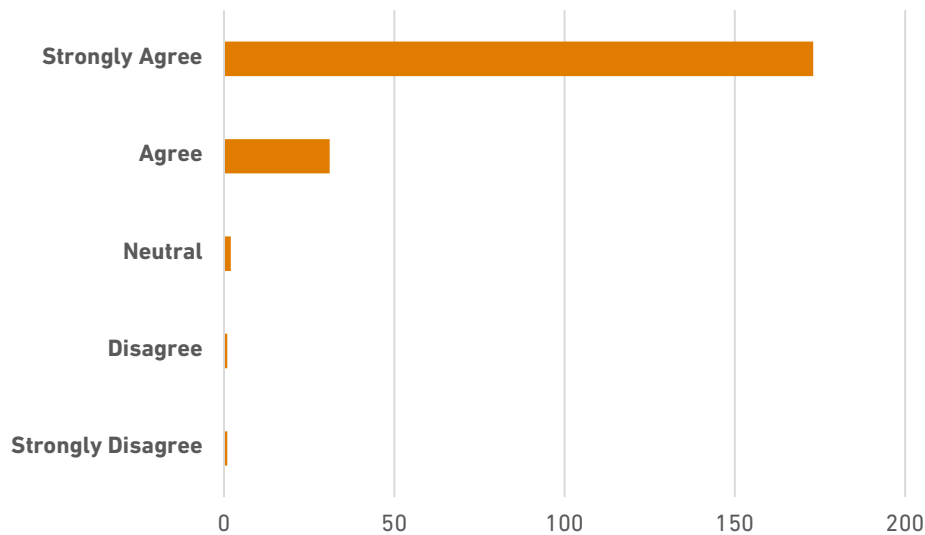


Figure 5 The total cost of the Orange Line and other high-capacity transit lines must consider both the construction and long-term operation and maintenance costs. (n=201)

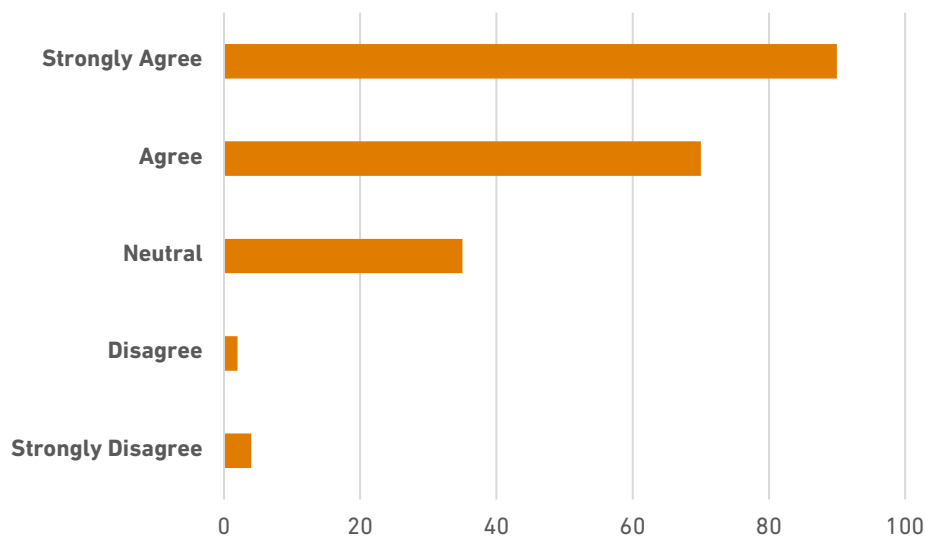


Figure 6 The approach to evaluating and rating potential station areas is appropriate. (n=166)

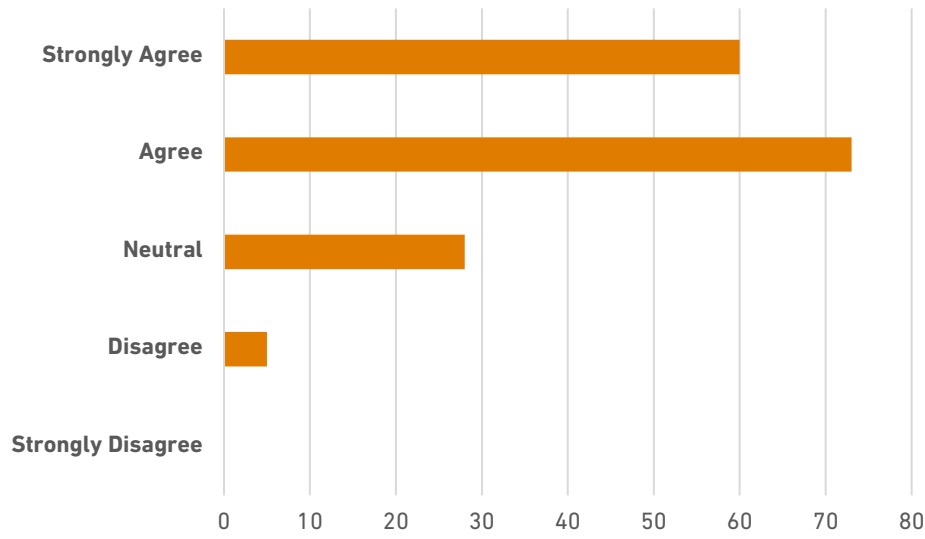


Figure 7 The ratings assigned to potential station areas are appropriate. (n=153)

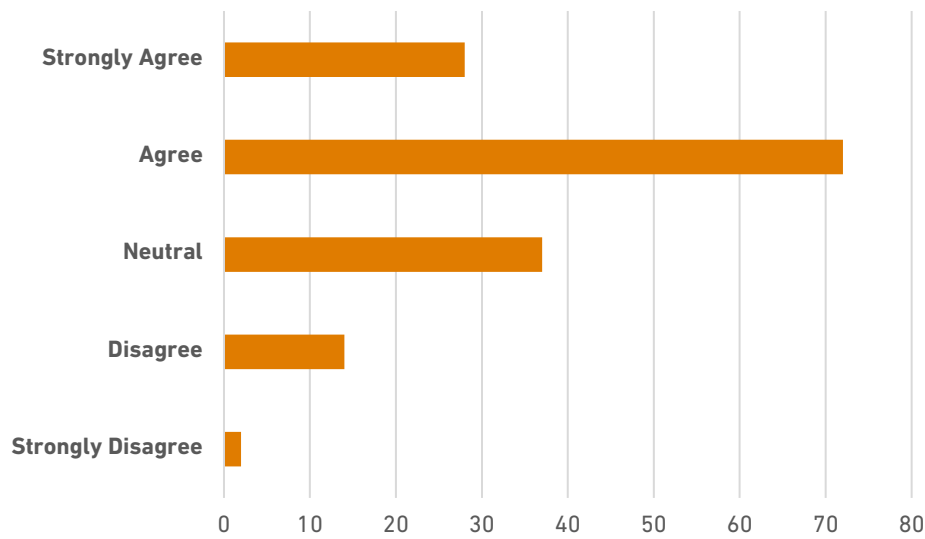
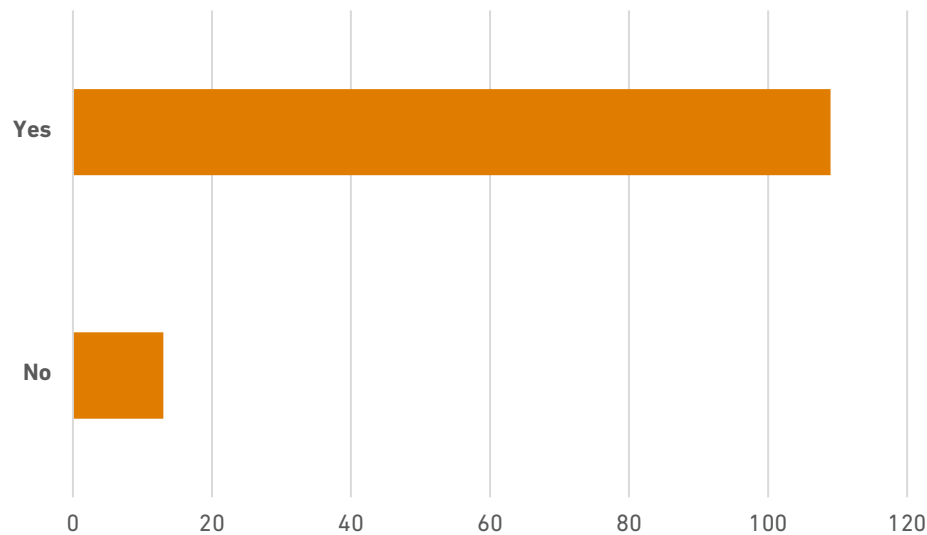


Figure 8 Do you agree with the proposed station locations? (n=122)



Respondents were also asked to evaluate trade-offs in areas where space is constrained. They were asked to rank the options below in order of importance with '1' being 'most important' to prioritize to '8' being the 'least important'.

- Operation of cars
- Use of bikes
- Use of scooters
- Use of parking
- Changes to traffic signal timing
- Right-of-way acquisition
- Timed implementation
- Construction Impacts

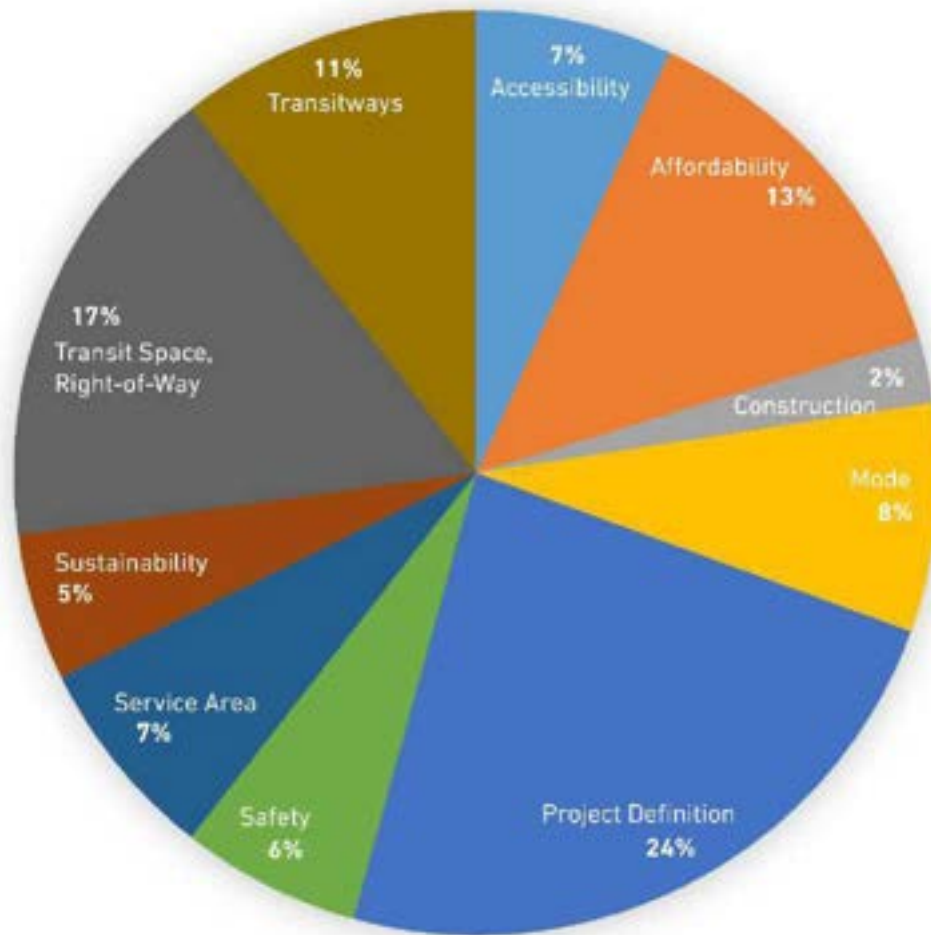
Because neither the paper survey nor the online survey “forced” the respondent to use all 8 numbers, and because the online survey allowed multiple options to be given the same rank, the results of this exercise are mixed. We can report that, of the 185 respondents who completed the exercise, 'Use of Bikes' and 'Right-of-way Acquisition' were ranked most often as top items from the list to prioritize.

In addition to the quantitative results above, participants were given opportunities to elaborate on their responses and/or to provide additional comments. These comments were reviewed by the outreach team and the technical team for grouping into one or more of the following categories:

- **Affordability:** Respondent discussed the role of transit in household budgets, overall affordability, and connecting the people who most need it to jobs.
- **Sustainability:** Respondent discussed the role of transit in overall transportation sustainability, and/or discussed emerging technologies.
- **Safety:** Respondent discussed the safety of cyclists, pedestrians and vehicles as they interact with the transit system.

- **Accessibility:** Respondent discussed how users will access the transit system, often referred to as first-mile/last-mile and/or discussed access to transit for the disabled and/or elderly.
- **Service areas:** Respondent discussed alternative areas of transit service, Capital Metro's existing transit system, and/or where the Orange Line project could be expanded.
- **Construction:** Respondent discussed the impacts of construction on existing transit, businesses and residents.
- **Mode:** Respondent discussed the benefits and/or drawbacks of various modes, including Bus Rapid Transit (BRT), Light Rail (LRT), and/or Automated Rapid Transit (ART).
- **Transit space, right-of-way:** Respondent discussed how transit fits into the overall space for transportation and/or the benefits and/or drawbacks of making more space for transit through the acquisition of right-of-way.
- **Transitways:** Respondent discussed benefits and/or drawbacks of providing dedicated space for transit, and/or discussed the need for faster, more reliable transit.
- **Project definition:** Respondent discussed the purpose and need for the project, and/or how the project is defined. Respondent may have shared a personal transit use story or commented on how the proposed project should operate (hours of service, frequency, connections to other transit corridors, station locations, etc.).

Figure 9 Categories of Comments provided via Open Response



Lessons Learned and Next Steps

Overall, the process used to drive key neighborhood and stakeholder participation to the workshops via personalized discussions/presentations was effective in increasing participation generally and, more specifically, increasing representation at workshops from these important groups. This tactic will be carried forward into the third round of stakeholder engagement.

Many participants and members the project team commented on the effectiveness of the workshop format both for eliciting engagement and facilitating useful feedback. This format will be considered for future engagement events.

The next phase of outreach will begin in late October and wrap up by mid-November.

Appendix A: Materials and Facilitator Guide

WELCOME

PROJECT CONNECT WORKSHOP

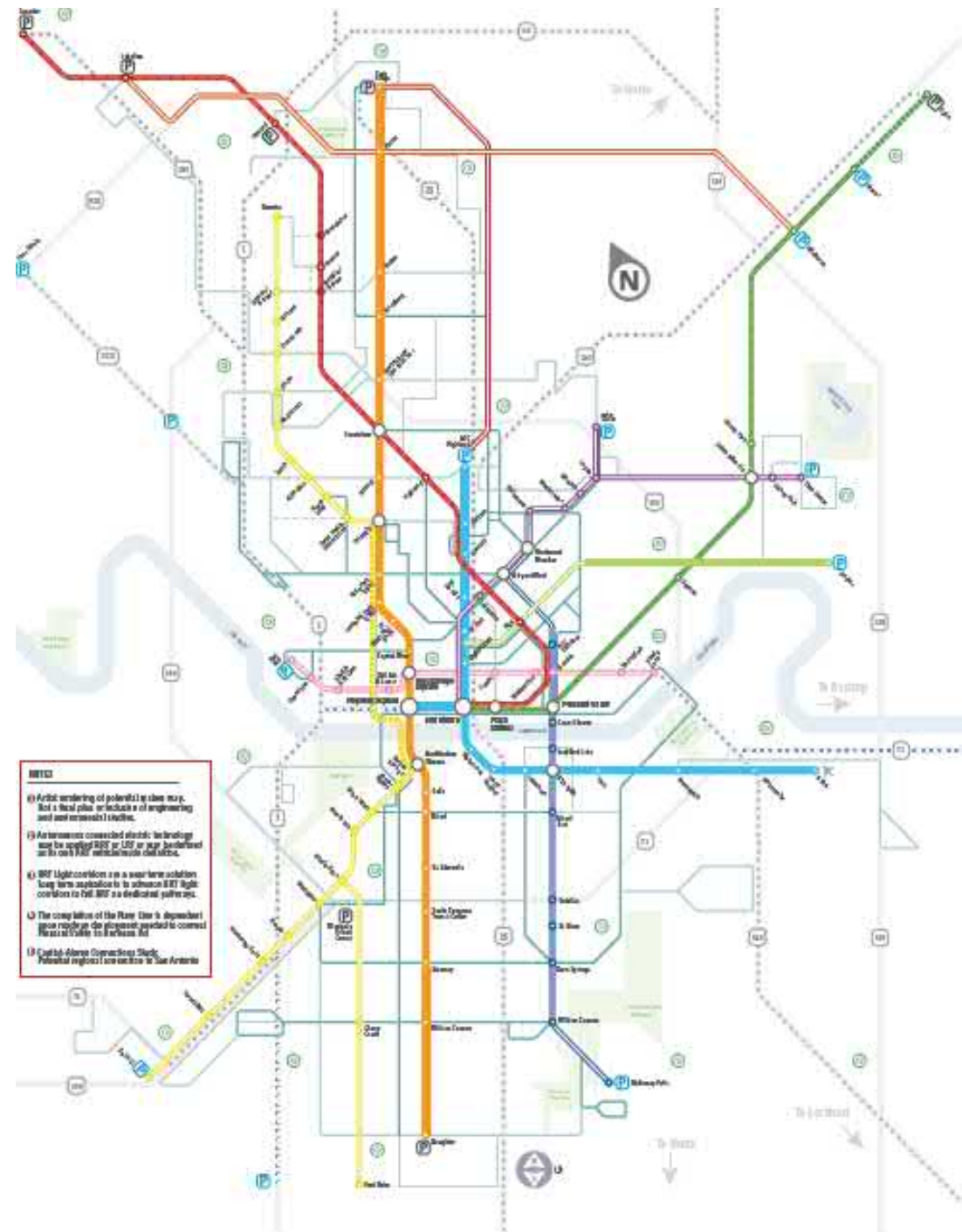
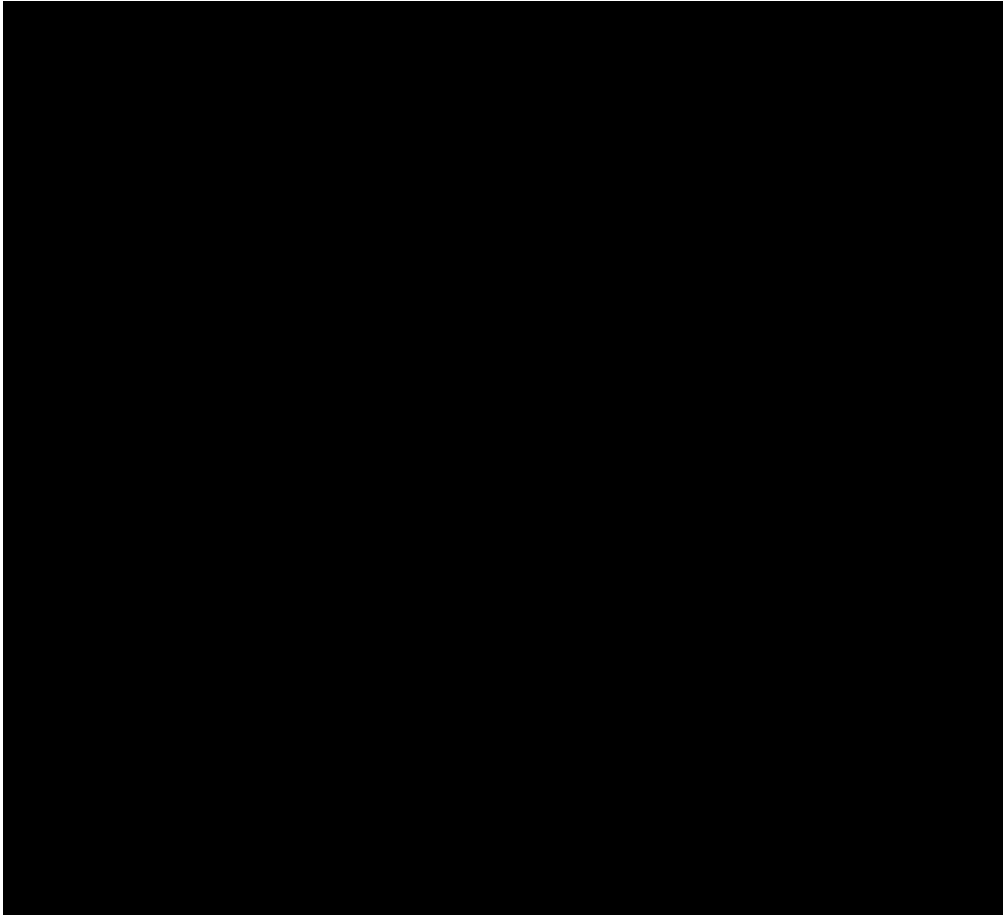
JULY 18, 2019

ORANGE LINE

RELIABLE. FREQUENT. CONGESTION-PROOF.



PROJECT CONNECT LONG-TERM VISION PLAN



ORANGE LINE

>>PROPOSED PROJECT AT A GLANCE

- The proposed Orange Line would be a **north/south transit line**.
- Would provide **high-capacity service within dedicated transitways**.
- Would establish the **north/south link** to the broader Project Connect system.
- Would **operate along the existing 801 route**.



WHY?

ORANGE LINE

PURPOSE

The purpose of the Orange Line high-capacity transit investment is to meet growing corridor travel demand with a **reliable, safe, cost-effective, time-competitive, state-of-the-art** high-capacity transit option that is congestion proof.

NEEDS

Growth along the Orange Line



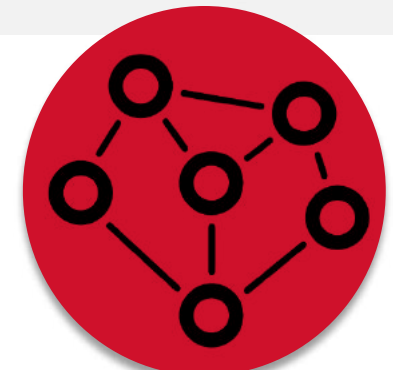
Provide better transit options linking affordable housing/jobs



Limited ability to increase roadway width



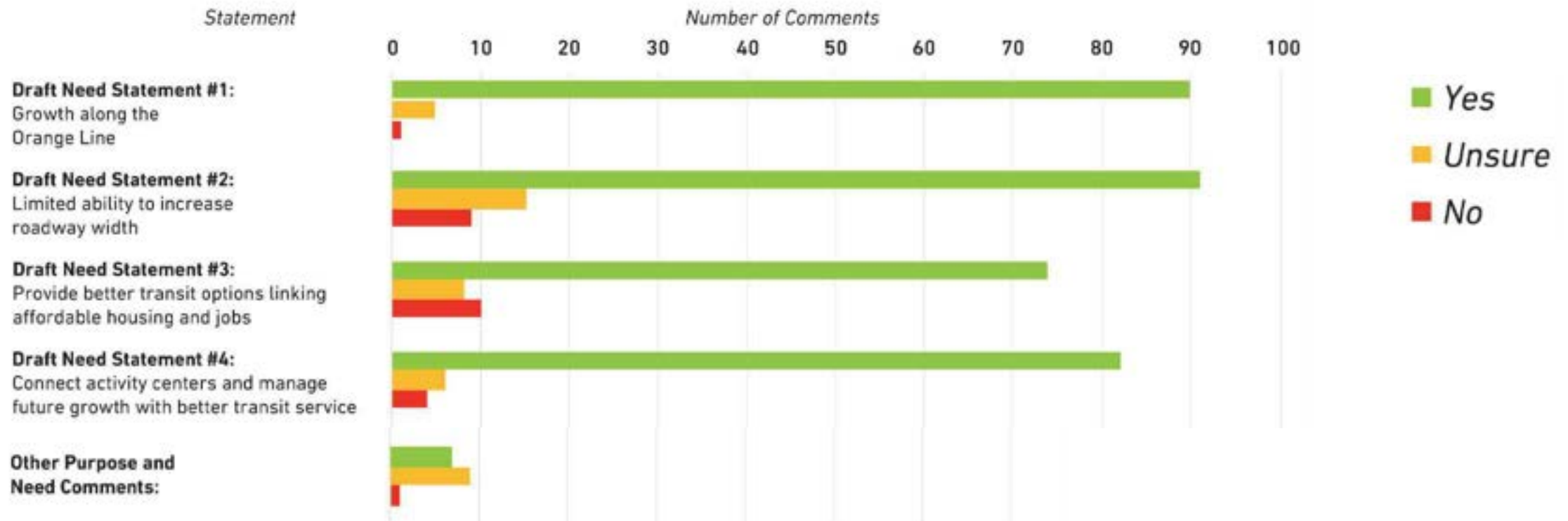
Connect activity centers and manage future growth with better transit service



PURPOSE & NEED

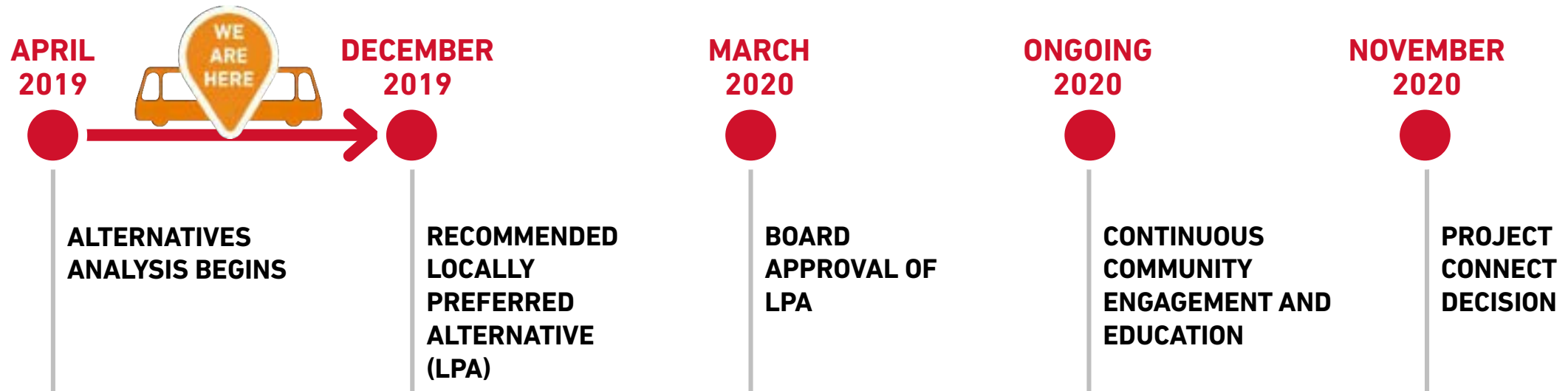
WHAT WE HEARD

Do you agree with the draft need statement?



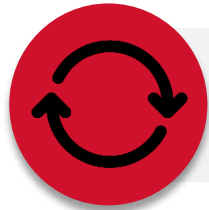
Total online and event participation: 3,163
 Purpose and Need Comments: 665
 Comments Related to Draft Need Statements #1-4: 498

ORANGE LINE PROPOSED SCHEDULE



ORANGE LINE SEGMENTS

How do we study different needs along the corridor?



Commonality between segments



Neighborhood character



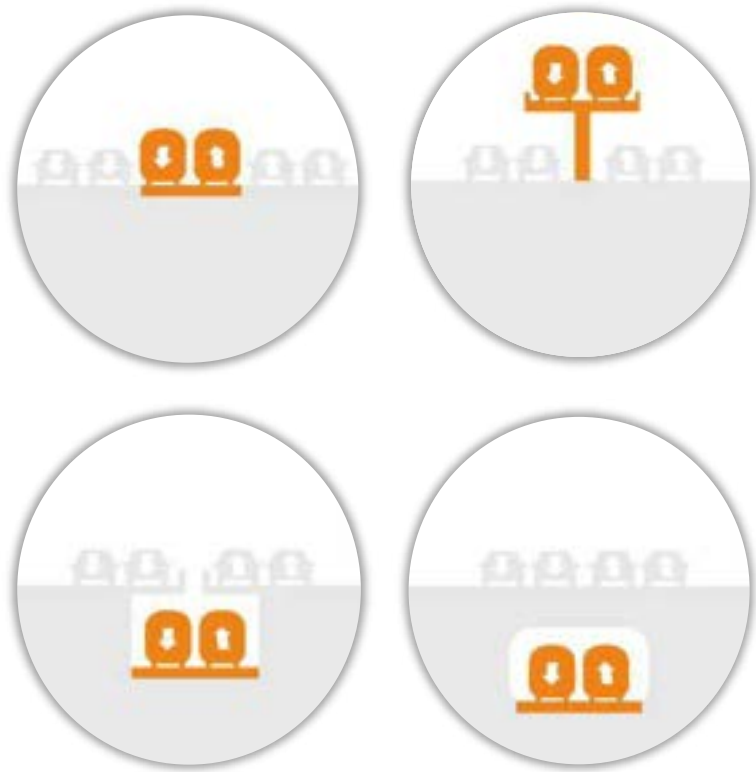
Right-of-way characteristics



ORANGE LINE

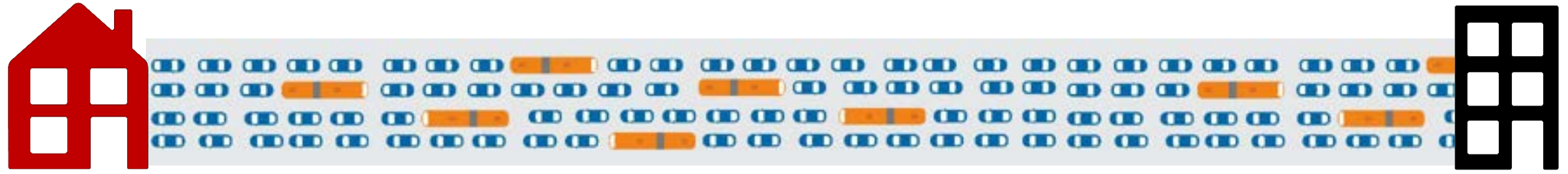
PLANNING CONSIDERATIONS

Studying our options for transitway location, station areas, and overall design for how we move people on the Orange Line.

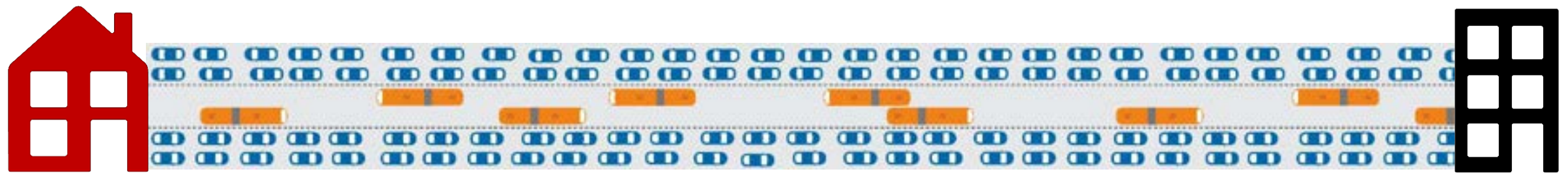


ORANGE LINE DEDICATED TRANSITWAYS

Transit in mixed traffic:



Transit protected from traffic in a dedicated transitway:

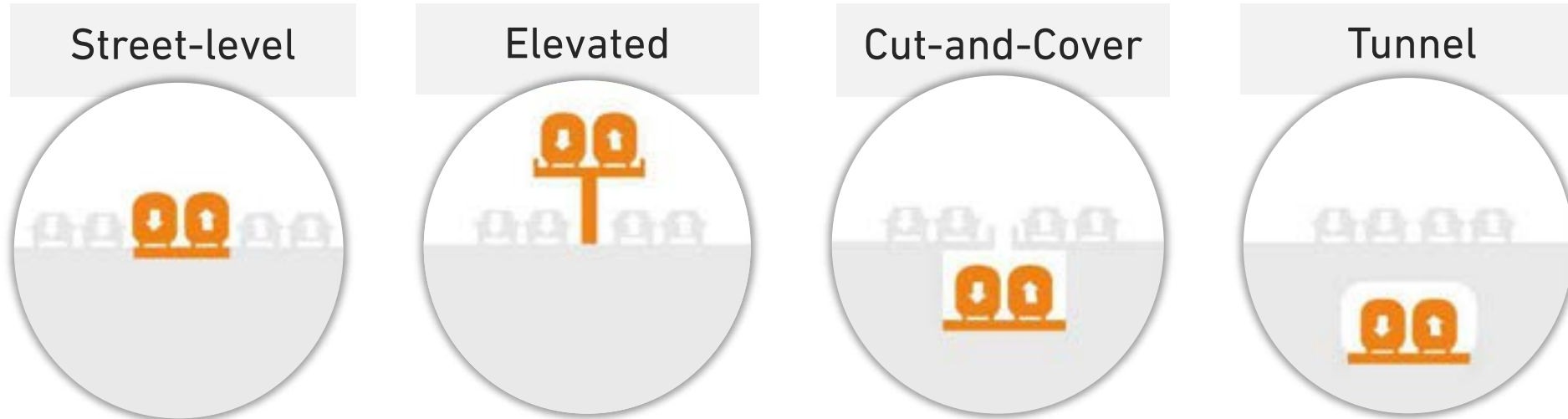


Major time-saving benefits for transit and non-transit riders

ORANGE LINE

DEDICATED TRANSITWAYS

What are our options for making transit free of traffic?



Lower cost;
potentially slower
travel times

Higher cost; potentially faster travel times
Sometimes used in places where roadway space is narrow

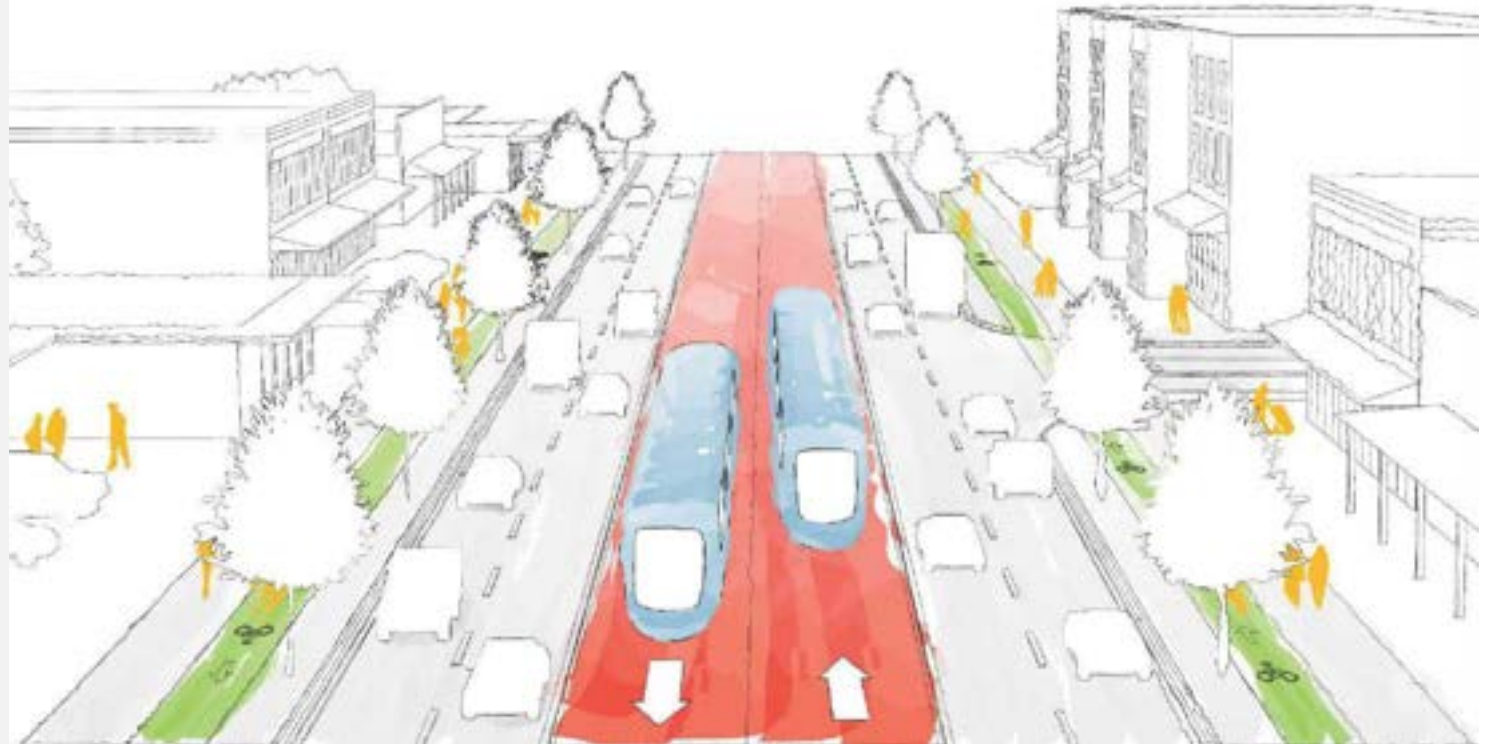
Dedicated transitways support both BRT and LRT

ORANGE LINE

STREET-LEVEL TRANSITWAY

What is a street-level transitway?

- A dedicated transitway running down the middle of the street
- Operations are impacted by traffic signals, pedestrians, bikes, intersections, and other street-level uses

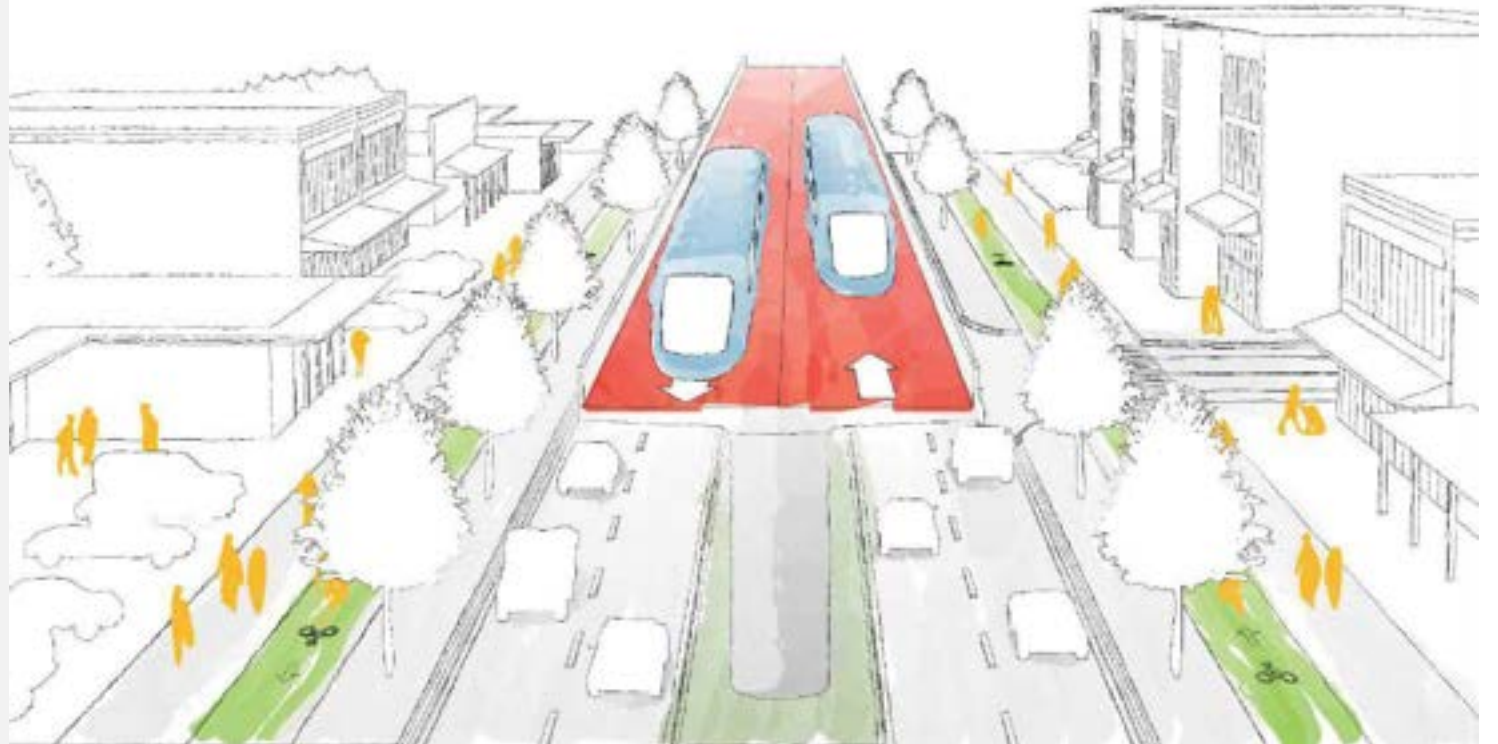


ORANGE LINE

ELEVATED TRANSITWAY

What is an elevated transitway?

- A dedicated transitway built above street-level along an existing street
- Stations are above street level and are accessed by stairs, escalators, and/or ADA elevators

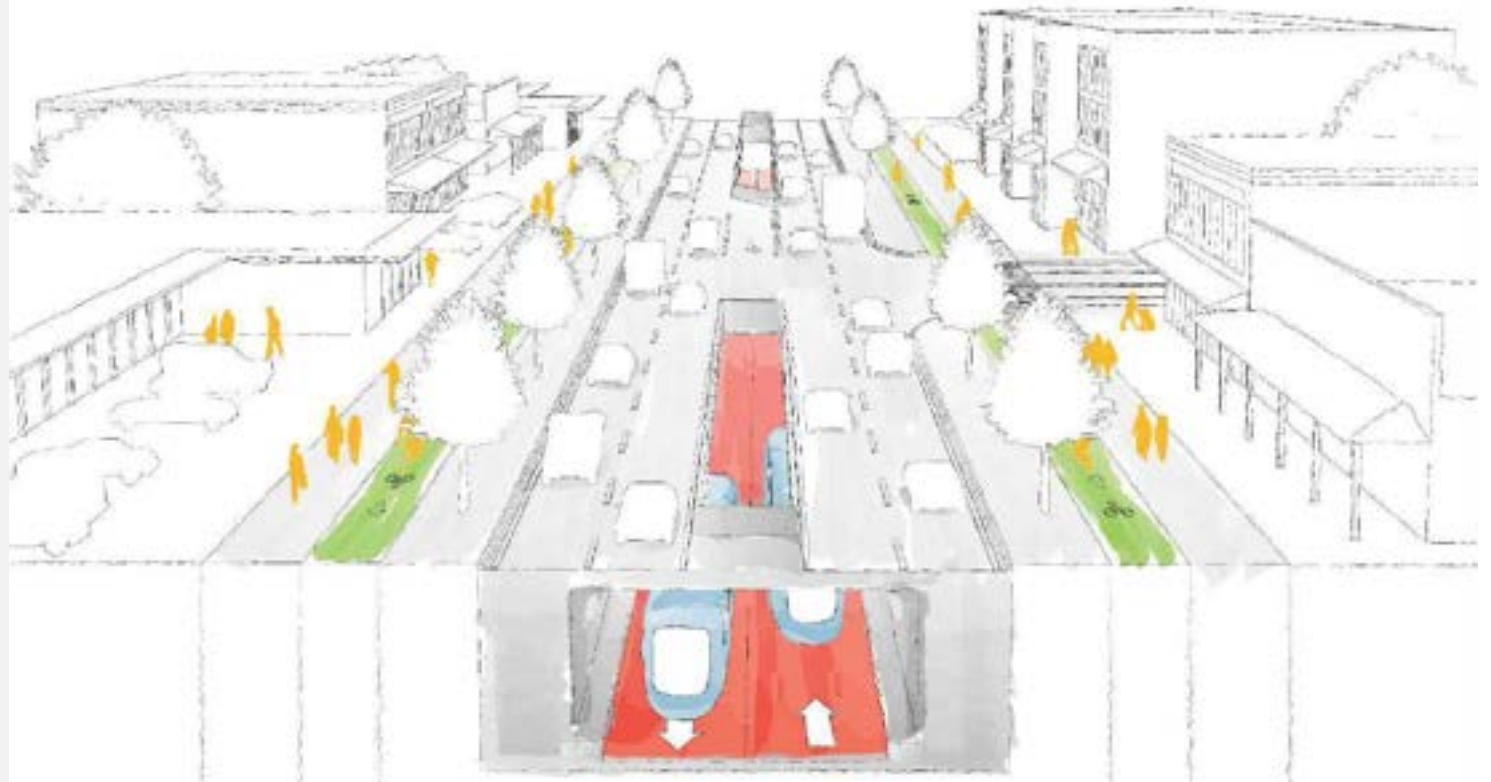


ORANGE LINE

CUT-AND-COVER TRANSITWAY

What is a cut-and-cover transitway?

- A dedicated transitway directly under the roadway with a road “lid” on top
- Stations are underground, and are accessed by stairs, escalators, and/or ADA elevators

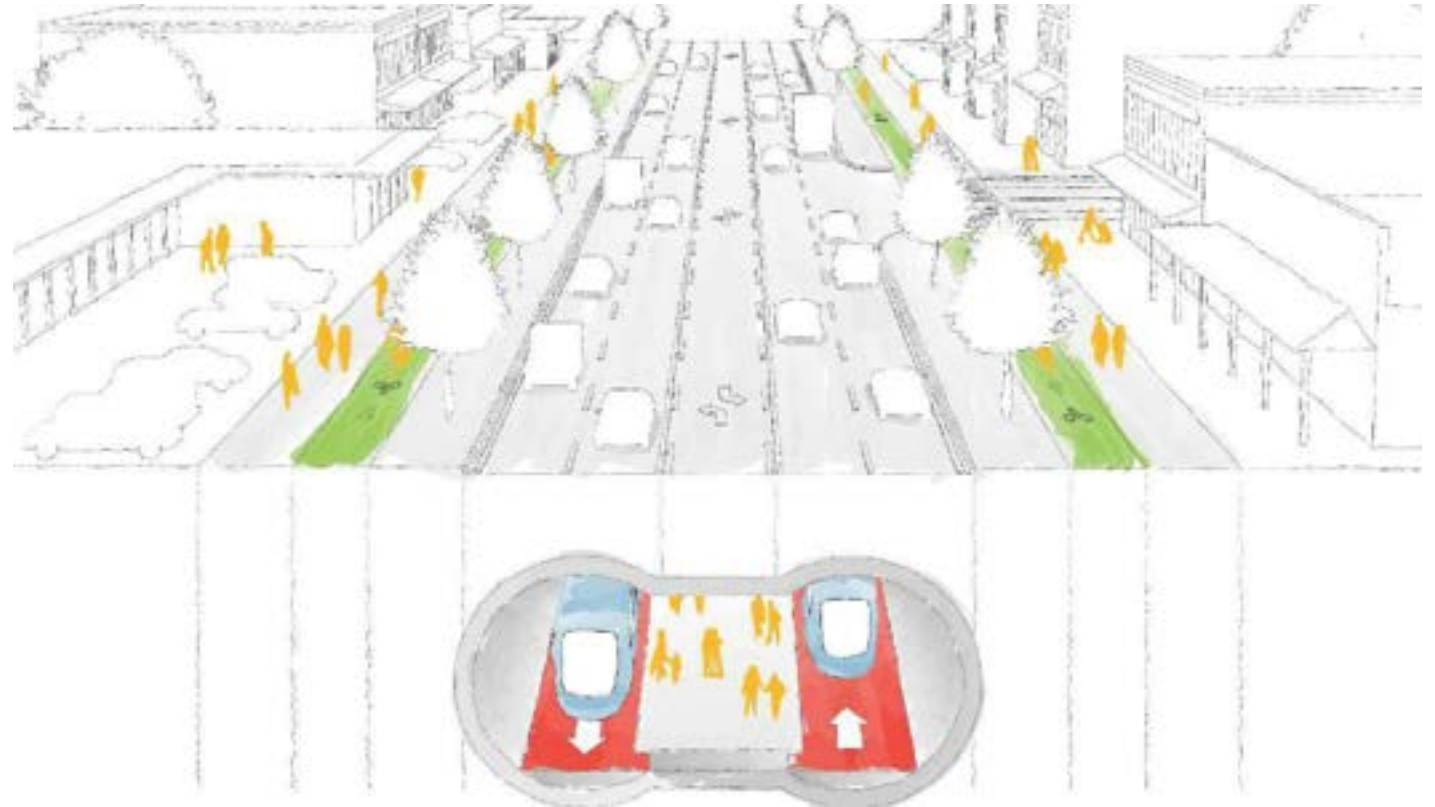


ORANGE LINE

TUNNEL TRANSITWAY







What is a tunnel transitway?

- A dedicated transitway under the road, built by boring a tunnel through the ground
- Stations are underground, and are accessed by stairs, escalators, and/or ADA elevators



ORANGE LINE

COMPARING TRANSITWAY OPTIONS

	Street Level	Elevated	Cut-and-Cover	Tunnel
 SPEED/RELIABILITY	Moderate	High	High	High
 RIGHT-OF-WAY/LANE IMPACTS	Moderate	Moderate	Moderate	Low
 COST	\$ - \$\$	\$\$	\$\$\$	\$\$\$
 STATION ACCESS BARRIERS	Low	Moderate	Moderate	Moderate
 CONSTRUCTION IMPACT	<i>Varies from MODERATE to HIGH depending on specific location characteristics</i>			
 OPPORTUNITY TO ENHANCE STREETSCAPE	Moderate	Low	Moderate	High

ORANGE LINE

EVALUATING OUR OPTIONS

How do we decide which transitway options to consider for each segment?



Question 1: How much space is there?



Question 2: What are the station areas like?

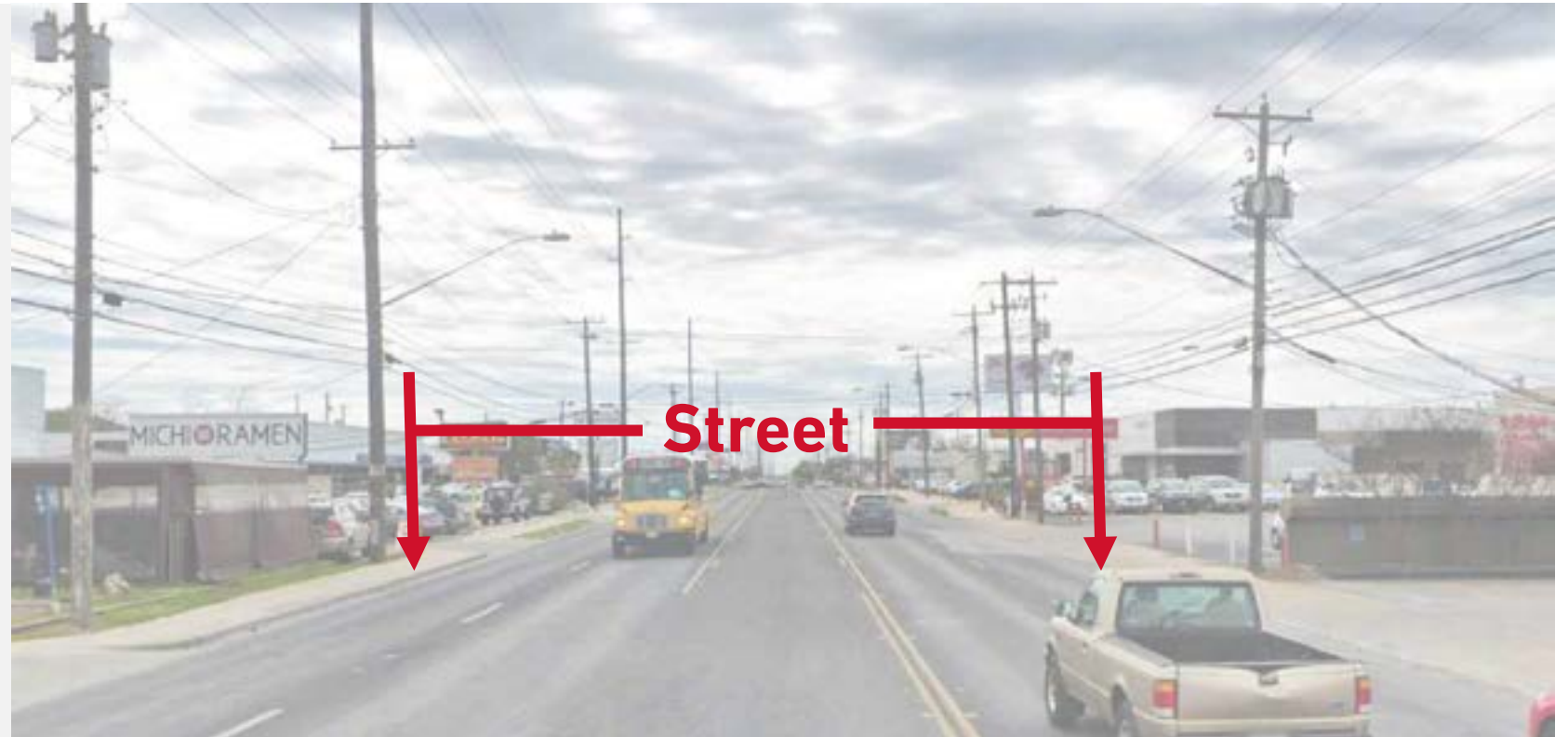
ORANGE LINE

SPACE FOR TRANSPORTATION



What is the difference between the **street** and the **right-of-way (ROW)**?

When we talk about the **street**, we usually mean **the space between the curbs**. This space is shared by cars, trucks, buses, and sometimes bicycles.



ORANGE LINE

SPACE FOR TRANSPORTATION



What is the difference between the **street** and the **right-of-way** (ROW)?

When we talk about the **right-of-way**, we mean **all of the publicly-owned road space**. This includes the street as well as the sidewalks, the utility areas, and the landscaped areas along the road.



ORANGE LINE SPACE FOR TRANSPORTATION



The amount of space available for transportation facilities, or the right-of-way (ROW), varies throughout the Orange Line corridor.

NARROW
(~80' of right-of-way)



Guadalupe at 32nd
(Segment 3)

MEDIUM
(~100' of right-of-way)



N. Lamar at Rundberg
(Segment 1)

WIDE
(~120' of right-of-way)



S. Congress at Sheraton
(Segment 6)

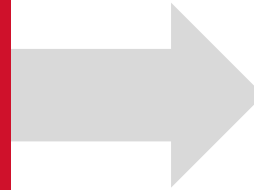
ORANGE LINE

STATION AREA EVALUATION



Over the past few years, we studied potential station areas closely to understand how they support transit today, or could support it in the future.

What is the area around each station like today, and what will it be like in the future?



Station area rating: what level of investment in new transit service could the area support?

- *Who lives and works nearby, and what are the major destinations in the area?*
- *How accessible is the area to bicycles, pedestrians, and other transit services?*
- *What is the potential for new growth and/or redevelopment in the area?*

High

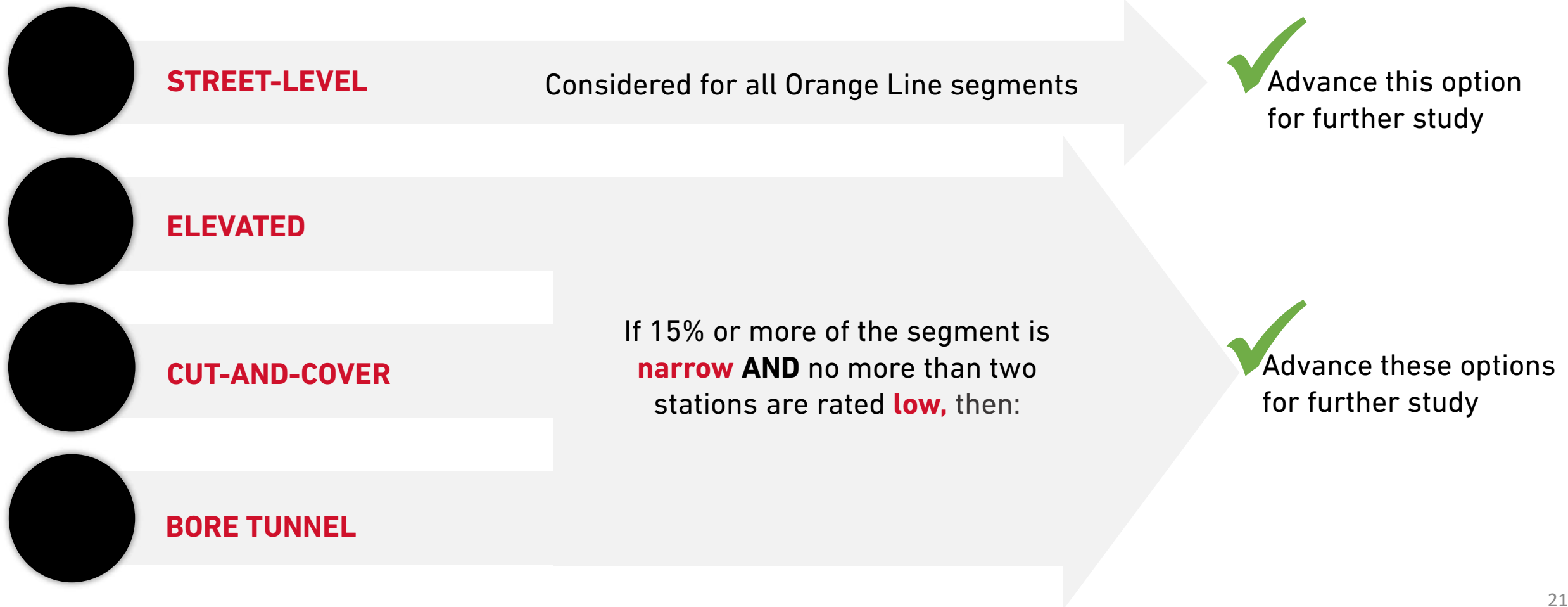
Medium

Low

SEGMENT EXAMPLE

EVALUATION METRICS

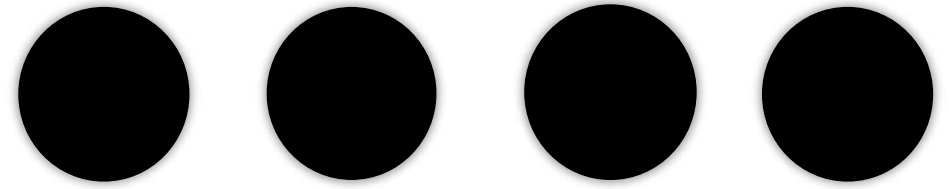
How do we decide which transitway options to consider for each segment?



HOW IT ALL COMES TOGETHER

EVALUATING EACH SEGMENT

Which transitway options will be carried forward into the next phase for further study?



Street-level **Elevated** **Cut-and-cover** **Tunnel**

	Street-level	Elevated	Cut-and-cover	Tunnel
1. North Austin	✓	X	X	X
2. North Central	✓	✓	✓	✓
3. Central Austin	✓	✓	✓	✓
4. Downtown	✓	✓	✓	✓
5. SoCo	✓	✓	✓	✓
6. South Central	✓	X	X	X
7. South Austin	✓	X	X	X



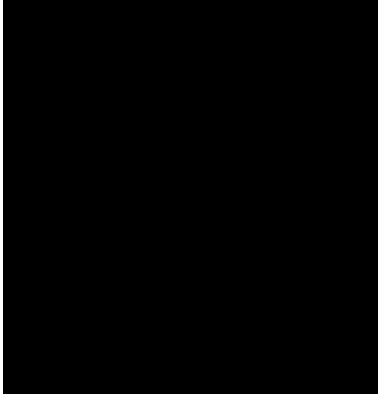
WORKSHOPS

BREAKOUTS



Join a discussion at the breakout tables along the wall to dive-in to your area(s) of interest and explore segment criteria.

HOW DO I PROVIDE FEEDBACK?



Visit ProjectConnect.com to view our virtual open house, provide feedback, and sign up to receive updates.



Visit the [Project Connect Community Office](#) located at 607 Congress Ave.

Stop by any time between 9 a.m. and 4 p.m. to talk with project staff, ask questions and provide feedback.

Orange Line Community Workshop Survey

Ragsdale Center at St. Edwards University

July 18, 2019

Name: _____ Email: _____ Zip code: _____

1. It is important to ensure that the Orange Line operates in its own dedicated space (transitway), free of other conflicts. *Please circle below.*

Strongly Agree Agree Neutral Disagree Strongly Disagree

2. In areas where space is constrained, trade-offs may be necessary to provide safe, fast and reliable transit and minimize conflicts.

Please rank in order of importance with '1' being 'most important' to prioritize to '8' being the 'least important.' Note: Pedestrian facilities are critical to transit access, so they are not listed.

- ___ Operation of cars
- ___ Use of bikes
- ___ Use of scooters
- ___ Use of parking
- ___ Changes to traffic signal timing
- ___ Right-of-way acquisition
- ___ Timed implementation
- ___ Construction impacts

3. The approach to early evaluation of transitway options using a combination of right-of-way and station area evaluations is appropriate. *Please circle below.*

Strongly Agree Agree Neutral Disagree Strongly Disagree

4. It is important that the Orange Line connects with other lines to form a comprehensive, high-capacity and frequent transit network. *Please circle below.*

Strongly Agree Agree Neutral Disagree Strongly Disagree

5. The total cost of the Orange Line and other high-capacity transit lines must consider both the construction and long-term operation and maintenance costs. *Please circle below.*

Strongly Agree Agree Neutral Disagree Strongly Disagree

6. The approach to evaluating and rating potential station areas is appropriate. *Please circle below.*

Strongly Agree Agree Neutral Disagree Strongly Disagree

7. The ratings assigned to potential station areas are appropriate. *Please circle below.*

Strongly Agree Agree Neutral Disagree Strongly Disagree

8. Do you agree with the proposed station locations? *Please circle one.* Yes No

9. Is there another station location that we should consider?

Additional Comments:

Workshop Dates

Doors open for each workshop at 5 p.m., with presentation and discussion from 5:30 – 7 p.m.

Central Austin Workshop: July 17, 2019

Austin Central Library Special Event Center, 710 W. Cesar Chavez St., Austin, 78701

South Austin Workshop: July 18, 2019

Ragsdale Center at St. Edward's University, 3001 South Congress Ave., Austin, 78704

North Austin Workshop: July 24, 2019

North Austin YMCA, 1000 West Rundberg Ln., Austin, 78758

Workshop Format

Upon arrival, guests will sign in and be assigned a starting table using nametags. After the presentation is complete, they will rotate through the three discussion tables for 15-minute intervals. They will stay at their third table for the report out portion.

Reference exhibits and project maps will be clustered around the three tables.

Workshop Run of Show

Time	Activity
3:30 – 5	Team arrives; set up
5:00 – 5:35	Doors open, check in
5:35 – 5:55	Presentation (20 min.)
6 – 6:13	Table 1/Corridor Conversations
6:13 – 6:15	Table 1 wrap and guests rotate
6:15 – 6:28	Table 2/Station Location
6:28 – 6:30	Table 2 wrap and guests rotate
6:30 – 6:43	Table 3/Transitway Locations
6:43 – 6:45	Table 3 wrap up; guests stay in place
6:45 – 7	Staff report outs by topic
7 – 7:30	Staff available for questions
7:30 – 8	Pack up; depart

Technical and Facilitator Guide

The goal of these workshops is to hear and record organic thoughts of and interactions between community members on these topics.

The role of the technical staff at each table is to field and answer questions and correct misconceptions. The role of the facilitator is to take notes, facilitate the activities, and manage the conversation to avoid allowing one person to dominate discussions and get conversation back on subject if it goes too far out-of-bounds. Either team member can do the report-out at the end.

Time will extremely tight! It's up to the entire team to listen and respond to the event manager to ensure movement between tables is efficient and on time.

Conversation can proceed organically as long as it is on topic. To get it started, the technical staff member will briefly walk through the exhibits at his/her station, and then kick off the discussion by asking questions on his/her topic.

Corridor Conversations

Activity: Large version of simplified Orange Line map printed on foam core. Markers will be available for the facilitator to make notes directly on the map that reflects discussion questions/conversations.

Q1: What do you think about what you heard during the presentation?

Q2: What about the Orange Line is exciting? What concerns you?

Q3: What opportunities for first mile/last mile connections do you see?

[Point people to survey]

Station Locations

Activity: Large version of simplified Orange Line map printed (with station ratings indicated) on foam core. Participants will place a green sticky dot on the station location where they would most often get on the Orange Line (home station), and a red sticky dot on the station location where they would most often get off the Orange Line (destination station). Other materials: station location analysis report, map of all stations studied.

Q1: Do you agree with the proposed station locations? Is there another station location that we should consider?

Q2: Let's focus first on the segments closest to us. What do you think about our rating of the stations in the [north/south/central] segments? [Follow up with thoughts on the other segments]

Transitways

Activity: Flip chart, one page per transitway option and sections for "pros" and "cons". Facilitator will generate discussion on the pros and cons of each option and record responses live. Other materials: results board for the seven segments.

Q1: What are some pros and cons that come to mind for the [at grade/elevated/below grade] transitway option?

Q2: Let's focus first on the segments closest to us. What do you think about the transitway options we eliminated in the [north/south/central] segments? [Follow up with thoughts on the other segments]

Q3: What areas come to your mind as good candidates for an elevated option? What about for an underground option?

Appendix B: Photos



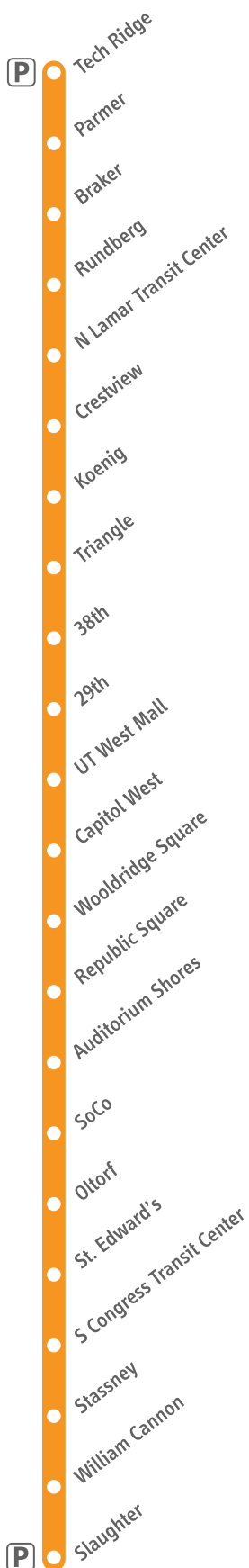








Appendix C: Notifications



Project Connect Workshop

Tell us what you think! The Orange Line will travel from North Lamar to South Congress. You can help guide our design plans!

Central Austin Workshop

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Austin Central Library
710 W. Cesar Chavez St.
Doors open at 5 p.m.

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North Austin Workshop

July 24, 5:30 – 7 p.m.
North Austin YMCA
1000 W. Rundberg Lane
Doors open at 5 p.m.

Please RSVP at feedback@projectconnect.com or call 512-369-6210 with your name, email address and preferred workshop date.

This meeting will be accessible to people with disabilities. If translation, signing services or other special accommodations are needed, please contact Courtney Black at courtney.black@capmetro.org.



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La fundación Carrying Hope, que ayuda a chicos del sistema de hogares temporales, celebra su tercer aniversario con un chapuzón y actividades divertidas el próximo **sábado 13 de julio**, de 9am. a 11am. La cita será en la alberca municipal Bartholome. Habrá pastel, pintura de caritas, juegos y concursos. La entrada es gratuita, pero se sugiere donar un 'paquete Hope' que será destinado a los chicos que son separados de sus hogares. Estos paquetes son mochilas con artículos como pañales, biberones, toallas húmedas, medias y juguetes pequeños. Esta es una gran oportunidad para disfrutar en familia y contribuir con una noble causa. **EMN**

DÓNDE

1800 E. 51st. St., Austin (TX 78723)

El gran problema nacional de salud

En Texas, quitarse la vida es la segunda causa de muerte entre los jóvenes

TANIA DEL ÁNGEL PICH
editor@elmundonewspaper.com

Durante la adolescencia y la juventud los seres humanos experimentamos una serie de cambios físicos, mentales y de personalidad; por ello, aquellas son consideradas las etapas más difíciles del crecimiento de una persona. Para muchos jóvenes, las adversidades vividas durante estos cambios pueden generar trastornos insuperables y pensamientos negativos que desencadenan atentados contra su vida.

El suicidio es una de las principales causas de muerte en este país. Cada semana, aproximadamente 130 jóvenes mueren como consecuencia del suicidio, un problema nacional de salud que puede prevenirse.

La Jason Foundation Inc. (JFI) es una organización de nivel nacional sin fines de lucro cuyo objetivo es terminar con las altas ci-

fras del suicidio a través de programas educativos y de concientización a la comunidad.

La JFI nació después de que Jason, hijo de Clark Flatt, presidente de la organización, se suicidara. El trágico episodio sucedió hace más de 20 años. "Trabajamos para prevenir la epidemia silenciosa del suicidio juvenil; educamos y hacemos labor de concientización entre los jóvenes, los maestros, trabajadores juveniles y padres de familia, con hermanas y recursos que les ayudan a identificar a quienes estén en riesgo de quitarse la vida", comenta para **EL MUNDO NEWSPAPER**, Evelyn Hill, directora de la división mayor de la Jason Foundation.

La JFI ofrece cursos y módulos de capacitación gratuitos en su página Web (jasonfoundation.com) para informar y educar sobre los peligros reales entre los jóvenes con crisis emocionales. "El objetivo de nuestro programa es proporcionar materiales educativos que ayuden a reconocer las señales de preocupación que puedan demostrar que un joven, posiblemente, esté luchando con problemas que no se abordan o no se tratan, lo que podría derivar en pensamientos suicidas", señala Hill.



DRAMÁTICO. El suicidio es una reacción trágica a situaciones de vida estresantes; más trágico aún es que el suicidio puede prevenirse.

DEBE SABERLO

El número de la Línea Nacional de Prevención del Suicidio es el 1-800-273-TALK (8255), es gratuita, tiene atención bilingüe y está disponible las 24 horas. Su llamada será dirigida al centro de crisis más cercano a usted.

EL DATO

Para más detalles de la labor de la Jason Foundation Inc. en jasonfoundation.com ó en el (615) 264-2323.

FACTORES DE RIESGO

Más adolescentes y adultos jóvenes mueren por suicidio que por la combinación de enfermedades como el cáncer, padecimientos cardíacos, SIDA, defectos de nacimiento, derrame cerebral, neumonía, influenza y enfermedades pulmonares crónicas.

La depresión es una de las principales causas de quienes deciden suicidarse. Además, los trastornos mentales o adictivos se asocian con el 90% de los casos de

suicidio. Uno de cada diez jóvenes sufre de enfermedades mentales lo suficientemente graves como para verse afectados, pero menos del 20% recibe tratamiento.

Cuatro de cada cinco adolescentes que intentan suicidarse han dado señales claras de advertencia a través de sus palabras o de sus comportamientos. En Texas, el suicidio es la segunda causa de muerte entre niños y jóvenes de 10 a 24 años.

"El suicidio no suele tener un inicio repentino. Hay una serie de factores

estresantes que pueden contribuir a la ansiedad e infelicidad de un joven, lo que aumenta la posibilidad de un intento de suicidio: depresión, enfermedades mentales y abuso de sustancias; violencia y conflictos en el hogar, en la escuela o con los amigos", explica Hill y agrega: "Nunca ignore la amenaza del suicidio, observe si su hijo tiene cambios abruptos en el comportamiento, especialmente en el ánimo y humor, si tiene episodios de llanto y variaciones notorias en el rendimiento escolar".

Project Connect Workshop

¡Díganos que piensa! La línea anaranjada recorrerá desde North Lamar hasta South Congress. ¡Usted puede ayudar a guiar nuestros planes!

Seminario del centro de Austin

July 17, 5:30 -7 p.m.
Austin Central Library
710 W. Cesar Chavez St.
Puertas abiertas a las 5

Seminario del sur de Austin

July 18, 5:30 -7 p.m.
Ragsdale Center at St. Edward's University
3001 S. Congress Ave.
Puertas abiertas a las 5

Seminario del norte de Austin

July 24, 5:30 -7 p.m.
North Austin YMCA
1000 W. Rundberg Lane
Puertas abiertas a las 5

Favor de confirmar su asistencia a, feedback@projectconnect.com o llame al 512-369-6210 con su nombre, correo electrónico y fecha preferida de seminario.

Esta junta / seminario sera accesible para personas discapacitadas. Si traducción, lenguaje de signos o servicios de apoyo especiales seran necesarios, favor de comunicarse con Courtney Black por correo electrónico: courtney.black@capmetro.org.



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Map showing the route of the Project Connect Workshop along South Congress Street in Austin, Texas. The route starts at North Lamar and goes south to South Congress. Key locations marked include Tech Ridge, Parmer, Braker, Rundberg, N Lamar Transit Center, Crestview, Koenig, Triangle, 38th, 29th, UT West Mall, Capitol West, Woodridge Square, Republic Square, Auditorium Shores, SoCo, Oltorf, St. Edward's, S Congress Transit Center, Stassney, William Cannon, and Slaughter.

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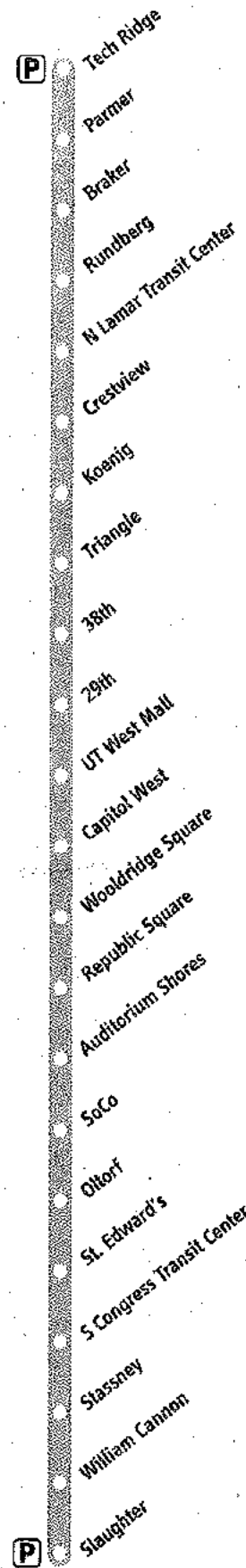
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Seminarios detallando ruta línea anaranjada

Le invitamos a "enrollarse las mangas," con sus compañeros miembros de la comunidad para asistirnos a evaluar alternativas para la línea anaranjada que recorrerá desde North Lamar hasta South Congress. ¡Usted puede ayudar a guiar nuestros planes!

LOCALIDADES DE LOS SEMINARIOS

Seminario del centro de Austin

17 de julio, 5:30 -7 p.m.
 Austin Central Library
 710 W. Cesar Chavez St.
 Puertas abren a las 5:00 p.m.

Seminario del sur de Austin

18 de julio, 5:30 -7 p.m.
 Ragsdale Center at St. Edward's University
 3001 S. Congress Ave.
 Puertas abren a las 5:00 p.m.

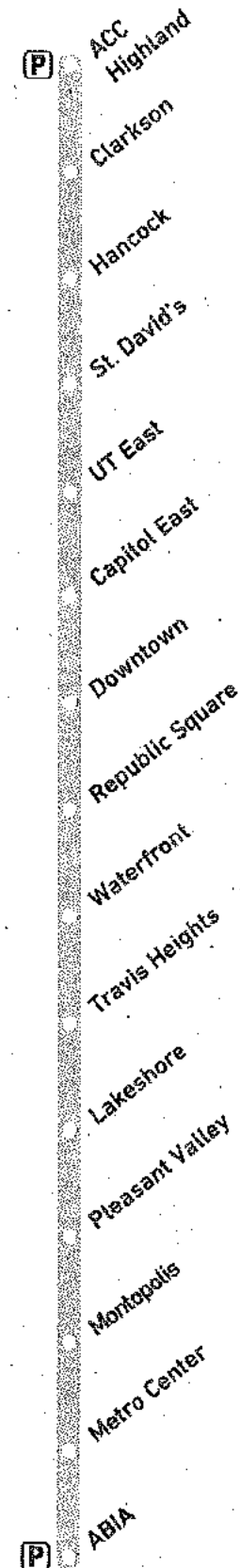
Seminario del norte de Austin

24 de julio, 5:30 -7 p.m.
 North Austin YMCA
 1000 W. Rundberg Lane
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Favor de confirmar su asistencia a bluelinefeedback@projectconnect.com, o llame al 512-369-6201 con su nombre, correo electrónico y día preferido para asistir.

¿No puede asistir?

Revise los materiales y envíenos comentarios en la junta pública virtual, disponible desde el 30 de julio hasta el 13 de agosto en projectconnect.com.



Seminarios detallando ruta línea azul

Le invitamos a "enrollarse las mangas," con sus compañeros miembros de la comunidad para asistirnos a evaluar alternativas para la ruta línea azul, una propuesta para la carretera de tránsito que podría conectar Austin Community College (ACC) Highland Campus a través del centro de Austin hacia Austin Bergstrom Aeropuerto Internacional (ABIA).

LOCALIDADES DE LOS SEMINARIOS

Martes 30 de julio de 5:30 - 7:00 p.m.
 ACC Highland Business Center
 5930 Middle Fiskville Road
 Puertas abren a las 5:00 p.m.

Miércoles 31 de julio de 5:30 - 7:00 p.m.
 Austin Energy Town Lake Center
 721 Barton Springs Road
 Puertas abren a las 5:00 p.m.

Jueves 1 de agosto de 5:30 - 7:00 p.m.
 Ruiz Branch Library
 1600 Grove Boulevard
 Puertas abren a las 5:00 p.m.

Favor de confirmar su asistencia a bluelinefeedback@projectconnect.com, o llame al 512-369-6201 con su nombre, correo electrónico y día preferido para asistir.

¿No puede asistir?

Revise los materiales y envíenos comentarios en la junta pública virtual, disponible desde el 30 de julio hasta el 13 de agosto en projectconnect.com.

FLAVOR

From Page B1

Josh Bumb, to bring back the event, which ran for nearly 30 years, from 1978 to 2007, and has drawn as many 14,000 people to Austin hangouts including Vic Mathias Shores and Waterloo Park.

“A lot of people have asked me, ‘Why can’t you put it back together again?’ Well, it’s Humpty Dumpty; you cannot put it back together again,” Arnsberger said. “Then somebody introduced me to (Bumb) ... and all the king’s horses and all the king’s men and all the king’s money came together and put it back together again — Spanty Dumpty.”

The festival — which brought together beer, peanut brittle, ramen, chili and one special salty, slimy, canned ingredient to unite them all — included a Spam cook-off, the Spamlympics and live music from a half-dozen artists.

Cook-off entrants introduced concoctions such as Spam ramen, NutSpittle (Spam-infused peanut brittle) and Spam chili.

Some were Spam newcomers, like Jason Berry, who made Spam sliders. But others had grown up attending the festival, like Ashley Lowe, who took her favorite fried rice recipe and adapted it with Spam.

“I love Spam,” Lowe said. “(Spamarama’s) very Austin, the whole feel and the concept of where it came from. It’s very Austin silliness, which I love to see alive.”

On cooking Spam now, “the weirdest part is cutting it because it’s really slimy,” she said.

Former Spam cook-off winner Mike Myers made a dish called the Three Pigs, made of a true pork tenderloin, Spam and smoked pork belly. He competed in honor of his late brother, John Myers, the longtime “Chef Spam,” whom he regularly battled in previous competitions.

“I’ve been planning my dish for years just to beat my brother,” Mike Myers



Kelli Oseen prepares Spam-fried avocado tacos during the cook-off at Spamarama. [JAY JANNER/AMERICAN-STATSMAN]

said. But because his brother couldn’t attend, Myers said he wanted to win and take the trophy to the Spam Museum in Austin, Minn.

The final award for the cook-off is the Spamerica’s Cup, which goes to the chef who has the highest total points in the taste and showmanship categories. The award is now named after John Myers, who won the cup more than anyone else.

After hours of cooking in the sweltering heat, Mike Myers garnered first place in the taste and showmanship categories of the cook-off.

“It’s a crapshoot. Anybody can win it,” Myers said. Adding that he missed the competition with his brother, he said: “John would’ve won it this year. But since he’s not here, I did. One of us has to.”

The Spamlympics had two

events:

- “Spam Toss”: Two-person teams compete by tossing a 12-ounce can between each other until one of them drops it; the team that throws it the farthest without dropping wins.

- Spamburger eating contest: Contestants are given a can of Spam and a burger bun, and the first person to finish eating it all wins.

Spamarama newcomer Mimi Daugherty brought her 2-year-old son, Mars Dominguez, with her after a friend told her about it. She said she doesn’t really like Spam but she liked Spamarama anyway.

“(My Spam) has been really good actually,” Daugherty said. “It’s hot, but this is really cool.”

Arnsberger said it took a lot to bring the festival back to life



A man wears Spam socks at Spamarama on Saturday. [JAY JANNER/AMERICAN-STATSMAN]

but that it was worth it, and he hopes to continue it next year.

“Austin is getting so out of control of being what Austin used to be,” Arnsberger said.

“This is the ‘Keep Austin Weird,’ and I’m trying to bring some of that back, so Austin can get a flavor of what Austin used to be.”

- Tech Ridge
- Parmer
- Braker
- Rundberg
- N Lamar Transit Center
- Crestview
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- Triangle
- 38th
- 29th
- UT West Mall
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- SoCo
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- St. Edward’s
- S Congress Transit Center
- Stassney
- William Cannon
- Slaughter

Project Connect Workshop

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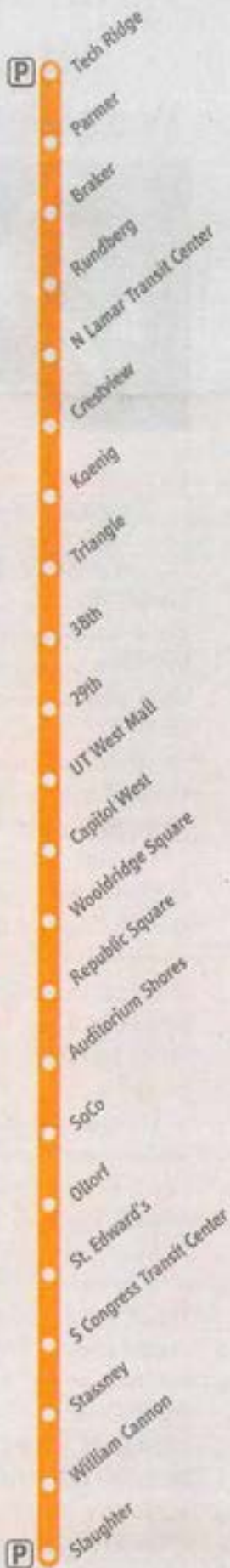
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Project Connect Workshop

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South Austin Workshop

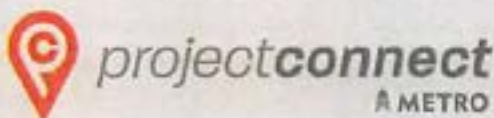
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Project Connect Orange Line Workshops

Wed, July 17; Thurs, July 18; and Wed, July 24

	Size	Dimensions	Deadline	Run - start	Run - end	cost
Statesman	1/4 page	4.93"x10.25" V	2-Jul	7-Jul	7-Jul	\$ 2,336.25
Villager	1/4 page	5.5"x 10.5" V	28-Jun	5-Jul	11-Jul	\$ 1,104.00
Chronicle	1/2 page	4.9"x9.6" V	28-Jun	3-Jul	10-Jul	\$ 1,404.00
El Mundo	1/4 page	5.45"x10"	28-Jun	3-Jul	10-Jul	\$ 750.00
Blue and Orange Line Combined Ads						
KUT	:15	18 spots	26-Jun	2-Jul	1-Aug	\$ -
KUTX	:15	28 spots	26-Jun	2-Jul	1-Aug	\$ -
KAZI	:60	30 spots	26-Jun	3-Jul	1-Aug	\$ 1,650.00
KOOP	:30	25 spots	26-Jun	3-Jul	1-Aug	\$ 1,500.00
La Prensa*	1/2 page	10.875 x 10.5	15-Jul	18-Jul	31-Jul	\$ 945.00
						\$ 8,744.25

*Did not publish 7/4 issue



Capital Metro @CapMetroATX · Jul 17

It was great to see so many engaged community members at our #ProjectConnect workshop tonight. We talked about the proposed Orange Line, which could provide a fast and reliable north-south connection while operating in its own lane & away from traffic congestion. #ATXtraffic



6 5 15



Capital Metro @CapMetroATX · Jul 18

Thank you @stedwardsu for hosting our #ProjectConnect meeting this evening. Tired of #atxtraffic and want to get moving? Us too! #ProjectConnect is the #ATX plan for a system of reliable and frequent transit with congestion-proof services that operates free from other traffic.



5 12

Appendix D: Virtual Open House Engagement Summary

Engagement Report

Orange Line Virtual Open House #2

For the period July 17 – August 1, 2019

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Scope

The report presents data for attention, active engagement and public input to the Project Connect Orange Line Virtual Open House #2 from July 18, 2019 to August 1, 2019.

Key Performance Indicators of Public Participation

We assess participation along three dimensions: attendance, active engagement, and input.

Attention: By coming to the site, people are doing the digital equivalent of attending a public meeting. That does not guarantee that they will raise their hand to speak. But it does provide us with an opportunity to inform them. Informing oneself is an important form of participation. To gauge this type of activity, we look at the number of unique visitors, the number of repeat visits, the time on site and the average number of pages being viewed during that time, as well as the time they spend on the key pages delivering information that they can use to learn about the engagement subject matter.

Active engagement: Active engagement captures those participants who send a signal about their views, such as contributing a comment, a rating. These are the people who actively engage in the conversation and provide us with data that may be used to gauge public opinion and considered in decision-making.

Input: Input is the ultimate goal of the site. Input can take many forms, depending on the nature of the content being discussed, the lived experience of participants, and their knowledge, both prior to arriving at the site and incorporating that which they learned on the site. Input may take a variety of forms, including rankings, choices, sentiment or expressions of opinion, preferences or fact. It is important to seek the correct type of input in order to ensure that it the input is meaningful. To be meaningful, the input sought must:

- Involve a topic on which the public is qualified to express an opinion, either because their preferences matter or because they have relevant knowledge or lived experience
- Advance a question that is an open variable and on which the organization is open to being influenced by public input.

Attention

This engagement was open for public comment for 16 days. During that time, an average of 74 people visited the site each day. During each visit, they spent an average of 3 minutes 2 seconds viewing an average of 3.25 pages.

In total

Period	Engagement	Users	Average Users / Day	Sessions	Sessions/ user	Average session duration	Pages/ session	# of days
190409-190424	Orange VOH1	1,892	118	2,174	1.15	02:07	2.66	16
190521-190627	Blue VOH1	1,260	33	1,506	1.2	01:38	2.27	38
190717-190801	Orange VOH2	1,183	74	1,442	1.22	03:02	3.25	16

Table 1: Attention

Attention Trend

Attention to the site was flat, running between 16 and 50 visitors for the first half of its existence. Then, the number of daily unique visitors hit a one day peak of 428 on July 25 (the day of a reddit forum discussion) before sliding the next three days to 90, 37 and 10 visitors respectively. Visitors to the site increased during the last three days of the Orange Line VOH 2, July 30 to August 1, which coincided with the launch and first three days of the Blue Line VOH #2.



Table 2: Attention trend

Attention Generators

Referrals from other websites and social media were the two largest sources of attention, generating approximately 21% and 17% respectively of the site’s visitors.

Email campaigns generated 3.5% of the traffic and organic search just over 3%.

Traffic from referrals and via email campaigns was far more engaged than traffic from social networks. People arriving through website referrals and email campaigns spent over five minutes viewing an average of over 4.5 pages of information. Visitors arriving from social networks, on the other hand spent just over two minutes viewing just under 3 pages.

Default Channel Grouping	Users ↓	New Users	Sessions	Bounce Rate	Pages / Session	Avg. Session Duration
	1,183 % of Total: 100.00% (1,183)	1,097 % of Total: 100.00% (1,097)	1,442 % of Total: 100.00% (1,442)	63.18% Avg for View: 63.18% (6.00%)	3.25 Avg for View: 3.25 (6.00%)	00:03:02 Avg for View: 00:03:02 (6.00%)
1. Direct	668 (56.44%)	632 (57.61%)	741 (51.39%)	72.20%	2.37	00:01:39
2. Referral	255 (21.56%)	211 (19.23%)	388 (26.91%)	44.07%	4.91	00:05:47
3. Social	202 (16.76%)	188 (17.14%)	221 (15.31%)	71.95%	2.86	00:02:08
4. Email	42 (3.49%)	34 (3.10%)	50 (3.47%)	44.00%	4.42	00:05:12
5. Organic Search	38 (3.19%)	32 (2.92%)	42 (2.91%)	57.14%	3.98	00:04:11

Table 3: Channels

Looking at the sites that generated attention for CapMetroEngage.org, the dominant source of referrals, CapMetro.org, accounts for 85% of all referral visits. The visitors from CapMetro.org were the most highly engaged visitors from any source, spending on average over six minutes on the CapMetroEngage.org visiting over five pages.

This is consistent with what was seen for the Blue Line Open House, reflecting the tight integration of the subject matter of the Project Connect page on CapMetro.org and the related engagement opportunities on CapMetroEngage. The upcoming consolidation of the two sites should provide a more seamless user experience for the users who have travelled this path.

The only other significant source of attention was a Skyscraperpage discussion forum, generating just under 10% of the referral traffic.

Source	Users	New Users	Sessions	Bounce Rate	Pages / Session	Avg. Session Duration
	255 % of Total 21.56% (1,182)	211 % of Total 18.23% (1,097)	388 % of Total 26.91% (1,442)	44.07% Avg for View 63.18% (30,24%)	4.91 Avg for View 3.25 (25.14%)	00:05:47 Avg for View 00:03:03 (95.97%)
1. capmetro.org	222 (85.38%)	179 (84.93%)	339 (87.37%)	41.89%	5.07	00:06:11
2. forum.skyscraperpage.com	23 (8.82%)	20 (9.48%)	29 (7.47%)	58.62%	4.31	00:02:51
3. mailchimp	4 (1.54%)	4 (1.90%)	4 (1.03%)	50.00%	3.75	00:13:13
4. tlc-ccp.org	3 (1.15%)	2 (0.95%)	3 (0.77%)	66.67%	1.33	00:00:12
5. austinmonitor.com	2 (0.77%)	1 (0.47%)	2 (0.52%)	50.00%	4.50	00:00:52
6. stage.capmetro.org	2 (0.77%)	2 (0.95%)	5 (1.29%)	60.00%	4.20	00:01:18
7. em-ui.constantcontact.com	1 (0.38%)	1 (0.47%)	1 (0.26%)	0.00%	3.00	00:04:40
8. messenger.com	1 (0.38%)	1 (0.47%)	1 (0.26%)	100.00%	1.00	00:00:00
9. mail.yahoo.com	1 (0.38%)	0 (0.00%)	1 (0.26%)	0.00%	3.00	00:01:14
10. us18.admin.mailchimp.com	1 (0.38%)	1 (0.47%)	3 (0.77%)	100.00%	1.00	00:00:00

Table 4: Referral Sources

Six of ten visitors arriving from CapMetro.org arrived directly on the Orange Line VOH #2 homepage. Just under three out of ten visitors arriving from CapMetro.org entered CapMetroEngage via one or the other of the two Blue Line VOHs.

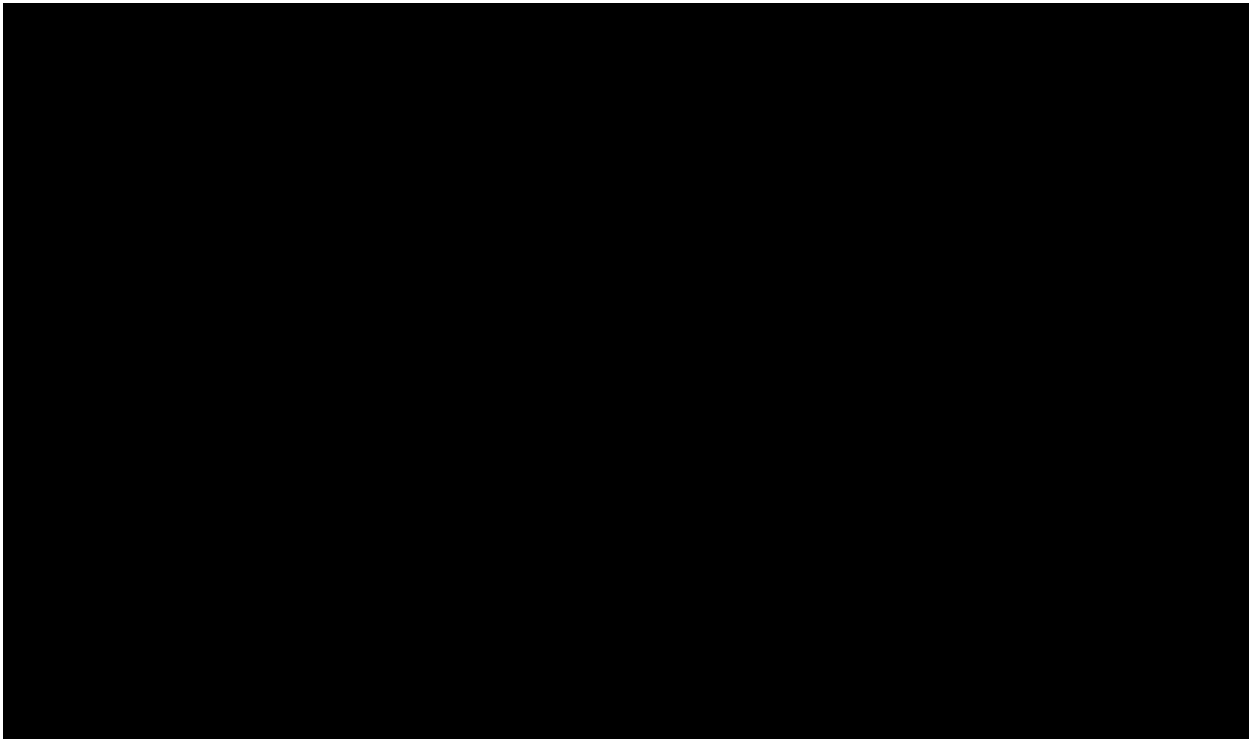


Table 5: Landing page of visitors arriving from CapMetro.org

Reddit generated over half the attention driven by social media. Much of the Reddit traffic originated from https://www.reddit.com/r/Austin/comments/choz5n/project_connect_orange_line_virtual_open_house_2/, which drove the July 25 spike in visits to CapMetroEngage.org

Facebook generated just under half. Twitter was not a significant source, generating only three visits to the site.

Visitors referred from Facebook were more engaged than Reddit users. They spent almost twice as long on the site viewing double the number of pages of Reddit users.

Social Network	Users	New Users	Sessions	Bounce Rate	Pages / Session	Avg. Session Duration
	202 % of Total: 17.28% (1,343)	188 % of Total: 17.14% (1,097)	221 % of Total: 15.31% (1,442)	71.95% Avg for View: 63.16% (13,889)	2.86 Avg for View: 2.25 (12.86%)	00:02:08 Avg for View: 00:03:02 (29.84%)
1. reddit	108 (53.47%)	105 (55.85%)	120 (54.30%)	81.67%	1.92	00:01:34
2. Facebook	90 (44.58%)	82 (43.62%)	97 (43.89%)	60.82%	3.90	00:02:44
3. Twitter	3 (1.49%)	0 (0.00%)	3 (1.36%)	33.33%	7.00	00:05:37
4. Pocket	1 (0.50%)	1 (0.51%)	1 (0.45%)	100.00%	1.00	00:00:00

Table 6: Social Networks generating attention

Mobile vs. Desktop

Over half of visitors viewed the site using their desktop devices, while approximately four out of ten used mobile devices to visit the site. This is significantly higher mobile device use than was experienced during the Blue Line VOH which preceded the Orange Line VOH #2.

Mobile device users spent less time on the site viewer fewer pages than either desktop or tablet users.

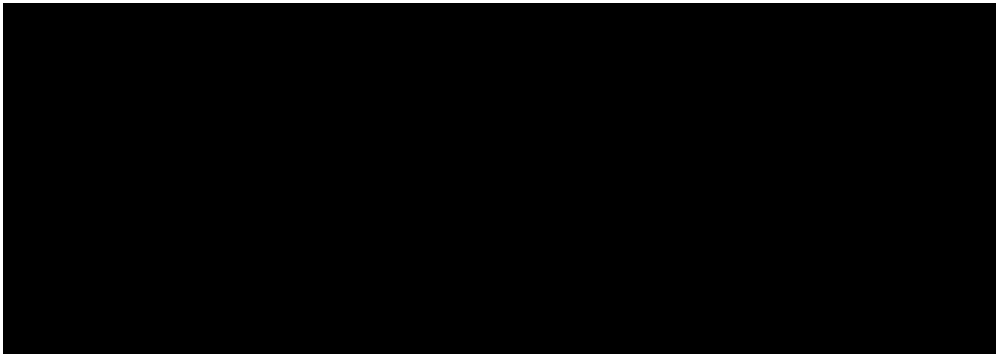


Table 7: Mobile vs. Desktop

Landing pages

Six out of ten visits to MetrolinxEngage.org during the report period began with visitors landing directly on the Orange Line VOH #2 homepage. Another 6% landed on the Orange Line VOH #1 homepage.

Approximately ten percent of visitors landed first on one of the Blue Line VOH's, including the Blue Line VOH #2, which launched three days prior to the end of this report period.

Landing Page	Sessions	% New Sessions	New Users	Bounce Rate	Pages / Session	Avg. Session Duration
	1,442 % of Total: 100.00% (1,442)	76.07% Avg for View: 76.07% (0.00%)	1,097 % of Total: 100.00% (1,097)	63.18% Avg for View: 63.18% (0.00%)	3.25 Avg for View: 3.25 (0.00%)	00:03:02 Avg for View: 00:03:02 (0.00%)
1. /en/engagement-initiatives/project-connect-orange-line-virtual-open-house-2	863 (59.85%)	80.53%	695 (63.35%)	65.70%	3.05	00:03:07
2. /en/engagement-initiatives/project-connect-blue-line-virtual-open-house-2	116 (8.04%)	75.00%	87 (7.93%)	43.10%	5.20	00:05:05
3. /en/engagement-initiatives/project-connect-orange-line-virtual-open-house	87 (6.03%)	87.36%	76 (6.91%)	68.97%	2.48	00:01:44
4. /en	78 (5.41%)	60.26%	47 (4.26%)	64.10%	2.64	00:01:17
5. /en/engagement-initiatives/project-connect-blue-line-virtual-open-house	69 (4.79%)	49.28%	34 (3.10%)	60.87%	3.01	00:02:34
6. /en/participation-opportunities/comment	50 (3.47%)	76.00%	38 (3.46%)	48.00%	4.12	00:04:07

Table 8: Landing pages

Active Engagement

CapMetroEngage now has a total of 3,809 registered participants, 2,960 of whom have actively participated.

During this report period, 50 new participants registered to set up personal profiles on the site. Also during this time, 42 registered participants provided input for the first time.

Period	New Registered Participants	Total Registered Participants	New Actively Engaged Participants	Total Actively Engaged Participants
190717-190801	50	3809	42	2960

Table 9: Registered Participants

A total of 439 submissions were made to the Orange Line VOH #2 during the report period. Of these 42.8% were contributed by 46 people who had registered and signed into their profiles. The remaining 57.2% of the submissions were contributed anonymously.

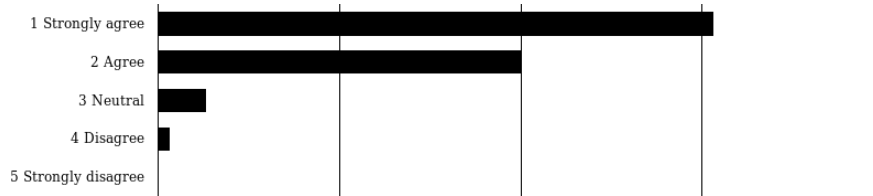
Period	Bringing it Together	Dedicated Transitways	Location Options	Station Locations	Step One Evaluation	Total	Onymous Submissions	Anonymous Submissions	Onymous % of Submissions
190717-190801	76	114	97	81	71	439	188	251	42.8%

Table 10: Submissions

Input

Station Locations

The approach to evaluating and rating potential station areas is appropriate.



1 Strongly agree	46
2 Agree	30
3 Neutral	4
4 Disagree	1

Please feel free to elaborate as needed.

High-capacity transit should follow population and job density as close as possible, it really is that simple. Build the train where the people are and where they want to go. The orange line alignment is excellent for this, and I think you've got all the right stops on your map.

I would agree that you are looking at the right elements. But having a three-step rating as the result is too simplistic. The City needs to decide which of the four criteria is most important or what level of "negative" in any one category makes a station not viable or not valuable compared to another station location. For example, it would seem that areas that already have important destinations (that are expected to last) would take priority over areas with redevelopment potential. But it also depends on what you think is an appropriate distance between stations. In Paris every block is supposed to be within .6 miles of a station. The A Train in New York stops every 9-11 blocks. So maybe you don't have quite enough stations along the line, given that people in Austin will be reluctant to walk more than half a mile in the heat.

The only caveat would be the cost and transportation impact of an inconsistent system.

Your criteria has one flaw, in that the second bullet, while good, favor existing transit centers because of the bus routes that go there. These routes could and

should be changed to get away from pedestrian-hostile highway park and rides. For example, if you look at development, a station is obviously needed around St Elmo or Industrial Drive, not at the terrible South Congress Transit Center.

The only thing that is not explicit is that we should prioritize providing mass transit to people of lesser means.

It is somewhat covered in the first bullet point but I believe should be an explicit criterion.

Another thing that has troubled me with the current setup is that it does not address those families that have been pushed further south and east due to gentrification.

These people are moving to Buda and Kyle and I don't see any great options for them for commuting.

Slaughter is no longer the southern edge of Austin.

ROW is not as important as station area zoning. Please coordinate with the Land Development Code Rewrite!

If you can't access the station easily you won't ride

You should also consider equity and affordability impacts of station locations. Safety should be explicitly considered as part of access.

New Transit stations should be coupled with truly affordable and preferably public housing to that is directly tied to the effects of displacement on the local residents and the potential benefit for low income users.

In narrow areas, a tunneled or cut-and-cap option should be the priority, with at-grade or elevated along the rest of the network.

It is important for CapMetro to be absolutely in lockstep with the Planning Department and ATD when evaluating the potential for new growth and or redevelopment in the area. These 3 entities have been operating in silos, protecting their turf and Austin residents and tourists have been negatively impacted.

also need to evaluate how close or far away it is from the previous/next stations

Sometimes it might be worth it to consider the speed and stations at congested areas like the Drag instead of looking at the ROW first

I am interested, and I'm sure many other people are as well, in how you evaluate the potential for growth and redevelopment. Because the neighborhood east of judges hill but west of the capitol has seen intensive growth and permit applications indicating that it is going to get much taller and denser in the coming years, and yet it lacks a stop servicing it.

Need more information on how each factor is weighed, and what is a "positive" translating to high or "negative" translating to low.

There should be a station at North Lamar/North Loop to be accessible to those who live along north loop east and west of north lamar. It is not reasonable to expect these people to go to the triangle or to Koenig station.

I think it is important that the Orange Line be able to tap in to existing and planned transit services for bicyclists, pedestrians, and other routes/lines.

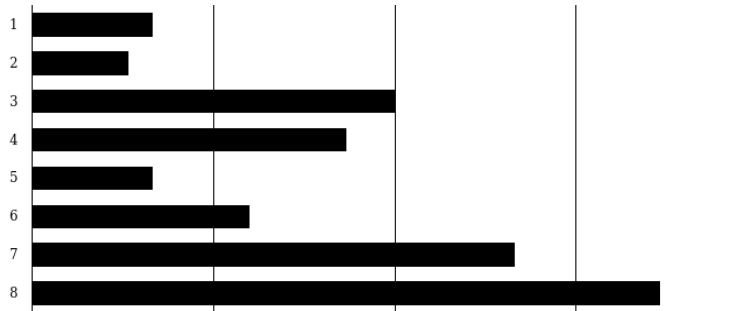
I am concerned that we will be too quick to grade separate in areas of narrow ROW. Surface running HCT can work in many areas. Please watch expenses and don't let the mayor's noise about "through lanes" worry you!

How much investment can the area support kinda seems to say: no poor people

Location Options

Please rank in order of importance with '1' being 'most important' to prioritize to '8' being the 'least important.' Pedestrian facilities are critical to transit access, so they are not listed.

1 is Most important. 8 is Least Important.



	1	2	3	4	5	6	7	8
Operation of cars	13	7	9	14	11	6	13	24
Use of Bikes	23	21	18	9	7	6	9	4
Use of Scooters	12	7	21	11	6	13	5	22
Use of Parking	5	4	15	13	5	9	20	26
Changes to traffic signal timing	12	13	14	13	14	14	7	10
Right-of-Way acquisition	30	6	16	15	12	6	6	6
Timed implementation	20	7	17	15	20	8	3	7
Construction impacts	6	13	12	12	14	21	13	6

Please feel free to elaborate as needed.

I'm disappointed that you did not ask which type of transit-way I preferred. For the record, I prefer the tunnel option over all the others; my 2nd choice would be cut & cover; my 3rd would be street level, I would NEVER support (or use) an elevated option, and would fight it all the way to city hall if necessary.

Parking should whenever and wherever possible be eliminated, lanes should be taken away from cars to avoid added costs. If Austin wants to achieve its target 16% mode share shift it can't keep fighting to keep things exactly the way they are for cars. Bikes and scooter access and infrastructure should be prioritized. The sooner we get this done, the sooner more people can live car-free and car-lite lives in our city.

We're building high-capacity transit, act like it!

What kind of scooters? Unpowered, electric, gas motorized?

This is a confusing list - not sure what "timed implementation" means. Basically, please prioritize walkability, bikeability, ease of pedestrian access, and streetscape beautification (street trees, wide sidewalks, benches, etc.). Cars can use the highways.

Sorry to be negative, but this is a poorly constructed question. I work at Austin Energy Green Building and deal with transportation issues, but I'm not sure what I am ranking here. Comparing timing of the completion of the project (as that what you mean by "timed implementation?" to "operation of cars" is a weird choice. If we think that the tunnel is the best option, then some of these items don't even seem to apply.

I'm not sure what all of these items mean. Positive final outcomes for pedestrians, bikers, and scooter riders far outweigh negatives caused by difficulty acquiring ROW, construction impacts, or cost in separating the transitway from roads.

I found this priority grid confusing and difficult to use. Please ask what we want to use or how to important it is.

I am not too concerned about car access to the stations (especially in UT West Mall), but being a UT student I am concerned about the potential disruption to the 801 and the Drag in general from construction on West Mall. Thus I'd prefer an option that minimizes construction times.

Lowest cost has the greatest potential for voter approval. Consider what Denver did announcing multiple lines at the same time so voters could see it would impact their part of town (this is important to obtaining support in parts of town that rejected the last bond). Transit is also about land use but THAT'S NOT TALKED ABOUT HERE - WHY NOT?

use of parking = remove it or use it as a protection for a shared use path

Tunnel is most preferred, with elevated or cut and cover options being secondary

The most important considerations should be cost versus ridership. This ranking table misses the most important things.

Ridership - 1; ADA Access - 2

Cars must be made the least appealing option. Transit is about moving people, not reducing congestion for drivers.

Tunneling and cut-and-cover are the preferred options, followed by at-grade.

This project is going to live or die by it's right of way acquisitions.

#CCMF

This corridor is a critical corridor for the health of Austin, and the future of public transportation in Austin. I would gladly sacrifice cars to make room for high-frequency, high-capacity public transit. That trade-off is very worth it to me. But honestly, this corridor is so important, I think it would be best to have both -- I would encourage you to either tunnel or cut-and-cover. Yes it's expensive, but on this corridor, it's worth it.

I want the orange line to have as minimal interaction with street lights and traffic as possible as the idea is rapid transit and it should avoid the pitfalls plaguing the on time performance of the current 801/803 bus implementation.

Because you can see, even with right of way in certain areas, on time performance and frequency can be improved if it doesn't have to stop where it doesn't need to.

How long will there be construction disruption on East Riverside in a single location and overall before the project is completed?

I suppose that the advent of self-driving cars will eventually have an impact on these plans, perhaps making it possible for people to have a very small vehicle that they can keep at home, drop them off at a bus stop and return home. What about a personal scooter account that would enable you to 1)keep a scooter at home, take it to the bus stop and on the bus, take to work and then back or 2)get home home to bus stop, leave at the bus stop, then pick one up there for your return home?

As a layperson, some definition of what each factor means would have been appreciated. Most are intuitive, but clarification is always best.

Adding rail should not hinder the addition of safe routes to school and bike lanes. Full impacts to local traffic and safety should be evaluated. Along with impacts to local businesses.

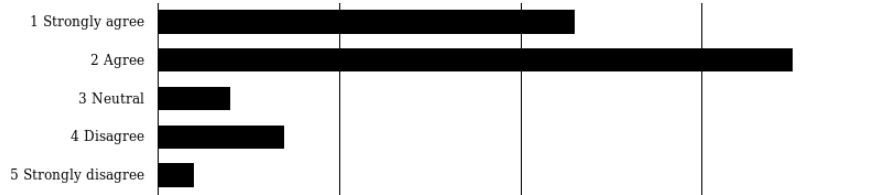
Construction of a transitway will be disruptive regardless, so if traffic is going to be affected for potentially 2-3 years, we should make sure it's worth it and have the best plan possible.

Street-Level should be avoided and the entire system should aim to have one consistent location type. I would pick a tunnel above all else, personally.

Vehicles need to be considered, as taking travel lanes may not be seen as worth it. Street level will have high lane impacts

Step One Evaluation

The ratings assigned to potential station areas are appropriate.



1 Strongly agree	23
2 Agree	35
3 Neutral	4
4 Disagree	7
5 Strongly disagree	2

Please feel free to elaborate as needed.

I think it's smart to avoid building the South Austin and North Austin portions until the city changes its code to allow for more density, mixed-use development, and walkability in these areas.

I currently reside in the South Austin segment and disagree with the reasoning to remove the option for far north and far south elevated and tunnel options. Folks living in those areas currently do not take transit because current ride options nearly double their commute (I am one of these people). If you provide a reliable option that can keep their ride time manageable, your ride ship will increase. Specifically, I worry the street level add-on in the south locations will only create more congestion with the already congested cross sections of I35 and William Cannon and I35 and Slaughter. East I35 in these locations are BOOMING. It is extremely important to take that seriously.

Additionally, this is evaluating the current snapshot of rideship. What about in 5 years when we've added another 300,000 residents? Many of those residents will be living in those far north and south locations for affordability reasons. The point of spending all of this money is to provide a solution that is going to be effective in 20 years, when there are no gaps between San Antonio and Round Rock. It is eminent that we take that seriously as a City and invest appropriately. Complete a full underground tunnel for the entire proposed Orange line. Fully invest in the entire Austin community. Don't leave those tale end neighborhoods behind.

Now this page is beautifully designed! It's really clear. I get it!. I would think that going underground is much more sensible between the Triangle and Hyde Park and the river (and maybe even down to 71), however. Do it right, tax us, and spend the money to have a fast system through the most congested part of town.

I think N Lamar Transit Center should be medium, and would be if the access to it were improved.

I feel the future expansion zones would be too far in the future and we should do it all at once. The south Austin zone is experiencing huge growth in mutlifamily construction and needs this connection.

These are mostly correct, but segments 1, 6, and 7 should be considered for elevated transit. If they can't support that investment than they can't support the Orange Line and shouldn't be pursued. The whole line will suffer if part of the line is stuck at traffic signals or gets in a collision with a car at an intersection like Braker or William Cannon.

However, I would like people to think about the impact park-and-rides have on the stations in the less dense areas.

Personal, I know that makes these routes more attractive.

While the top 3 and bottom 3 stations are in areas without much density, I think having good park-and-ride facilities there will help attract more riders.

Particularly if they are tied to the larger retail areas, as Cap Metro already does at South Park Meadows.

I find the existing park-and-ride facilities to be somewhat lacking.

I know a parking garage costs money but it says a lot about the potential capacity of the transit lines.

These are too expensive it needs to be at grade.

I appreciate the comprehensive look and hope the in-depth study continues.

Tunneling should be priority in segments 3-5, elevated on segment 2

Stations south of the river are likely more important than "Low"

South Congress has such a draw as a destination for tourists and locals, it stands to have a higher rating. Also, in the interest of connectivity, it would seem prudent to weight Crestview and both the North Lamar and South Congress Transit Centers higher. Buy-in from the general public heavily depends on connecting to the existing fabric of transit options.

I agree with the orange line if the blue line will make frequent stops along central Austin and the downtown area.

There is a big difference between some of the medium stops, there should maybe be another level between low and medium

All stations have the potential of at least being Medium depending on small area planning around station areas and the update to the land development code.

Perfect -- yes, this makes sense to me. Go underground in "north central" (around Koenig), and re-surface around SoCo.

A Station MUST be kept at St Edward's and Crestview because at Edwards really only has 2-3 lines connecting it and Crestview is the only really close to the red line.

Kramer is like a 15 minute walk... And it's on the 803 line.

This means that if Crestview is removed, there won't be a direct connection to the red line on this line and I think that that is important to have, it makes getting uptown very convenient when I don't want to walk 12-15 minutes from 2nd to 4th downtown

I feel like Braker and Parmer should be rated medium instead of low. I feel like Capmetro currently underestimates service needs in North Austin. A more comprehensive transportation network that includes Pflugerville and Round Rock are desperately needed. We might as well make that investment now instead of latter when it will become costly.

The Triangle has the potential to be a "high" level station especially if the state hospital revitalization goes through.

UT mall ought to be ranked higher

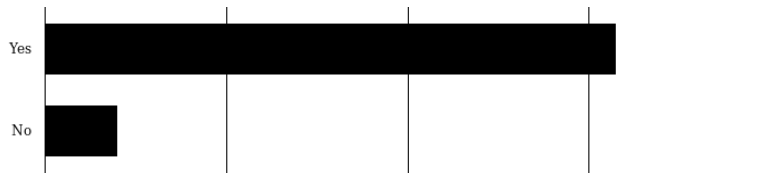
Need to re-evaluate seems outdated and the ratings for park & rides seem backwards.

North Central deserves a higher priority rating. There is a significant amount of the population here that could take advantage of public transportation if were available and more efficient.

The following stations should be ranked as HIGH: Parmer, Crestview, Soco, St Edwards. Stassney, Slaughter and William Cannon should at least be Medium.

I'm a little skeptical that grade separation is really plausible on South Congress district.

Do you agree with the proposed station locations?



Yes	63
No	8

Is there another station location that we should consider?

The Hyde Park station should be moved to 41st & Guadalupe, to position it mid-way between the Triangle and 29th stations. As you may know, the state just approved funds to completely redevelop the State Hospital at that location, so this transit station should be integrated into those redevelopment plans.

I think there should be more than one station for UT, given West Campus just got upzoned for even more height and is already the second densest zip code in the entire state of Texas.

I also think it's very important the Crestview station has a pedestrian bridge to make easy, quick connections to the red line.

As many UT students and employees and future state employees in the Capitol Complex expansion will likely be utilizing the orange line, an additional stop serving UT Campus South/Capitol North might be prudent near MLK/in between 24th St and Capitol West. That area is also showing indications of an impending construction boom that will eventually connect downtown to UT and west campus with continuous high density residential, retail, office, and hospitality projects.

Maybe. If the SOCO transit center is the place under 71 that has just appeared near Central Market, then I would say that a stop just south of the Post Office on SOCO is needed. It's only .4+ miles south of the St. Edwards stop, but the area between SOCO and S. First and the area between SOCO and the Walmart has a lot of destinations (and more and more housing) - so should also be served.

Consider moving the Koenig Station to North Loop (current station on MetroRapid) or between those two. The intersection at Koenig has a lot of traffic and is difficult to access and has safety issues for pedestrians and bicyclists.

Change the name of "Hemphill Park" since no one knows what that is. Move that station to near where the Wheatsville station is now, just south of 31st

Street. A lot of people use it to go to the grocery store and other businesses in that area. You can name it "Wheatsville," since that is the historic name of that part of town.

Add a station near to where the "Museum" station is now for MetroRapid. There is too much distance between stations otherwise to access that part of town.

Most people are also not familiar with Wooldridge Square and the current name Austin History Center works well.

A station between MLK and 21st would provide significantly better access to the heart of the UT campus (21st and Speedway), southern West Campus (where hundreds of new units are currently being built), as well as museums such as the Ransom Center, Bullock Museum, and Blanton Museum.

Eliminate NLTC Station due to inefficient station access for buses and pedestrian-friendliness (distance, hazard) for walk-ups from nearby neighborhoods. Instead, shift existing Fairfield Station farther south to serve former NLTC walk-ups. Re-develop parking lot at NLTC as affordable housing with direct access to (moved) Fairfield Station. Rename Fairfield to North Lamar Station.

Please reconsider keeping Museum Station at Guad+MLK. It's a long walk from Bullock, Blanton, new State tower, to UT Mall or Capital West Stations. Maybe move Capital West Station south, to also serve Wooldridge Square, near Court House between 10th and 11th.

Could you consider a station on airport so that Highland is easier to access

Replace South Congress Transit Center with a St Elmo station

Anywhere there is a connecting high frequency route there needs to be a station.

Not sure if the proposed stops will benefit the most people not currently served by transit.

None really - This provides a good axis of development to contrast the Red Line in terms of use. Future expansion plans also encourage housing development in cheaper land areas to transport to downtown job centers.

Domain station

Please refer to my previous comment.

add Masterson/Applegate, and maybe Kramer instead of Braker (or a bit south of it) along North Lamar. The stretch between Rundberg and Braker is too long and ignores many immigrant communities and businesses there like Marketplace Austin or the huge Chinatown Center.

The proposed stations are logical locations, but the city will need some type of connection or shuttle. People will not want to walk or bike miles in summer heat or rain storms to get to the stations. There are many residents who do not live close enough to these stations to make the use of public transportation a viable option.

Koenig is not a great station location. There's nothing there, and there never will be -- state property to the east, water utilities to the west. There are a LOT more people living in the North Loop / 51st Street area, and there's a lot of future growth planned in that area. I know that's close to the Triangle, but I don't know if I'd put a stop AT the Triangle. I think instead of a Koenig stop and a Triangle stop, I would put a single stop in the middle at 51st street.

Pickle Research campus? is this already rolled into Rundberg?

walnut creek park. The china town station I assume would be the Braker Station.

There should be a station at North Loop to provide a stop for people that leave between Koenig and 51st a stop to go to. No one lives near the current Koenig stop. That stop should be moved farther north to Denson near the Whataburger. This is a more central location to those living north of Koenig but south of airport.

Stops closer the Domain and the new Austin FC stadium. Maybe there could be a split in the line that goes west toward Burnet Rd, or well-connected transit that links the Domain area to the Orange Line.

CONTINUE SERVICE AT THE MUSEUM STATION

-TO SERVICE THE HIGH TRIP DEMAND BETWEEN 15TH STREET AND MLK DUE TO ALREADY HIGH DEMAND FROM THE ESTIMATED 1 MILLION TRIPS PER YEAR BY STATE OFFICIALS WORKING IN THE NORTH CAPITOL COMPLEX.

There are already over 15 state offices located in the area between Lavaca/San Jacinto and 15th/Martin Luther King. The Capitol Complex Master Plan will reshape the Capitol Complex to host an additional 3,000 full time employees occupying, at full build out, over 5 million square feet of space.

(<https://www.statesman.com/news/20190705/900m-project-capitol-bring-thousands-more-workers-into-downtown-austin>)

(<http://www.tfc.state.tx.us/divisions/commissionadmin/tools/2018%20T>).

The development has received funding for both phases as of the June 2019 Legislative Session. (<https://www.statesman.com/news/20190705/900m-project-will-reshape-area-n...>) Additions to the density will take place north of the capitol grounds, between 15th St. and Martin Luther King Jr. Blvd, and would be better serviced by a transit stop at 18th street rather than 15th.

The lack of a stop servicing the Capitol Complex on the Orange line will only worsen the traffic snarls that will come with the 6% increase in downtown parking that the master plan promises, and prevent this area from becoming the pedestrian haven it seeks to be. (<https://austin.towers.net/capitol-complex-master-plans-first-phase-bring...>)

-TO PREVENT UNNECESSARILY LARGE GAP BETWEEN STATIONS IN THE CENTRAL AUSTIN SEGMENT AND CONNECT WITH THE PROPOSED 18TH STREET CIRCULATOR.

The lack of a stop in between the projected Capitol West and UT/West Mall stations leaves a 9 block gap un-serviced in the downtown area, the largest proposed, omitting cover over a very dense area. To combat this, the Capitol West station should be moved from 15th to 18th street. This move would better service the north capitol complex and the 3,000 new full time employees, in addition to the 5,000 employees that will be moved here from leased office space downtown, that will work in the state office buildings currently being built as a part of the Capitol Complex Master Plan renovations.

(<https://www.statesman.com/news/20190705/900m-project-will-reshape-area-n...>) An 18th street station on the Orange Line would also serve as a seamless connection to the potential east/west 18th street circulator connecting the line to the proposed Blue Line Medical School Station presented in the March 2018 long term plan.

(<http://capmetrotx.iqm2.com/Citizens/SplitView.aspx?Mode=Video&MeetingID=...>)

- TO SERVICE THE DENSITY IN THE REGION BETWEEN 15TH STREET AND MLK TO SERVICE RECENT AND PLANNED HIGH-RISE DEVELOPMENTS.

Austin's commercial real estate is in the middle of a boom that, in the future, will necessitate transit service in areas currently underserved by Project Connect's long term vision. The competitive property market in the Seaholm district, along with zoning changes allowing for much taller buildings in DMU zoned areas has made the area north of downtown, particularly between 17th street and MLK, an attractive spot for burgeoning high-rise developments. The current need for the Museum Station stop exists because "Currently, 5,000 employees in twenty-two leased properties are occupying over 1.5 million

gross square feet of office space scattered over Austin” due to lack of office space in the capitol complex.

(http://www.tfc.state.tx.us/divisions/commissionadmin/tools/2016.03.23_Te...)

Though the area was historically a dead zone between the CBD and West Campus, recent permit applications indicate plans for several much taller buildings going up in the neighborhood. These include the 17th street hotel (<https://austin.towers.net/west-17th-street-hotel-brings-height-to-downto...>), clocking in at 18 stories; the 17th street condominiums, at 27 stories

(<https://austin.towers.net/heres-our-first-look-at-the-condo-tower-headed...>); 410 Uptown office space, at 12 stories (<https://aquilacommercial.com/property/410-uptown/>), the recently completed 13 story SXS building (<https://www.1400lavaca.com/>), the new county courthouse, as well as over 2 million square feet of office space in the renovated capitol complex.

(<https://www.statesman.com/BUSINESS/20170912/2-new-buildings-will-add-1-m...>)

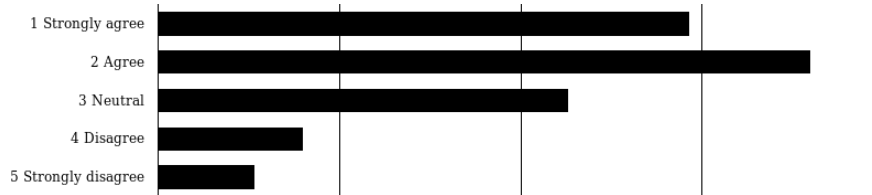
Each of these has the potential to bring hundreds of new residents, employees, and visitors to the Museum District whose travel time could be cut down by the addition of the Museum Station stop on the Orange Line.

24th seems like an odd location for the UT station. Just a smidge north of where you want to be. I'd go with the Co-Op.

15th or MLK. I'm not sure where capitol west is, I assume 12th, but 12th - 24th is a log way to go without a stop imo

Bringing it together

The approach to early evaluation of transitway options using a combination of right-of-way and station area evaluations is appropriate.



1 Strongly agree	22
2 Agree	27
3 Neutral	17
4 Disagree	6
5 Strongly disagree	4

Please feel free to elaborate as needed.

I think elevating or cutting, or *especially* tunneling will damage the project's ability to be delivered in a timely manner, if at all. We should avoid unnecessary expense by taking lanes and parking from cars, NOT some of the only protected bike lanes in the city.

Consider this, even if the Orange line does get built as an el or subway, it will finish much later and there will be a lot less money or appetite for new lines. This will further delay the construction of a comprehensive dedicated ROW system throughout the city.

The approach seems logical until you get to "Question 2: Are two or fewer stations rated low?" Are you saying that you want the entire transit line (or maybe just a segment?) to be underground only when it's passing through areas with fewer "attractions" and connectivity options (either in place or potential)? There are plenty of reasons to want the system to be underground in high value locations as well.

There should be some consideration of allowing vertical profiles in the sections with enough ROW to permit street-level plans that would help bypass the busiest intersections. There should also be consideration of the speed each option permits. Street-level operations may not permit speeds as high as those

in tunnels or elevated portions. Higher speed greatly increases the usefulness of transit when compared to driving.

This is confusing but I trust you

Please keep flexibility in mind to expand the system in the future. We don't want to end up with more infrastructure like the I-35 double decker where you are limited in terms of expansions/modifications.

This evaluation doesn't account for reliability challenges and safety issues associated with street-running trains (yes, I said trains, not "fancy" buses). I think you could just say if a segment doesn't meet the grade-separated criteria to continue then just change it to a dashed line future extension. We're better off waiting until we can afford the real deal than paying for mediocre transit.

I strongly agree mostly because of costs.

I wish that all of the line could NOT be street-level.

But in areas south of Ben White where there's more area to work with, I agree it's a way to cut costs.

These are cost prohibitive it needs to be at grade.

We should consider all alternatives but be realistic about feasibility

Aesthetics or view corridors should be considered as well but to a lesser extent. Elevated transitways run the risk of becoming as unsightly and pedestrian unfriendly as elevated freeways if implemented in the wrong places. Additionally, how will the orange line cross the river?

This question is too confusing unless the exact slide for it is present.

This is mostly good criteria, but planning to use a higher cost option in specific places (i.e., elevated rail in narrow corridors such as Guadalupe near UT) may be the only sensible move for building stations in major destinations that already have a lot of development.

Street-level should be ruled out for high-traffic areas that will slow down transit. Having room at ground level to put the bus-only lanes in doesn't mean the lanes will meet the goals of congestion-proof transit -- they will still have to contend with bikes, cars and pedestrians at intersections.

If we want to have a real transit system, we can't rule out the only options that work because they actually cost money.

This question is confusing.

This explanation is very confusing. If the answer to both questions for street-level are yes, does that mean that you move forward with street level, or with the other options? Would a rating of "low" mean that street-level is desirable? If both answers to the non-street-level questions are not yes, then what do you do? If some of the segment is narrow, but none of the stations are rated "low", then what do you do? What if some of the segment is narrow, but not as much as 15%, what do you do?

You do not clarify whether you would consider taking traffic lanes from vehicles, and that needs to be clarified. If a ROW is narrow, but traffic lanes can be converted to HCT lanes, than at-grade lanes will work. I support considering that option.

This discussion is a mess and needs to be redone.

I know it is more expensive to put the whole line under ground, but I do think that a lot of it should be under ground. It's best to do this right the first time - changing it later will be harder. From North Loop down to a few miles south of the river, I think we should be going underground (either tunnel or cut-and-cover).

I think that the best implementation for a lot of areas to guarantee right of way is to elevate, or to tunnel.

While, according to your matrix, cut and cover is cheaper than tunneling, it still appears to require some visible roadspace.

Above a certain amount of narrowness (50-60%), street-level should probably be discarded as an option. Unless there is some feasible way to have the line both be street level and have dedicated lanes, which does not seem possible in mostly-narrow corridors.

I feel the public input is very limited and geared to only get input in a way that pushes forward the concepts chosen. It does not appear to provide real input on if the chosen dedicated street path, which seems just based on cost at this time should be implemented without further impact analysis to the safety, local traffic, economy, and local connectivity of local communities in the North Lamar neighborhoods. Currently there are significant pedestrian, bike and car accidents. Thus, adding a train down the middle at street level would seem to ascorbate these impacts. A full traffic and safety analysis should be conducted on more than one option besides the do nothing alternate. A cultural and

economic impact analysis should also be completed on more than one option besides the do nothing alternate as adding the ROW for dual trains and station would seem to require taking ROW from neighboring properties and hinder access into those properties, which overall would impact the local economy. Other studies: noise impacts

I'm not sure I understand this evaluation system.

I agree that narrow ROW indicates it's a good time to _evaluate_ grade separation. Narrow ROW alone shouldn't mean we automatically choose grade separation.

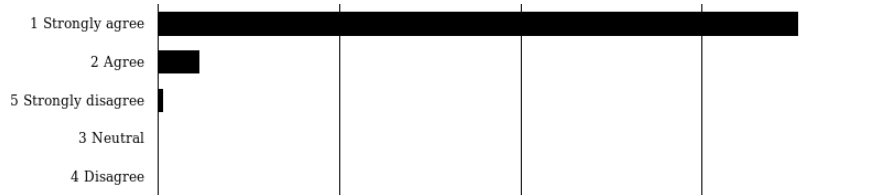
One consistent system type that is grade-separated should be used

What is the cost difference between cut and cover vs bored? seems like cut and cover has all the cost w/ bored but additional impacts on surface.

Sure I guess

Dedicated Transitways

It is important to ensure that the Orange Line operates in its own dedicated space (transitway), free of other conflicts.



1 Strongly agree	106
2 Agree	7
5 Strongly disagree	1

Please feel free to elaborate as needed.

This is extremely important, and should not be compromised on. We can't have a mixed-traffic streetcar and expect people to ride.

A careful balance needs to be made between separating the transit from automobiles, and making sure access to the transitway is convenient and safe.

If the transit is stuck in traffic, there won't be as many riders. Because one benefit of riding transit (speed) will be eliminated.

If the system uses a dedicated lane on a regular street, it would still have stops at traffic lights and so would not really be a high-speed alternative.

A long term "best case scenario" option is preferred regardless of initial cost. We need this to ensure the best future possible.

Buses carry more people per vehicle and deserve a proportionate amount of dedicated right-of-way.

Free from conflicts means NO street-running transit (even in dedicated lanes). Just ask Houston how well their "dedicated" lanes have worked out, constantly hitting cars and even their own buses. For the safety and reliability of cross traffic, pedestrians, bikes, scooters, and most importantly your transit (better be light rail, not BRT), we need the transit separated from all of those other modes for the full length of the Orange Line. If segments 1, 6, and 7 don't justify this,

then ditch those segments. They would negatively impact the on-time performance for the full line.

Personally, I do not take transit because it increases travel time immensely. Often, it is 3 times longer to commute even on the 801 or 803 lines. I believe transitways are the only way to solve address this problem substantially.

USE COUPLETS! Don't waste money burying, we need to serve a broader area, so north and south bound do not need to be on the same street.

Underground would be best so as not to take away from regular traffic and bike lanes

although car lanes may be reduced, transit is prioritised and should encourage people to use public transit

Without dedicated transitways, delays will be too great and no one will take advantage of this new transit option.

Anything other than dedicated transit ways would fail to entice people out of their cars and would fail to address the issue that buses are currently too slow to offer feasible transportation over Uber/Lyft.

Elevated or below ground is the only way that it can truly be free of other conflicts.

Public transit is the only way to solve our traffic woes. A dedicated transitway has shown great promise in cities across the world where it has been implemented. Look at even BRTS implementations worldwide and there is no doubt in my mind that this is the way forward for a city like Austin.

Transit not only need protection from traffic, but private vehicle lanes should be actively reduced to make space for active transportation and make private vehicles the least appealing travel option. Transit should not focus on reducing congestion for drivers, it should focus on moving the most people.

The best way to encourage people to use mass transit over single occupancy vehicles is to show a clear benefit for one over the other. I cant think of a better, more visible example then a bus moving quickly down a congested road while cars pile up next to it.

Especially for middle segments, failure to provide this will add congestion.

If public transport is not faster and easier than driving users will not ride.

Widespread adoption of public transit in any city relies on it being fast and efficient. Transit needs to be seen not just as a viable option, but as a way to reliably avoid congestion in this increasingly crowded city. That necessarily means separating the Orange Line from all other traffic.

It's extremely important. Please, please, please don't just put buses in their own lane next to cars and pretend they will solve the problem. We need to use a transit solution that can go above or below intersections.

Without a dedicated space, we don't have a solution. We have another band aid.

Traffic can get super bad and if this line is part of that traffic than it's no better than just adding a new bus line (and most of the busses are VERY unreliable). I think having it separate would be a fantastic way to significantly improve austin's somewhat disappointing public transportation.

My observation is that busses in regular traffic lanes cause a lot of congestion.

Of course, for the success of this line, the public transportation must be traffic separated, high-capacity, and high-frequency. Buses stuck in traffic is what we've always had -- we need something better.

One of the struggles of taking public transport in this great city is that, even though it's cheaper than driving, it takes twice as long in most of my treks I have attempted. Dedicated right of way would go a long way towards making a more convincing argument for taking public transport

Pedestrian access to the transit lanes that is safe and convenient, ie, no long waiting at crosswalk lights is important.

Any new lines on high traffic routes MUST be separated from other auto traffic.

Transit with mixed traffic is what we currently have. What we have now is broken.

Even if it means taking away car lanes in some areas, we need to dedicate space to our transit network to ensure that it can be efficient enough to transport 20%+ of the population

People do not want to ride buses, stop wasting our money. Buses are gross and used as camps for homeless. I will never ride a bus, except maybe to a UT Football game. Further you make the problem worse with "dedicated buslanes" further restricting room for cars and making turns downtown more difficult. I still do not understand how I cannot cross a solid white line, or drive in a bus lane, but the only option to turn is 10 ft from the intersection and if there are already people in the bus lane I either have to cut them off or break a traffic law. Very well thought out, fail

Dedicated space ensures timeliness of transit and puts incentive on drivers to move to using transit rather than cars if possible.

I feel the public input is very limited and geared to only get input in a way that pushes forward the concepts chosen. It does not appear to provide real input on if the chosen dedicated street path, which seems just based on cost at this time should be implemented without further impact analysis to the safety, local traffic, economy, and local connectivity of local communities in the North Lamar neighborhoods. Currently there are significant pedestrian, bike and car accidents. Thus, adding a train down the middle at street level would seem to ascorbate these impacts. A full traffic and safety analysis should be conducted on more than one option besides the do nothing alternate. A cultural and economic impact analysis should also be completed on more than one option besides the do nothing alternate as adding the ROW for dual trains and station would seem to require taking ROW from neighboring properties and hinder access into those properties, which overall would impact the local economy. Other studies: noise impacts

As a regular rider of the 801 nearly half of the ride time is simply sitting in traffic with other cars. If Public transportation is to be promoted as the preferable means of transportation, it should have its own dedicated transitway to cut commute time in half to be similar to that of a car.

If there isn't a dedicated space, what's the point!

Yes! It needs to move fast and not be stuck in traffic! If its slow, people won't use it.

The corridor needs to have completely dedicated space.

Dedicated right of way is absolutely essential.

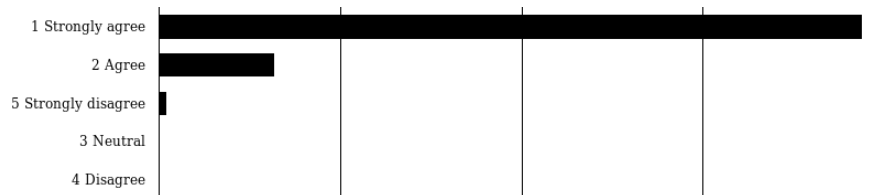
The transitways need to be separated and prioritized to ensure that it will be fast, frequent, and reliable.

Also should be in separate guideway in at least downtown, central and north central to decrease travel times, and allow for longer trains. Downtown block length limits train length

Being that the orange line is the most used road to take people up and down from north and south Austin, the only way that the traffic can be addressed without being in the same girdlock by having dedicated lanes. Not only will this be helpful as it is, but realistically speaking, a BRT lane is not enough for the time many want to commute. If you want people to feel like this is realizable and worth into getting into, it is only best if we invest in LRT for this is not only fast but reliable for the people to use more frequently.

Bruh, if my train gets stuck in traffic I'll be lived

It is important that the Orange Line connects with other lines to form a comprehensive, high-capacity and frequent transit network.



1 Strongly agree	97
2 Agree	16
5 Strongly disagree	1

Please feel free to elaborate as needed.

- The orange line should be a trunk line for a later system of light rail routes as Austin becomes a transit-focused city
- There should be a strong connection between the Orange and Blue Lines for people going to the airport from North Austin.
- More people will ride if there is a comprehensive network. More people can decide not to have cars or to have only one car in a family if there is a comprehensive network.
- What about an elevated line?
- From looking at the orange-line specific map, it seems like there is a missed opportunity connecting to the 335 bus
- We want to be able to explore and connect with other parts of the city that is currently inhibited by the heavy toll of parking availability and the time consideration of the bus system.
- Connectivity is key to complete trips.
- connection to other lines is very important for facilitating travel and access to all parts of the city, (e.g.) London, NYC, Mex City, Chicago, etc.
- The Orange Line needs to connect to the Blue Line (and thus create options to run different lines, such as N Lamar to ABIA).

In particular, connecting lines that run perpendicular to I-35 and Mopac are necessary along with the main lines that will most likely be parallel.

I miss the old Dillos in downtown.

But also getting across town from say Oak Hill to South Park Meadows is too long of a commute.

Connections are important to high frequency routes. Stops should be located here to make connections seamless.

Being able to go north and south into and out of downtown is the first priority and a great start, but being able to go to other neighborhoods more easily would be desired as well.

Other lines include fixed bus lines.

need easy access to connection if stops and routes are kept minimal

Connections are imperative. Not everyone is starting/stopping at the same location.

I struggle much more trying to traverse east/west in Austin than I do north/south. It often takes three times as long to get the same distance. I believe that providing east/west connectors between the Orange line and other HCT lines, primarily the Blue line would increase ridership and make the system a much more cohesive, synchronized plan. A connection is greatly needed in the area North of the Capitol but South of the University, as there is so many people traveling between the 2 corridors at this point but no transit to carry them across.

In a city like Austin with less than ideal road networks, frequency and connectivity is key to getting higher ridership. I firmly believe that an Orange line with connectivity to other lines is going to be the way forward.

kind of a leading question but, yeah, duh.

what good is one fast route that goes north-south on an already high service area if its not able to benefit the rest of the city, especially the areas where Austin's most vulnerable populations live.

It should serve it's purpose as a spine which may connect to other forms.

One of the major issues with the Red Line is that it currently missed many dense parts of town and doesn't connect in a sensible way with the busiest transit corridors. This is something the Orange Line could potentially rectify, and could drive greater adoption of public transit system-wide.

and transfers between different lines, different transit modes, even if i'm the future there are different companies, are low-cost or included or treated as same ticket fares

Yes, if the bus does not connect, residents will not use it. The reason my family does not often use the Austin rail is that there is no transportation from the stations to where we need to go.

It's of little value if the don't connect.

I would like as many connections the the red, blue(/20), green, and the 803 lines as possible because I would say that that is great north-south, central-east travel.

And, if you do build a park and ride in the four-points area, I would like to see some connector to these lines here to minimize transfers to get around Austin faster and cheaper (as it is right now, I can get to Leander from South Austin for \$4.75 and I would like to see an expansion on where I could go with \$5)

Frequent orange line options must be supported by frequent connections.

In addition, Downtown to Airport transit is a major component to many metropolitan cities. It should be a component to any proposal made.

Obviously!!

People do not want more buses. If you stage the questions in such a way you will get a yes. IE Do you think it is important that undeserved people in our community have access to public transportation? of Course people will say yes and then boom you have a justification to build this massive network that no one wants. We need some buses but until those operate at capacity we do not need any more.

The chronic difficulty of moving east and west in Austin needs to be addressed in some way ASAP.

Orange line will service the main throughfare into downtown, so connectability is essential for access to other parts of town. Otherwise, the orange line will mirror the connectivity issues the rapid lines/standard routes currently have.

The orange line would provide vital connections to two of Cap metro major park and rides in the north to the entire central part of the City. This line would also go by the popular Chinatown and Walnut Metro Park. The two factors that bring people from across the City to North Lamar are those two places.

The current routes on Lamar are used to transport kids to schools. These are local stops so could be kept on a bus system, but it is imperative the routes used by kids that cannot drive keep the stops to assist them to get to school.

Transfers are tricky because of the timing that is all too variable between routes. It makes sense to cross major routes to connect East/West routes with a central North/South route.

Especially the red line.

ADD A DOWNTOWN CIRCULATOR ON 18TH STREET TO CONNECT ORANGE AND BLUE LINES.

Please include a circulator that carries passengers between Guadalupe street, 15th street, Trinity street, and 18th street that would connect the Orange and Blue lines in a way that allows them to function synchronously and spread dense growth outside of the areas immediately surrounding each station

Previous Urban Rail plans in 2011, 2016, and 2018 explicitly included a circulator connecting the western and eastern downtown corridors twice, once by along 18th street and another on 4th St. between the Republic Square and Downtown stations. In regards to the downtown circulator Todd Hemingston said at the March 2018 board meeting “We’ve envisioned [a station] in the northeast by the emerging medical center. Then a smaller one on the Guadalupe corridor at the northern end as well as where that crossing line is right in the heart of where the capitol is doing a massive redevelopment of their complex [18th street]”.

The inclusion of the 18th street circulator connecting the Orange Line to the proposed Medical School Blue Line station should be made explicit in Project Connect’s long term vision; However, in order to fully serve the downtown community, it’s circuit should be changed. Rather than going all the way from 18th street to 4th street, the circuit should make its east-west crossings at 18th and 15th. This would reduce the redundancy of the route, as people are

unlikely to choose to ride the circulator between 18th and 4th streets when they could simply ride the orange or blue lines. Additionally, people are unlikely to choose to ride the circulator between the Republic Square and Downtown stations when they could just ride a higher capacity dedicated lane transit line. The only side of the circulator that is serving a purpose currently unserved by the rest of the rapid transit system is the 18th street connection. This should remain, and the 4th street connection should be replaced with a 15th street connection to allow for full access to the downtown area.

Interest in this downtown circulator is shared by the Downtown Austin Alliance. A Museum District circulator would provide rapid access to and from the eastern side of the Capitol District and the Dell Medical Center, as well as providing a much needed connecting route between the Orange and Blue lines.

Yes! People would love to get from one Austin hotspot to another (say from the airport to downtown to South Congress) without using a car. And connecting with other lines is crucial to realizing that dream.

This can only work if it gets people from point A to point B and there's no great trek to find the next bus or rail

I don't live on congress, so I would need to eat there first

The total cost of the Orange Line and other high-capacity transit lines must consider both the construction and long-term operation and maintenance costs.



1 Strongly agree	44
2 Agree	46
3 Neutral	21
4 Disagree	1
5 Strongly disagree	2

Please feel free to elaborate as needed.

This is why we should consider low-cost options for street-level light rail in narrow ROW situations, namely by taking car lanes. There are San Francisco lines you can look to for technological solutions to narrow ROW constraints for street-level light rail.

But we cannot use that as an excuse to cut corners today - better to overbuild/invest now as costs will rise disproportionately in the future.

The benefits of transit - including reduced carbon emissions per capita, improved air quality, more equitable access to the city, etc. - must also be factored into total delivered benefits vs. costs.

In my experience great maintenance promotes use of mass transportation

The total cost is important, but so is the quality. I'd rather reduce the length of the line to ensure full grade-separation and then extend the line later as funding allows and the station areas become more ripe for development.

Utilize low maintenance, sustainable vehicles, designed to operate in HOT climates like Austin. Don't make the same mistake you made with the MetroRapid Busses!

It is also important to consider the impact of the O&M costs of the line on the operation of other services, especially fixed bus service, and on the fares.

taxes or bonds?

Everything will have a cost. Not solving congestion on roads is expensive too.

This is a given. The entire Project Connect system will be a decade long project most likely, and the cost of operation post construction must be considered or the entire system will bankrupt itself.

Just build it.

Of course, but those costs need to be compared to the cost of not building transit, IE: Environmental, social, public health, road expansion, etc

Initial construction costs are less important than maintenance.

It's going to be expensive no matter what - the larger goal should be to design a GOOD system that last for decades rather than a cheaper one that does a pitiful job.

It would be good to emphasize keeping the operational costs down, as opposed to capital costs. I suspect that rail would have higher capital costs, but lower operational costs than buses in the long run.

We need to focus on results. All transit system are costly. There needs to absolutely be excellent budgetary oversight, but in terms of cost it's important to remember this is an investment in the future and a way to ensure the region isn't all stuck in horrifying traffic.

But I don't think that this should be a reason to spring for the cheapest solution, I am a proud austinite and I want this city to have a beautiful and functional transportation the likes of which put DC and Denver's networks to shame.

We don't need to build expensive lines to the suburbs that have low ridership. We need to serve the most people and the most low-income people as possible

Is this a pat yourselves on the back question!? ONLY someone in government would even think to ask this. YES costs should be taken into account. And you should not lie to us like you did for the metro rail when you told us that it would turn a profit and then after installation you back peddled and said oh no it

cannot run a profit even if it ran at 100% capacity 100% of the time, it is a service.

I am curious how much we spend total divided by number of riders, not rides. It may be cheaper to shut the whole thing down and give away Uber rides.

Cap Metro needs to take a step back and quit trying to justify their jobs by cramming more ---- on the tax payer (who they work for) that they are not asking for. Build more roads.

Believe it or not private industry will take care of this with out you. More people will live downtown and not need to use their cars as much, people also telecommute to work more and more and do not take up space on the roads.

Just to prove my point could you please point to your "Crowning success"? I think at best you have done a poor job and this is coming from a life long born and raised Austinite. Cut your staff cut your projects and use that money to build more roads (oh wait that would be giving the people what they want and we cannot have that you have to tell us what we want).

Construction and operation costs are important to consider, but with the understanding that this is a large scale investment meant to shift other transportation costs such as road maintenance and upkeep, in addition to sustainability priorities.

Many other impacts need to be evaluated prior to chosen a solution besides costs.

This will drastically affect the infrastructure of Austin and should be done with proper planning to cover all possible costs.

Yes cost is a consideration - but, it better to spend \$\$\$ on what is really needed, than \$\$ on what will do.

Cost is always an issue, but if planned accordingly, this can bring great change to the daily commute Austinites take on a daily basis, which will definitely outweigh the costs that many deem to say it's unnecessary, which we cannot afford to delay any further without further displacing minorities from their current spaces in exchange for rich young people who can afford the rent and further contribute to urban sprawl.

I don't see why not

Appendix E: Comments Received

Date	Zip Code	1. It is important to ensure that the Orange Line operates in its own dedicated space (transitway), free of other conflicts.	In areas where space is constrained, trade-offs may be necessary to provide safe, fast and reliable transit and minimize conflicts. I would prefer trade-offs that consider: Rank in order of importance with '1' being most important to prioritize and '8' being the least important.								3. The approach to early evaluation of traffic options for detailed analysis using a combination of right-of-way and station area evaluations is appropriate.	4. It is important that the Orange Line connects with other lines to form a comprehensive, high-capacity and frequent transit network.	5. The total cost of the Orange Line and other high-capacity transit lines must consider both the construction and long-term operation and maintenance costs.	6. The approach to evaluating and rating potential station areas is appropriate.	7a. The ratings assigned to potential station areas are appropriate.	7b. Do you agree with the proposed station locations?	8. Is there another station location that we should consider?	Additional Comments?
		Tradeoff 1	Tradeoff 2	Tradeoff 3	Tradeoff 4	Tradeoff 5	Tradeoff 6	Tradeoff 7	Tradeoff 8									
7/17/2019		Strongly Agree	Operation of cars						Use of Scooters		Strongly Agree							
7/17/2019	78752	Strongly Agree	Use of Bikes	Right-of-Way acquisition	Construction impacts	Timed implementation	Changes to traffic signal timing	Use of Scooters	Use of parking	Operation of cars	Neutral	Strongly Agree	Agree	Agree	Neutral			Crestview station should be high priority. Concerned about bike/pedestrian ROW along Orange Line. Would
7/17/2019	78705	Strongly Agree	Operation of cars	Use of Bikes	Construction impacts	Timed implementation	Right-of-Way acquisition	Changes to traffic signal timing	Use of parking	Use of Scooters	Strongly Agree	Strongly Agree	Strongly Agree	Agree	Agree	Yes		Do this now!! It is past due
7/17/2019	78757	Strongly Agree	Construction Impacts	Timed implementation	Right-of-Way acquisition	Operation of Cars	Changes to traffic signal timing	Use of Parking	Use of Scooters	Use of Bikes	Neutral	Strongly Agree	Agree	Neutral	Neutral	Yes	No. Too many stations make for a slow train.	I think the line should be street level (unless city gets state to share the cost), except between Coran Chaves and 3th, where it should be tunnel or out and over. Focus most on people served where they live work, play and go to school and providing frequent boardings to the most people. We need much higher understanding of the value of well designed surface, station, walkable urban places. Speed of long distance travel is a good metric but should be much lower in order of priority.
7/17/2019	78752	Strongly Agree	Timed Implementation	Use of Bikes	Use of Scooters	Construction Impacts	Operation of cars	Changes to traffic signal timing	Right-of-Way acquisition	Use of Parking	Neutral	Agree	Strongly Agree	Neutral	Neutral	No	Wheatsville + Hole in the Wall + West Mall + S. UT Campus to So Co Station instead of 1. Add another station between Triangle and Crestview.	Access, comfort, walkability, sidewalks in places are much more important than speed of long distance travel. Slow is good!
7/17/2019	78751	Strongly Agree	Use of Bikes	Use of Scooters	Right-of-Way acquisition	Timed implementation	Changes to traffic signal timing	Construction Impacts	Use of Parking	Operation of cars	Neutral	Strongly Agree	Agree	Agree	Neutral			How will this effect pedestrian safety/ right to walk? Austin traffic intersections are already not friendly for those on foot.
7/17/2019	78746	Strongly Agree	Use of Bikes	Use of Scooters	Timed implementation	Right-of-Way acquisition	Construction impacts	Changes to traffic signal timing	Operation of cars	Use of Parking	Strongly Agree	Strongly Agree	Strongly Agree	Disagree	Disagree	No	Far too many stations (in 1,6, and 7 segments). Not enough stations near and in downtown (segments 3 and 4)	Segments 3 and 4 should relocation all non-essential traffic to sub-surface toll lanes (either cut and cover or tunnel). Surface lanes open only to pedestrians, bikes, scooters, transit and essential government vehicles. All Park and Rides should charge for parking at a level that covers all costs for the station, parking lot, etc.
7/17/2019	78701	Strongly Agree	Use of Bikes	Construction Impacts	Changes to traffic signal timing	Changes to traffic signal timing	Use of Scooters	Operation of cars	implementation	Right-of-Way	Strongly Agree	Strongly Agree	Neutral	Neutral	Neutral			
7/17/2019	78757	Strongly Agree	Use of Bikes	Operation of Cars	Use of Scooters						Agree	Strongly Agree	Strongly Agree	Agree	Agree	Yes	More interested in walking and pedestrian use of street. No- they look good.	Improved reliability and frequency is critical!
7/17/2019	78757	Strongly Agree	Timed Implementation	Use of Bikes	Use of Parking	Changes to traffic signal timing	Operation of cars	Right-of-Way acquisition	Use of Scooters	Construction Impacts	Neutral	Strongly Agree		Neutral	Neutral	No	East and West	Why are we opinionating about pros and cons and not discussings facts? Danger above/street/below for pedestrians and riders. Flood risks, long and short term pollution, other things that go with it that other cities have experienced. How does this relate?
7/17/2019		Strongly Agree	Right-of-Way acquisition	Use of Bikes	Timed Implementation	Construction Impacts	Changes to traffic signal timing	Operation of cars	Use of Parking	Use of Scooters	Strongly Agree	Strongly Agree	Agree	Agree			One station should "naturally" connect Orange and Blue lines. Current designs. Line is properly designed should be more than 65%.	I think the population growth in 30 years if the Orange and Blue lines. Current designs. Line is properly designed should be more than 65%.
7/17/2019	78723	Strongly Agree	Use of Bikes	Changes to traffic signal timing	Operations of cars	Timed implementation	Construction impacts	Right-of-Way acquisition	Use of parking	Use of Scooters	Strongly Agree	Strongly Agree	Agree	Agree	Agree	Yes		
7/17/2019	78701	Agree	Changes to traffic signal timing	Timed implementation	Operations of cars	Use of Bikes	Construction impacts	Right-of-Way acquisition	Use of parking	Use of Scooters	Agree	Agree	Strongly Agree	Agree				
7/17/2019	78705	Agree	Right-of-Way acquisition	Operation of Cars	Use of Bikes	Use of Parking	Changes to traffic signal timing	Construction Impacts	implementation	Use of Scooters	Agree	Agree	Agree	Neutral	Agree			
7/17/2019	78705		Right-of-Way acquisition	Timed implementation	Construction impacts	Operation of Cars	Use of Bikes	Use of Parking	signal timing	Use of Scooters	Strongly Agree	Agree	Disagree	Strongly Agree	Agree	Yes	45th Street, Cesar Chavez	
7/17/2019	78751	Strongly Agree	Operation of cars	Use of Bie	Right-of-Way acquisition			Use of Scooters	Construction Impacts	Use of Parking	Agree	Neutral	Agree	Agree	Neutral	Yes	No	Tunnel option is best through Central N. Central areas, in terms of being able to fit into the city as it already exists. But it's expensive and takes longer to construct. We miss the #5 bus going down 45th through Hyde Park to downtown! That make it convenient for me to take the bus. Now I don't take the bus because the other routes are inconvenient. Triangle tsop should be bumed up in rating to green because of the enormouse amount of construction in the area bumping up numbers of jobs and residents. Both as well as the large elderly/care facility and state hospital nearby, both of which have a higher need for transit than able-bodied folks.
7/17/2019	78758	Strongly Agree	Right-of-Way acquisition	Changes to traffic signal timing	Use of Bikes	Timed implementation	Use of Scooters	Construction Impacts	Use of parking	Operation of cars	Agree	Agree	Strongly Agree	Strongly Agree	Agree	Yes	1. Multiple stops on SoCo (Congress and Riverside). 2. Between "Capitol West" and 24th.	The easiest way to lose the support of transit advocates like me is a plan that wastes transit money-costs too much and moves too few riders. Please consider cost effectiveness to placate not only conservatives, but progressives who want transit money used wisely.
7/17/2019	78704	Strongly Agree	Timed Implementation	Changes to traffic signal timing	Construction impacts	Right-of-Way acquisition	Use of Scooters	Use of Bikes	Operation of cars	Use of Parking	Agree	Strongly Agree	Agree	Agree	Agree	Yes	SoCo should be high station.	Excellent choice of corridor. It's the backbone of the city of Austin's movement. Any viable network starts here. Separating the transit from streetlights and speed limits (not street level) is vital for creating a strong advantage to automobile traffic and increasing ridership. Needs to be sexy to attract people not currently engaged in mass transit. Taking away car lanes on Guadalupe and Lamar will endanger successful vote.

7/17/2019	78705	Strongly Agree	Timed Implementation	Use of Bikes	Use of Scooters	Changes to traffic signal timing	Right-of-Way acquisition	Construction Impacts	Use of parking	Operation of cars	Agree	Strongly Agree	Strongly Agree	Agree	Neutral	Yes	
7/17/2019	78705	Strongly Agree	Timed Implementation	Operation of Cars	Use of Parking	Changes to traffic signal timing	Right-of-Way acquisition	Construction Impacts	Use of parking	Operation of cars	Strongly Disagree	Disagree	Strongly Disagree	Strongly Agree	Neutral	Yes	We need a tunnel. Build a tunnel so Austin can be a city on par with the best!
7/17/2019	78757	Strongly Agree	Use of Bikes	Timed implementation	Use of Scooters	Right-of-Way acquisition	Changes to traffic signal timing	Construction Impacts	Use of parking	Operation of cars	Neutral	Agree	Agree	Strongly Agree	Strongly Agree		South waterfront district or "SoCo North"
7/17/2019	78701	Strongly Agree	Timed Implementation	Use of Bikes	Construction impacts	Right-of-Way acquisition	Changes to traffic signal timing	Operation of cars	Use of Parking	Use of Scooters	Strongly Agree	Strongly Agree	Neutral	Agree	Neutral		More stations are better. One more at UT, one more at SoCo.
7/17/2019	78703	Strongly Agree	Operation of cars	Use of Bikes	Use of Parking	Construction Impacts	Right-of-Way acquisition	Timed implementation	Changes to traffic signal timing	Use of Scooters	Agree	Strongly Agree	Strongly Agree	Neutral	Neutral		Need feeders from W. Austin (Windsor Rd. to 24th Street). Keep in mind geographic barriers to access to the Orange Line like the steep bluff along Shoal Creek and hills in West Austin. Consider area population, age, and location of employment. West Austin has many older residents and is the site of much domestic road landscape work where workers need transit.
7/17/2019	78756	Strongly Agree	Right-of-Way acquisition	Operation of Cars	Changes to traffic signal timing	Timed implementation	Construction impacts	Use of Parking	Use of Bikes	Use of Scooters	Strongly Agree	Strongly Agree	Strongly Agree	Disagree	Disagree		45th and Lamar intersection
7/17/2019	78701	Neutral	Use of Parking	Changes to traffic signal timing	Construction impacts	Operation of Cars	Timed Implementation	Right-of-Way acquisition	Use of Bikes	Use of Scooters	Agree	Agree	Neutral	Agree	Neutral	Yes	Brentwood neighborhood associations through it's steering committee, which I am a member of, request Route 5 overview. This we consider to be an urgent need to either return the SC buses to the original route previous to summer 2018 change or discover better synchronicity with cross town buses to UT campus area through to downtown. Ridership data absolutely supports that this issues needs to be addressed.
7/17/2019	78757	Strongly Agree	Timed Implementation	Construction Impacts	Operations of cars	Use of Bikes	Use of Scooters	Changes to traffic signal timing	Right-of-Way acquisition	Use of Parking	Strongly Agree	Strongly Agree	Strongly Agree	Agree	Neutral		North Loop East
7/17/2019	78705	Agree		Use of Parking	Operations of cars	Use of Bikes	Use of Scooters				Agree	Agree	Agree	Agree	Agree		I would like to see ease of connectivity between the 803 and the Orange Line. I would like to see this process of upgrade applied in the future to the 803 (yellow line). I am concerned about the Crestview intersection, and would like to see the Orange Line go underground and have a subway station at Crestview. Why is the yellow line route on the long term vision plan different from the 803, both downtown and around the triangle. Thank you!
7/17/2019	78759	Agree	Timed Implementation	Operation of Cars	Use of Parking	Changes to traffic signal timing	Right-of-Way acquisition	Use of Bikes	Construction Impacts	Use of Scooters	Agree	Strongly Agree	Strongly Agree	Agree	Agree		The Oasis in the Hill Country
7/17/2019	78792	Strongly Agree	Construction Impacts	Timed implementation	Right-of-Way acquisition	Operation of Cars	Use of Bikes			Use of Scooters	Strongly Agree	Strongly Agree	Agree	Strongly Agree	Agree		The drag is somewhat unique and really needs it own analysis. I like the idea of how flexible in terms of different needs (street, above, below). This fits each others pedestrians safety and comfort are very important on the drag, accent to property from Guadalupe is very important in many parts of the drag. Efficient to all lanes. I dont think we can sacrifice bike/scooter (only can share). So the dedicated lane I think has to go internal for the West couple of stops. Also with stops underground there has to be a good ... at the UT area and downtown stops.
7/17/2019	78715	Strongly Agree	Right-of-Way acquisition	Timed implementation							Agree	Strongly Agree	Strongly Agree				I believe more consideration and emphasis should be placed on prepping for future cities, which will be comprised with a lot of autonomous vehicles. I believe all construction and consideration should go into ensuring coversans are easier. I believe every decision will fine year forecasts should definety keep in mind the emerging technology.
7/17/2019	78761	Strongly Agree	Right-of-Way acquisition	Changes to traffic signal timing	Operations of cars	Construction Impacts	Timed Implementation	Use of Bikes	Use of Scooters	Use of Parking	Disagree	Agree	Agree	Neutral	Neutral		Connectivity to local cross town routes is critical to overall system functionality (duh, right?) Pedestrian safety/access and comfort (ie: sun and rain protection) also important considerations. Thank you for moving Austin forward!
7/17/2019	78744	Agree	Right-of-Way acquisition	Construction Impacts	Changes to traffic signal timing	Timed implementation	Use of Bikes	Use of Parking	Operation of cars	Use of Scooters	Strongly Agree	Strongly Agree	Strongly Agree	Agree	Agree	Yes	Urban rail (light rail) has far more potential than BRT. Urban rail has potential to encourage adjacent econmic development TOD- very little for BRT) system must be affordable and implemented quickly while attracting adjacent ridership and minimizing O+ M costs. LRT meets this criteria. I'm not convinced Project Connect team has adequate grouping. 1. Cities unlimited resources. 2. Need to create a workable effective affordable project. 3. Need to get a workable urban rail system scaled to Austin's size, in operation ASAP to help solve mounting mobility problems.
7/17/2019	78705	Strongly Agree	Operation of cars	Use of Bikes	Timed implementation	Construction Impacts	Right-of-Way acquisition	Use of Parking	Changes to traffic signal timing	Use of Scooters	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree	Yes	The data used to rank the station locations may be a little outdated.

7/17/2019	78744	Strongly Agree	Use of Bikes	Use of Parking	Timed implementation	Changes to traffic signal timing	Right-of-Way acquisition	Construction Impacts	Operation of cars	Use of Scooters	Strongly Agree	Strongly Agree	Neutral	Agree	Agree	Yes	East of proposed William Cannon.	More people using public transport service would most probably mean less transit time for all riders. It would be nice to consider an segments of population of Austin, even those who can afford car travel.
7/17/2019	78759	Strongly Agree	Operation of cars	Construction Impacts	Changes to traffic signal timing	Timed implementation	Right-of-Way acquisition	Use of Bikes	Use of parking	Use of Scooters	Agree	Strongly Agree	Strongly Agree	Agree	Agree	Yes		I believe station names should be very clear. Ex: "Mary at SoCo", instead of just "SoCo". I enjoyed today's meeting I feel like opinions were heard and respected! Prioritized pedestrian traffic on Guadalupe at UT over transit. Maintain parking on Guadalupe between MLK and 24th. Bus Rapid Transit preferred over Light Rail. When there are real constraints, cut and cap given safe treatment around top side openings, seems like a good balance between pure tunnel and elevated (which is likely to have usual impact challenges).
7/17/2019		Strongly Disagree	Operation of cars	Use of Parking	Use of Bikes	Construction Impacts	Changes to traffic signal timing	Right-of-Way acquisition	Use of Scooters	Timed Implementation	Neutral	Neutral	Strongly Agree					For me, frequency is key! I want to go catch the bus without needing to read a timetable/google maps. I want to know that while transferring and waiting for my next bus I won't be standing in the heat for over ten minutes.
7/17/2019	78704	Strongly Agree	Right-of-Way acquisition	Use of Bikes	Construction impacts	Operation of Cars	Changes to traffic signal timing	Use of Scooters	Use of parking	Timed Implementation	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree	Neutral		Penn Field, maybe rather than St. Eds.	
7/17/2019	78757	Strongly Agree									Agree	Strongly Agree	Agree	Agree				
7/17/2019	78756	Strongly Agree	Timed Implementation	Operation of Cars	Use of Parking	Construction Impacts	Right-of-Way acquisition	Changes to traffic signal timing	Use of Bikes	Use of Scooters	Agree	Strongly Agree	Strongly Agree	Agree	Agree	Yes	No	
7/17/2019	78752	Strongly Agree	Operation of cars	Use of Bikes	Timed implementation	Construction Impacts	Right-of-Way acquisition	Changes to traffic signal timing	Use of parking	Use of Scooters	Strongly Agree	Strongly Agree	Strongly Agree	Agree	Agree	Yes		Choo Choo, y'all! Daily traffic conflicts with surface rail in Houston-Schedle/reliability impact? Beauty of the Cap Metro red line is a predictable, reliable schedule (unlike 801/803 which still suffer downtown due to traffic conflicts in bus lanes).
7/17/2019	78723	Strongly Agree	Right-of-Way acquisition	Changes to traffic signal timing	Timed implementation	Use of Bikes	Use of Parking	Use of Scooters	Construction Impacts	Operation of cars	Strongly Agree	Strongly Agree	Agree	Neutral	Neutral	No	Align slightly further west in the north segment to new red line station and soccer stadium (Kramer)	We disagree with ruling out cut/cover or tunneling for the line. It is much cheaper to do it now then pay a lot more when the areas are developed. Elevated transit is known to disrupt the social fabric of a neighborhood. We should at least do a study on potential impact on social life and reduce of neighborhoods. Street level is chaper but is not a long term solution. It is still impacted by street level interations, pedestrians, non-attentive drivers, etc. Thank you for fighting all there narrow-minded people and trying to improve Austin.
7/17/2019	78723	Strongly Agree	Timed Implementation	Use of Bikes	Changes to traffic signal timing	Right-of-Way acquisition	Construction impacts	Use of Parking	Use of Scooters	Operation of cars	Agree	Strongly Agree	Neutral	Neutral	Disagree		Near Kramer to UT Perhaps a stop in between UT West Mall/Capitol West and another between Republic Square/Auditorium Shores.	
7/17/2019	78701	Strongly Agree	Right-of-Way acquisition	Timed implementation	Use of Bikes	Use of Scooters	Construction impacts	Changes to traffic signal timing	Operation of cars	Use of Parking	Strongly Agree	Strongly Agree	Strongly Agree	Neutral	Agree			
7/17/2019	78703	Strongly Agree	Use of Bikes	Use of Scooters	Right-of-Way acquisition	Changes to traffic signal timing	Timed Implementation	Construction Impacts	Use of parking	Operation of cars	Agree	Strongly Agree	Agree	Neutral	Neutral		Yes, at 38th and Guadalupe	Need bike storage on cars, surface level is best, more stop, no need to avoid car lanes.
7/17/2019	78705	Strongly Agree	Use of Bikes	Changes to traffic signal timing	Right-of-Way acquisition	Timed implementation	Construction impacts	Use of Scooters	Use of parking	Operation of cars	Neutral	Strongly Agree	Neutral	Neutral	Neutral	Yes		It is critical to factor things beyond cost/R.O.W availability. Long-term viability and high growth plus zoning challenges should also be considered in mode and transitway types. These trends indicate a need for the highest capacity options(s) if Project Connect is truly intending to plan for the long-term. The cheapest option (surface) should be selected regardless of impacts on cars. Increasing the cost will lead to less miles of LRT or this whole thing failing at the ballot box. Preserving car lanes at the cost is morally indefensible given the current state of the climate. Please do the right thing.
7/17/2019	78752	Strongly Agree	Use of Bikes	Use of Scooters	Construction impacts	Right-of-Way acquisition	Changes to traffic signal timing	Timed implementation	Use of parking	Operation of cars	Agree	Strongly Agree	Strongly Agree	Agree	Agree			Operations cost to unlock frequency and line capacity are critical criteria that exhibits why rail is the only practical choice.
7/17/2019	78660	Strongly Agree	Use of Bikes	Use of Scooters	Right-of-Way acquisition	Timed implementation	Construction impacts	Use of Parking	Changes to traffic signal timing	Operation of cars	Strongly Agree	Agree	Strongly Agree	Agree	Agree			We should prioritize frequency of transit connectivity to bus routes, seperations or prioritization of Rail/Transit speed. Please consider Crosstown (East-West) connections. Sunday and evening service.
7/17/2019	78723	Strongly Agree	Timed Implementation	Right-of-Way acquisition	Use of Parking	Use of Bikes	Use of Scooters	Changes to traffic signal timing	Operation of cars	Construction Impacts	Agree	Strongly Agree	Agree	Neutral	Agree		City Hall	I think investment is a better decision than speed of implementation of up front cost. The balance of getting approval for as expensive, but future proof construction is key.
7/17/2019	78759	Strongly Agree	Right-of-Way acquisition	Timed implementation	Use of Bikes	Use of Scooters	Use of Parking	Operation of cars	Construction Impacts	Changes to traffic signal timing	Agree	Strongly Agree	Strongly Agree	Neutral	Neutral	Yes		
7/17/2019	78705	Strongly Agree	Operation of cars	Use of Bikes	Use of Scooters	Changes to traffic signal timing	Use of Parking	Timed implementation	Right-of-Way acquisition	Construction Impacts	Strongly Agree	Strongly Agree	Strongly Agree	Agree	Agree		Greater Number of statements in the North Central and Central Austin areas.	
7/17/2019	78701	Strongly Agree	Right-of-Way acquisition	Timed implementation	Use of Bikes	Changes to traffic signal timing	Operation of cars	Use of Scooters	Construction Impacts	Use of Parking	Strongly Agree	Strongly Agree	Neutral	Agree	Agree	Yes	Statesman Development area.	
7/18/2019	78704	Agree	Timed Implementation	Operation of Cars	Use of Parking	Construction Impacts	Use of Bikes	Right-of-Way acquisition	Changes to traffic signal timing	Use of Scooters	Agree	Strongly Agree	Strongly Agree	Agree	Neutral	No	Also consider area by University and Capital West	Your presentation style is effective and peole appear to be glad they came. It is hard to get people out in July but Cap Metro's website and Project Connect bury the info on meetings.
7/18/2019	78748	Strongly Agree	Construction Impacts	Operation of Cars	Right-of-Way acquisition	Timed implementation	Use of Bikes	Use of Parking	Use of Scooters	Changes to traffic signal timing	Strongly Agree	Strongly Agree	Agree					Please put two stops at UT. 29th St. is on a "UT" stop. Someone working at UT would not use it. In Central areas it's ok to have stops closer together.
7/18/2019	78705	Strongly Agree									Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree				

7/18/2019	78736	Strongly Agree	Use of Bikes	Right-of-Way acquisition	Construction impacts	Use of Scooters	Timed Implementation	Changes to traffic signal timing	Use of parking	Operation of cars	Neutral	Agree	Agree	Neutral	Disagree	Yes	St. Elmo- will have lots of new mixed use development soon. Also, affordable housing nearby Foundation Community Apartments.	Need to evaluate how many people can easily assess station- mile radius. Ridership is very important for the cost of this project- should be primary consideration. How is Woodridge Square yellow! Any Downtown station should be green. Triangle should be green- New state buildings being built, lots of current state workers, plus Triangle residents and businesses. Captitol will be green in the future once state building development is built- new facility plan. Consider state building plan new state building near the IM Field near the Triangle. Huge deveopment along Congress between the Capitol and UT. Capitol West stadium should be located to take advantage of this. Also, are any of the plans taking into consideration travel of middle a high school students? Some schools (such as Lamar) do not offer buses outside of the zoned area for the school. May large cities offer "speed city bus routes" that include stops near schools to allow for bettwe public transit access for students. I was bussed from East to West Asutin in the 70's or 80's and I had to use the city buses. This was difficult and the options for students is no better now.	
7/18/2019	78708	Strongly Agree	Timed Implementation	Operation of Cars	Use of Parking	Use of Bikes	Right-of-Way acquisition	Changes to traffic signal timing	Construction Impacts	Use of Scooters	Strongly Agree	Strongly Agree	Strongly Agree	Neutral	Neutral		East-West connection have always been poor in Austin. How is this plan taking needs of East Austin and other traditionally underserved ones into consideration with this plan. These areas we are most in need of good affordable public transit.		
7/18/2019	78705	Strongly Agree	Use of Bikes	Construction Impacts	Timed implementation	Changes to traffic signal timing	Right-of-Way acquisition	Use of Parking	Operation of cars	Use of Scooters	Strongly Agree	Strongly Agree	Strongly Agree	Neutral	Neutral	Yes			
7/18/2019	78705	Strongly Agree	Operation of cars	Use of Bikes	Construction impacts	Timed implementation	Changes to traffic signal timing	Use of Scooters	Use of parking	Right-of-Way	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree	Agree	Yes	Wheatville (Guadalupe and 32nd)	Need service frequency to be less than 10 minutes peak, peak no more than 15 minutes off peak.	
7/18/2019	78704	Strongly Agree	Changes to traffic signal timing							Use of Scooters	Strongly Agree	Strongly Agree	Neutral	Agree	Agree	Yes	Maybe less north of river, maybe not woodridge but maybe add MLK?	Try to make vote city (municipal) only so that the rest of the county (unaffected) doesn't vote this down again. This survey could be much more specific and clear in order to get constructive feedback. I support the Orange Line but I wish this workshop was more comprehensive and less useless questions. I feel like my comments were not heard.	
7/18/2019		Strongly Agree	Use of Bikes	Operation of Cars	Right-of-Way acquisition	Construction Impacts	Use of Parking	Changes to traffic signal timing	Timed implementation	Use of Scooters	Agree	Strongly Agree				Yes			
7/18/2019		Strongly Agree	Use of Bikes	Right-of-Way acquisition	Operations of cars	Timed implementation	Construction impacts	Changes to traffic signal timing	Use of parking	Use of Scooters	Strongly Agree	Strongly Agree	Agree	Strongly Agree	Neutral	Yes	Additioanl station near SoCo. Theres new development coming in on 1st street in this area.		
7/15/2019	78704	Strongly Agree	Changes to traffic signal timing	Construction Impacts	Use of Bikes	Timed implementation	Right-of-Way acquisition	Operation of cars	Use of parking	Use of Scooters	Agree	Strongly Agree	Strongly Agree	Agree	Agree			I prefer dedicated route where other bus routes could utilize dedicated lanes of Orange and Blue lines for short distances. This would mean a preference for bus vs. rail. This allows for access from East/West of the proposed Orange Line. It also allows for more rapid travel than buses traveling within traffic. Goal: Mazimise utilization of dedicated lane/route.	
7/15/2019		Agree	Construction Impacts	Use of Bikes	Changes to traffic signal timing	Construction impacts	Timed implementation	Right-of-Way acquisition	Use of Parking	Use of Bikes	Use of Scooters	Strongly Agree	Strongly Agree	Strongly Agree	Neutral	Neutral	Yes	Between Slaughter and William Cannon at Ditman	
7/15/2019	78704	Strongly Agree	Right-of-Way acquisition	Construction Impacts	Timed implementation	Construction impacts	Changes to traffic signal timing	Use of Parking	Use of Bikes	Use of Scooters	Agree	Strongly Agree	Agree	Neutral	Agree	Yes			
7/24/2019	78756	Strongly Agree	Right-of-Way acquisition	Timed implementation	Construction impacts	Changes to traffic signal timing	Use of Bikes	Operation of cars	Use of Scooters	Use of Parking	Strongly Agree	Agree	Neutral					If you build it, hopefully the city will encourage further densifying around it. Also need to consider impact on residents ability to connectivity in area ie: Orange Line tip the sentrifcation needle? Is Project Connect being viewed/worked through on equity lens? I left Q. 2,3,6 and 7 blank because I didn't understand info provided.	
7/24/2019	78753	Neutral									Agree	Strongly Agree						Take into consideration environmental justice areas and approach station locations through an equity lense. Austin has had a bad history of gentification and the Orange Line has potential to make surrounding areas more express lined moving into the future. A tunnel is preferred in areas like UT where Guadalupe is super busy and on SoCo.	
7/24/2019	78723	Strongly Agree	Use of Bikes	Use of Scooters	Changes to traffic signal timing	Timed implementation	Right-of-Way acquisition	Use of Parking	Construction Impacts	Operation of cars	Agree	Strongly Agree	Neutral	Agree	Agree	Yes	Maybe coordinating with suburban areas who are more dependent on vehicle use coming into downtown Austin.		
7/24/2019	78723	Strongly Agree	Use of Bikes	Right-of-Way acquisition	Timed implementation	Construction Impacts	Changes to traffic signal timing	Use of Parking	Operation of cars	Use of Scooters	Agree	Strongly Agree	Neutral	Agree	Disagree			Keep in consideration pedestrian/resouce connectivity if moving forward with street-level (more spaced out crosswalks). Take into consideration homeless populations mobility. I hope that once these studies/feedback get translated into recommendations. There can be a prioritization of resources to areas in Austin that have been left behind. There should be an analysis of "cultural costs" and true assesment of timelines. Folks dont want to invest in projects that will take 20 years! They would be different by then. All options should be carbon neutral!	
7/24/2019	78610	Strongly Agree	Use of Parking	Use of Bikes	Construction impacts	Operation of Cars	Right-of-Way acquisition	Timed implementation	Changes to traffic signal timing	Use of Scooters	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree	Agree	Yes		Q2: This question is confusing and has items that don't feel directly comparable. Q5: The cost needs to be palatable to pass a vote and get the initial push to robust transit underway. Long term costs can be justified later once people love and rely on the system.	
7/24/2019	78758	Strongly Agree	Right-of-Way acquisition	Use of Bikes	Changes to traffic signal timing	Operation of Cars	Use of Scooters	Construction Impacts	Use of parking	Timed Implementation	Agree	Strongly Agree	Neutral	Agree	Agree	Yes			

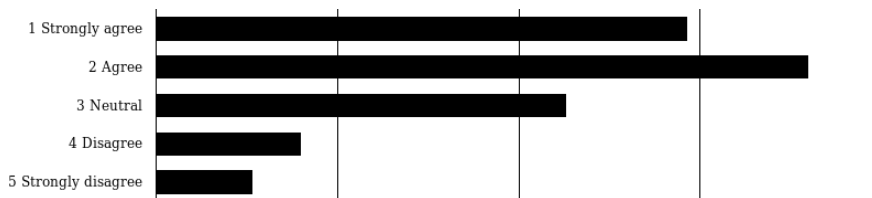
7/24/2019																		Use Light Rail not busses. Stop talking about Automatic Driverless Buses- this is not going to happen for a very long time, if ever. Take lanes away from cars! We need to transition off cars.
7/24/2019	78758	Agree	Timed Implementation	Right-of-Way acquisition	Operations of cars	Changes to traffic signal timing	Use of Bikes	Construction Impacts	Use of parking	Use of Scooters	Strongly Agree	Strongly Agree	Strongly Agree	Agree	Neutral	Yes		
7/24/2019	78758	Strongly Agree	Operation of cars	Use of Bikes	Right-of-Way acquisition	Use of Parking	Use of Bikes	Construction implementation	Changes to traffic signal timing	Use of Scooters	Agree	Strongly Agree	Agree	Agree	Agree	Yes		Don't we need more East/West Routes? The area is aging" and we need lots of accessibility. Huge problem that Red Line has no station near Rundberg. Why not use a corner of Railyard? The stretch between Crestview and kramer is long and densely populated.
7/24/2019	78758	Agree	Operation of cars	Use of Bikes	Use of Parking	Construction Impacts	Right-of-Way acquisition	Timed implementation	Changes to traffic signal timing	Use of Scooters	Agree	Strongly Agree	Strongly Agree	Neutral	Neutral	Yes		Please do not ignore N. Lamar north of 183. North Lamar between 183 and Braker requires intensive planning and investments.
7/24/2019	78753	Disagree	Right-of-Way acquisition	Construction Impacts	Use of Parking	Operation of Cars	Changes to traffic signal timing	Timed implementation	Use of Bikes	Use of Scooters	Agree	Strongly Agree	Strongly Agree	Agree	Strongly Agree	Yes		Light rail or subway please. Don't worry about saving car lanes. Must have zoning changes.
7/24/2019	78705	Strongly Agree	Use of Bikes	Use of Scooters	Changes to traffic signal timing	Right-of-Way acquisition	Timed Implementation	Construction Impacts	Use of parking	Operation of cars	Neutral	Strongly Agree	Neutral	Neutral	Agree	Yes	Austin Amtrak Station	It seems this line is targeted at central city areas, not out in the suburbs. Get the suburban people out of their cars!! Central city residents may already be multi modal.
7/24/2019	78757	Strongly Agree	Construction Impacts	Right-of-Way acquisition	Timed implementation	Use of Parking	Changes to traffic signal timing	Use of Bikes	Operation of cars	Use of Scooters	Agree	Strongly Agree	Strongly Agree	Neutral	Neutral	Yes		Keep as much green space and shade from trees as possible to help with air quality.
7/24/2019	78751	Strongly Agree	Timed Implementation	Right-of-Way acquisition	Construction impacts	Use of Bikes	Changes to traffic signal timing	Use of Scooters	Use of Parking	Operation of cars	Agree	Agree	Strongly Agree	Agree	Agree	Yes		I'm not personally concerned with loosing car lanes or parking. Transit needs to be frequent and convenient for it to be a reliable alternative to car. I would also encourage the consideration of an even shorter starter line if the initial capital cost needs to be cheaper for the public voter buy in.
7/24/2019	78757	Strongly Agree	Operation of cars	Use of Bikes	Construction impacts	Changes to traffic signal timing	Timed Implementation	Right-of-Way acquisition	Use of parking	Use of Scooters	Agree	Strongly Agree	Agree	Agree	Agree	Yes	Need alternating options for stops in between Orange Line stations	Frequency of routes and ability to make transfers within 10 minutes (or less) is imerative to overall success of transit system.
7/24/2019	78753	Strongly Agree	Use of Bikes	Operation of Cars	Use of Parking	Changes to traffic signal timing	Timed Implementation				Agree	Strongly Agree	Agree	Agree	Disagree	Yes		
7/24/2019	78752	Strongly Agree	Use of Bikes	Changes to traffic signal timing	Right-of-Way acquisition	Construction Impacts	Opr	Use of Scooters	Use of parking	Timed Implementation	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree	Yes		Great!
7/24/2019	78758	Strongly Agree	Right-of-Way acquisition	Use of Bikes	Timed implementation	Construction Impacts	Operation of cars	Use of Scooters	Use of parking	Changes to traffic signal timing	Agree	Strongly Agree	Strongly Agree	Agree	Agree	Yes		It is important to consider area need in choosing and ranking station viability. If left unconsidered, the poeer, less mobile areas of Austin will stay that way. Mobility is huge for the continued improvement and development of those areas.
7/24/2019	78758	Strongly Agree	Operation of cars	Use of Bikes	Timed implementation	Use of Parking	Construction impacts	Right-of-Way acquisition	Changes to traffic signal timing	Use of Scooters	Agree	Strongly Agree	Strongly Agree		Agree	Yes		Transfers need to be quick and efficient- they need to be timed and connections from East/West need to run frequently enough to make the Orange Line frequency make sense. Dedicated transit space is absolute priority. Must be built for population growth. Worth it to pay more now for trains rather than go cheap but be in the same mess in 20 years. Transit must be faster than cars or no one will change. Thank You!
7/24/2019	78753	Agree		Changes to traffic signal timing	Right-of-Way acquisition		Operation of cars	Timed implementation	Use of parking	Construction Impacts	Agree	Strongly Agree	Strongly Agree	Disagree	Disagree			Station ranking document should be public. Unclear that leaning forward (considering development speed) or current concentrations of transit-dependent residents.
7/24/2019	78754	Strongly Agree	Use of Bikes	Right-of-Way acquisition	Use of Parking	Use of Scooters	Operation of cars	Timed implementation	Changes to traffic signal timing	Construction Impacts	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree	Neutral	Yes	Masterson Pass as various community organization groups shared there is high concentration of immigrant/refugee population there that need access to high transit.	Drop Stassney from proposed line and add to potential future ext. Add Rundbert to proposed line. Community is disadvantaged and can benefit now.
7/24/2019	78731	Strongly Agree	Right-of-Way acquisition	Timed implementation	Use of Bikes	Use of Scooters	Changes to traffic signal timing	Use of Parking	Impacts	Operation of cars	Agree	Strongly Agree	Strongly Agree	Neutral	Neutral			
7/24/2019	78757	Agree	Use of Bikes	Changes to traffic signal timing	Timed implementation	Construction Impacts	Right-of-Way acquisition	Use of Parking	Operation of cars	Use of Scooters	Agree	Strongly Agree	Strongly Agree	Agree	Neutral	Yes		I think it's very important to have mass transit that is either above or below ground. Street level trains are the final option, though they would be beter than what we have.
7/24/2019	78722	Strongly Agree	Use of Bikes					Use of Parking	Changes to traffic signal timing	Operation of cars	Agree	Strongly Agree	Strongly Disagree	Agree	Agree	Yes	Capital West must be far enough worth to serve current Museum Station because MLK is a dense trip generator.	What is the current rate of fare jumping or CapMetro? It is possible to risk higher rates for fare jumping in order to get faster boarding, lower dwell times and off vehicle fare paying? Speed is #1, #2, #3 importanc. Getting trains and buses out of traffic/traffic lights, turning vehicles is critical. Orange Line should turn East at Auditorium Shores and head to ABIA Blue Line Should take over southern position of Orange to Republic Square then turn East on 5th, 6th, 7th, 8th to Trinity/Rod River than turn North.
7/24/2019	78757													Disagree				I am concerned about excavated solutions, since Austin is built on limestone with many artesian springs. The HRC and Blanton Museum at UT both discovered artesian springs beneath their sites causing great cost over runs and redesign of architectural and mechanical systems.
7/24/2019	78705	Strongly Agree	Right-of-Way acquisition	Timed implementation	Construction impacts	Use of Bikes	Operation of cars	Use of Parking	Use of Scooters	Changes to traffic signal timing	Strongly Agree	Agree	Agree	Agree	Strongly Agree	Yes	N/A	Increased frequency. If elevated/ cut and cover/tunnel would allow for autonomous decreased frequency.
7/24/2019	78757	Agree									Agree	Strongly Agree	Strongly Agree					

7/24/2019	78758	Strongly Agree	Use of Bikes	Use of Scooters	Timed implementation	Construction Impacts	Changes to traffic signal timing	Use of Parking	Operation of cars	Right-of-Way Construction Impacts	Strongly Agree	Strongly Agree	Strongly Agree	Agree	Agree	Yes	N/A. I like station locations on Orange Line and generally highly agree with selection and rating. Just curious about details of rating process.	Think the Orange Line will most likely be most important part of Project Connect and must be carefully done to satisfy current needs/desires and future needs/desires. Overall, doing a great job. I am very excited for a future here with high quality transit otherwise I'd have to move to another city with better transit because I hate driving. Almost being killed walking/biking etc. Thank you for work so far and work going forward. Will make ATX an awesome place. PS. Please be willing to take care lanes away where it's feasible. Bus or LRT I'd be happy with just make high quality either way.
7/24/2019		Strongly Agree	Use of Bikes	Operation of Cars							Disagree	Strongly Agree	Agree	Agree	Neutral			Higher speed Right now I think it's important to consider not only areas that are highly used, but look at areas that are impossible to use public transit in. Ther Orange Line is planned basically for an area that is already serviced... (by rapid transit). Existing Red Line-consider adding stops.
7/24/2019	78752	Agree	Use of Bikes			Construction Impacts	Use of Parking	Ues of Scooters	Operation of cars	Right-of-Way	Strongly Agree	Strongly Agree	Neutral	Strongly Agree	Neutral		I'd love for you all to look at holes in the long term vision plan.	I recently visited Seattle and was impressed with the electric train. It was fast, efficient, fun and provided easy transfers to other mass transit. Austin needs to catch up to other major cities with transit options. We need more mass transit options above or below ground to accomodate the growth of Austin.
7/24/2019	78757	Strongly Agree	Operation of cars	Use of Bikes	Use of Parking	Construction Impacts					Agree	Strongly Agree	Agree	Neutral	Neutral	Yes	It feels like there are too many planned stops in some areas.	

Project Connect Orange Line Virtual Open House #2

Bringing it together

The approach to early evaluation of transitway options using a combination of right-of-way and station area evaluations is appropriate.



1 Strongly agree	22
2 Agree	27
3 Neutral	17
4 Disagree	6
5 Strongly disagree	4

Please feel free to elaborate as needed.

I think elevating or cutting, or *especially* tunneling will damage the project's ability to be delivered in a timely manner, if at all. We should avoid unnecessary expense by taking lanes and parking from cars, NOT some of the only protected bike lanes in the city.

Consider this, even if the Orange line does get built as an el or subway, it will finish much later and there will be a lot less money or appetite for new lines. This will further delay the construction of a comprehensive dedicated ROW system throughout the city.

The approach seems logical until you get to "Question 2: Are two or fewer stations rated low?" Are you saying that you want the entire transit line (or maybe just a segment?) to be underground only when it's passing through areas with fewer "attractions" and connectivity options (either in place or potential)? There are plenty of reasons to want the system to be underground in high value locations as well.

There should be some consideration of allowing vertical profiles in the sections with enough ROW to permit street-level plans that would help bypass the busiest intersections. There should also be consideration of the speed each option permits. Street-level operations may not permit speeds as high as those

in tunnels or elevated portions. Higher speed greatly increases the usefulness of transit when compared to driving.

This is confusing but I trust you

Please keep flexibility in mind to expand the system in the future. We don't want to end up with more infrastructure like the I-35 double decker where you are limited in terms of expansions/modifications.

This evaluation doesn't account for reliability challenges and safety issues associated with street-running trains (yes, I said trains, not "fancy" buses). I think you could just say if a segment doesn't meet the grade-separated criteria to continue then just change it to a dashed line future extension. We're better off waiting until we can afford the real deal than paying for mediocre transit.

I strongly agree mostly because of costs.

I wish that all of the line could NOT be street-level.

But in areas south of Ben White where there's more area to work with, I agree it's a way to cut costs.

These are cost prohibitive it needs to be at grade.

We should consider all alternatives but be realistic about feasibility

Aesthetics or view corridors should be considered as well but to a lesser extent. Elevated transitways run the risk of becoming as unsightly and pedestrian unfriendly as elevated freeways if implemented in the wrong places. Additionally, how will the orange line cross the river?

This question is too confusing unless the exact slide for it is present.

This is mostly good criteria, but planning to use a higher cost option in specific places (i.e., elevated rail in narrow corridors such as Guadalupe near UT) may be the only sensible move for building stations in major destinations that already have a lot of development.

Street-level should be ruled out for high-traffic areas that will slow down transit. Having room at ground level to put the bus-only lanes in doesn't mean the lanes will meet the goals of congestion-proof transit -- they will still have to contend with bikes, cars and pedestrians at intersections.

If we want to have a real transit system, we can't rule out the only options that work because they actually cost money.

This question is confusing.

This explanation is very confusing. If the answer to both questions for street-level are yes, does that mean that you move forward with street level, or with the other options? Would a rating of "low" mean that street-level is desirable? If both answers to the non-street-level questions are not yes, then what do you do? If some of the segment is narrow, but none of the stations are rated "low", then what do you do? What if some of the segment is narrow, but not as much as 15%, what do you do?

You do not clarify whether you would consider taking traffic lanes from vehicles, and that needs to be clarified. If a ROW is narrow, but traffic lanes can be converted to HCT lanes, than at-grade lanes will work. I support considering that option.

This discussion is a mess and needs to be redone.

I know it is more expensive to put the whole line under ground, but I do think that a lot of it should be under ground. It's best to do this right the first time - changing it later will be harder. From North Loop down to a few miles south of the river, I think we should be going underground (either tunnel or cut-and-cover).

I think that the best implementation for a lot of areas to guarantee right of way is to elevate, or to tunnel.

While, according to your matrix, cut and cover is cheaper than tunneling, it still appears to require some visible roadspace.

Above a certain amount of narrowness (50-60%), street-level should probably be discarded as an option. Unless there is some feasible way to have the line both be street level and have dedicated lanes, which does not seem possible in mostly-narrow corridors.

I feel the public input is very limited and geared to only get input in a way that pushes forward the concepts chosen. It does not appear to provide real input on if the chosen dedicated street path, which seems just based on cost at this time should be implemented without further impact analysis to the safety, local traffic, economy, and local connectivity of local communities in the North Lamar neighborhoods. Currently there are significant pedestrian, bike and car accidents. Thus, adding a train down the middle at street level would seem to ascorbate these impacts. A full traffic and safety analysis should be conducted on more than one option besides the do nothing alternate. A cultural and

economic impact analysis should also be completed on more than one option besides the do nothing alternate as adding the ROW for dual trains and station would seem to require taking ROW from neighboring properties and hinder access into those properties, which overall would impact the local economy. Other studies: noise impacts

I'm not sure I understand this evaluation system.

I agree that narrow ROW indicates it's a good time to _evaluate_ grade separation. Narrow ROW alone shouldn't mean we automatically choose grade separation.

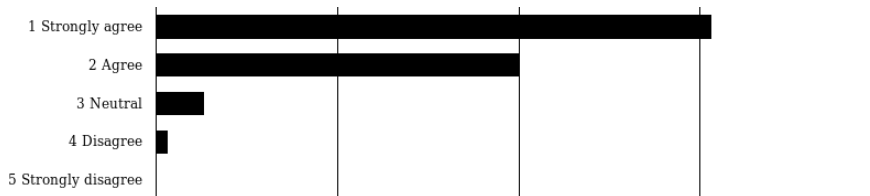
One consistent system type that is grade-separated should be used

What is the cost difference between cut and cover vs bored? seems like cut and cover has all the cost w/ bored but additional impacts on surface.

Sure I guess

Station Locations

The approach to evaluating and rating potential station areas is appropriate.



1 Strongly agree	46
2 Agree	30
3 Neutral	4
4 Disagree	1

Please feel free to elaborate as needed.

High-capacity transit should follow population and job density as close as possible, it really is that simple. Build the train where the people are and where they want to go. The orange line alignment is excellent for this, and I think you've got all the right stops on your map.

I would agree that you are looking at the right elements. But having a three-step rating as the result is too simplistic. The City needs to decide which of the four criteria is most important or what level of "negative" in any one category makes a station not viable or not valuable compared to another station location. For example, it would seem that areas that already have important destinations (that are expected to last) would take priority over areas with redevelopment potential. But it also depends on what you think is an appropriate distance between stations. In Paris every block is supposed to be within .6 miles of a station. The A Train in New York stops every 9-11 blocks. So maybe you don't have quite enough stations along the line, given that people in Austin will be reluctant to walk more than half a mile in the heat.

The only caveat would be the cost and transportation impact of an inconsistent system.

Your criteria has one flaw, in that the second bullet, while good, favor existing transit centers because of the bus routes that go there. These routes could and should be changed to get away from pedestrian-hostile highway park and rides. For example, if you look at development, a station is obviously needed around St Elmo or Industrial Drive, not at the terrible South Congress Transit Center.

The only thing that is not explicit is that we should prioritize providing mass transit to people of lesser means.

It is somewhat covered in the first bullet point but I believe should be an explicit criterion.

Another thing that has troubled me with the current setup is that it does not address those families that have been pushed further south and east due to gentrification.

These people are moving to Buda and Kyle and I don't see any great options for them for commuting.

Slaughter is no longer the southern edge of Austin.

ROW is not as important as station area zoning. Please coordinate with the Land Development Code Rewrite!

If you can't access the station easily you won't ride

You should also consider equity and affordability impacts of station locations. Safety should be explicitly considered as part of access.

New Transit stations should be coupled with truly affordable and preferably public housing to that is directly tied to the effects of displacement on the local residents and the potential benefit for low income users.

In narrow areas, a tunneled or cut-and-cap option should be the priority, with at-grade or elevated along the rest of the network.

It is important for CapMetro to be absolutely in lockstep with the Planning Department and ATD when evaluating the potential for new growth and or redevelopment in the area. These 3 entities have been operating in silos, protecting their turf and Austin residents and tourists have been negatively impacted.

also need to evaluate how close or far away it is from the previous/next stations

Sometimes it might be worth it to consider the speed and stations at congested areas like the Drag instead of looking at the ROW first

I am interested, and I'm sure many other people are as well, in how you evaluate the potential for growth and redevelopment. Because the neighborhood east of judges hill but west of the capitol has seen intensive growth and permit applications indicating that it is going to get much taller and denser in the coming years, and yet it lacks a stop servicing it.

Need more information on how each factor is weighed, and what is a "positive" translating to high or "negative" translating to low.

There should be a station at North Lamar/North Loop to be accessible to those who live along north loop east and west of north lamar. It is not reasonable to expect these people to go to the triangle or to Koenig station.

I think it is important that the Orange Line be able to tap in to existing and planned transit services for bicyclists, pedestrians, and other routes/lines.

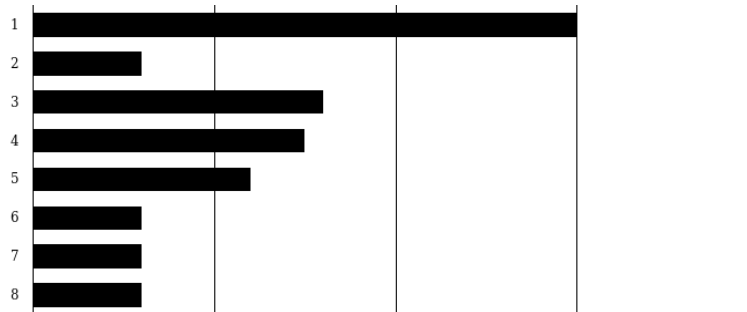
I am concerned that we will be too quick to grade separate in areas of narrow ROW. Surface running HCT can work in many areas. Please watch expenses and don't let the mayor's noise about "through lanes" worry you!

How much investment can the area support kinda seems to say: no poor people

Location Options

Please rank in order of importance with '1' being 'most important' to prioritize to '8' being the 'least important.' Pedestrian facilities are critical to transit access, so they are not listed.

1 is Most important. 8 is Least Important.



	1	2	3	4	5	6	7	8
Operation of cars	13	7	9	14	11	6	13	24
Use of Bikes	23	21	18	9	7	6	9	4
Use of Scooters	12	7	21	11	6	13	5	22
Use of Parking	5	4	15	13	5	9	20	26
Changes to traffic signal timing	12	13	14	13	14	14	7	10
Right-of-Way acquisition	30	6	16	15	12	6	6	6
Timed implementation	20	7	17	15	20	8	3	7
Construction impacts	6	13	12	12	14	21	13	6

Please feel free to elaborate as needed.

I'm disappointed that you did not ask which type of transit-way I preferred. For the record, I prefer the tunnel option over all the others; my 2nd choice would be cut & cover; my 3rd would be street level, I would NEVER support (or use) an elevated option, and would fight it all the way to city hall if necessary.

Parking should whenever and wherever possible be eliminated, lanes should be taken away from cars to avoid added costs. If Austin wants to achieve its target 16% mode share shift it can't keep fighting to keep things exactly the way they are for cars. Bikes and scooter access and infrastructure should be prioritized. The sooner we get this done, the sooner more people can live car-free and car-lite lives in our city.

We're building high-capacity transit, act like it!

What kind of scooters? Unpowered, electric, gas motorized?

This is a confusing list - not sure what "timed implementation" means. Basically, please prioritize walkability, bikeability, ease of pedestrian access, and streetscape beautification (street trees, wide sidewalks, benches, etc.). Cars can use the highways.

Sorry to be negative, but this is a poorly constructed question. I work at Austin Energy Green Building and deal with transportation issues, but I'm not sure what I am ranking here. Comparing timing of the completion of the project (as that what you mean by "timed implementation?" to "operation of cars" is a weird choice. If we think that the tunnel is the best option, then some of these items don't even seem to apply.

I'm not sure what all of these items mean. Positive final outcomes for pedestrians, bikers, and scooter riders far outweigh negatives caused by difficulty acquiring ROW, construction impacts, or cost in separating the transitway from roads.

I found this priority grid confusing and difficult to use. Please ask what we want to use or how to important it is.

I am not too concerned about car access to the stations (especially in UT West Mall), but being a UT student I am concerned about the potential disruption to the 801 and the Drag in general from construction on West Mall. Thus I'd prefer an option that minimizes construction times.

Lowest cost has the greatest potential for voter approval. Consider what Denver did announcing multiple lines at the same time so voters could see it would impact their part of town (this is important to obtaining support in parts of town that rejected the last bond). Transit is also about land use but THAT'S NOT TALKED ABOUT HERE - WHY NOT?

use of parking = remove it or use it as a protection for a shared use path

Tunnel is most preferred, with elevated or cut and cover options being secondary

The most important considerations should be cost versus ridership. This ranking table misses the most important things.

Ridership - 1; ADA Access - 2

Cars must be made the least appealing option. Transit is about moving people, not reducing congestion for drivers.

Tunneling and cut-and-cover are the preferred options, followed by at-grade.

This project is going to live or die by it's right of way acquisitions.

#CCMF

This corridor is a critical corridor for the health of Austin, and the future of public transportation in Austin. I would gladly sacrifice cars to make room for high-frequency, high-capacity public transit. That trade-off is very worth it to me. But honestly, this corridor is so important, I think it would be best to have both -- I would encourage you to either tunnel or cut-and-cover. Yes it's expensive, but on this corridor, it's worth it.

I want the orange line to have as minimal interaction with street lights and traffic as possible as the idea is rapid transit and it should avoid the pitfalls plaguing the on time performance of the current 801/803 bus implementation.

Because you can see, even with right of way in certain areas, on time performance and frequency can be improved if it doesn't have to stop where it doesn't need to.

How long will there be construction disruption on East Riverside in a single location and overall before the project is completed?

I suppose that the advent of self-driving cars will eventually have an impact on these plans, perhaps making it possible for people to have a very small vehicle that they can keep at home, drop them off at a bus stop and return home. What about a personal scooter account that would enable you to 1)keep a scooter at home, take it to the bus stop and on the bus, take to work and then back or 2)get home home to bus stop, leave at the bus stop, then pick one up there for your return home?

As a layperson, some definition of what each factor means would have been appreciated. Most are intuitive, but clarification is always best.

Adding rail should not hinder the addition of safe routes to school and bike lanes. Full impacts to local traffic and safety should be evaluated. Along with impacts to local businesses.

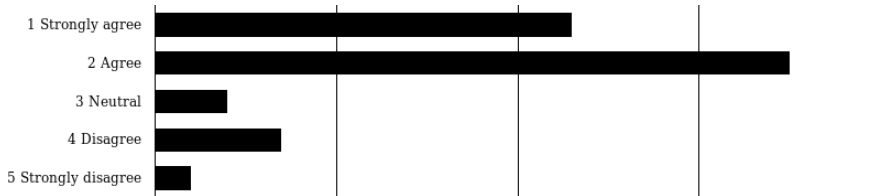
Construction of a transitway will be disruptive regardless, so if traffic is going to be affected for potentially 2-3 years, we should make sure it's worth it and have the best plan possible.

Street-Level should be avoided and the entire system should aim to have one consistent location type. I would pick a tunnel above all else, personally.

Vehicles need to be considered, as taking travel lanes may not be seen as worth it. Street level will have high lane impacts

Step One Evaluation

The ratings assigned to potential station areas are appropriate.



1 Strongly agree	23
2 Agree	35
3 Neutral	4
4 Disagree	7
5 Strongly disagree	2

Please feel free to elaborate as needed.

I think it's smart to avoid building the South Austin and North Austin portions until the city changes its code to allow for more density, mixed-use development, and walkability in these areas.

I currently reside in the South Austin segment and disagree with the reasoning to remove the option for far north and far south elevated and tunnel options. Folks living in those areas currently do not take transit because current ride options nearly double their commute (I am one of these people). If you provide a reliable option that can keep their ride time manageable, your ride ship will increase. Specifically, I worry the street level add-on in the south locations will only create more congestion with the already congested cross sections of I35 and William Cannon and I35 and Slaughter. East I35 in these locations are BOOMING. It is extremely important to take that seriously.

Additionally, this is evaluating the current snapshot of rideship. What about in 5 years when we've added another 300,000 residents? Many of those residents will be living in those far north and south locations for affordability reasons. The point of spending all of this money is to provide a solution that is going to be effective in 20 years, when there are no gaps between San Antonio and Round Rock. It is eminent that we take that seriously as a City and invest appropriately. Complete a full underground tunnel for the entire proposed Orange line. Fully invest in the entire Austin community. Don't leave those tale end neighborhoods behind.

Now this page is beautifully designed! It's really clear. I get it!. I would think that going underground is much more sensible between the Triangle and Hyde Park and the river (and maybe even down to 71), however. Do it right, tax us, and spend the money to have a fast system through the most congested part of town.

I think N Lamar Transit Center should be medium, and would be if the access to it were improved.

I feel the future expansion zones would be too far in the future and we should do it all at once. The south Austin zone is experiencing huge growth in mutlifamily construction and needs this connection.

These are mostly correct, but segments 1, 6, and 7 should be considered for elevated transit. If they can't support that investment than they can't support the Orange Line and shouldn't be pursued. The whole line will suffer if part of the line is stuck at traffic signals or gets in a collision with a car at an intersection like Braker or William Cannon.

However, I would like people to think about the impact park-and-rides have on the stations in the less dense areas.

Personal, I know that makes these routes more attractive.

While the top 3 and bottom 3 stations are in areas without much density, I think having good park-and-ride facilities there will help attract more riders.

Particularly if they are tied to the larger retail areas, as Cap Metro already does at South Park Meadows.

I find the existing park-and-ride facilities to be somewhat lacking.

I know a parking garage costs money but it says a lot about the potential capacity of the transit lines.

These are too expensive it needs to be at grade.

I appreciate the comprehensive look and hope the in-depth study continues.

Tunneling should be priority in segments 3-5, elevated on segment 2

Stations south of the river are likely more important than "Low"

South Congress has such a draw as a destination for tourists and locals, it stands to have a higher rating. Also, in the interest of connectivity, it would seem prudent to weight Crestview and both the North Lamar and South Congress Transit Centers higher. Buy-in from the general public heavily depends on connecting to the existing fabric of transit options.

I agree with the orange line if the blue line will make frequent stops along central Austin and the downtown area.

There is a big difference between some of the medium stops, there should maybe be another level between low and medium

All stations have the potential of at least being Medium depending on small area planning around station areas and the update to the land development code.

Perfect -- yes, this makes sense to me. Go underground in "north central" (around Koenig), and re-surface around SoCo.

A Station MUST be kept at St Edward's and Crestview because at Edwards really only has 2-3 lines connecting it and Crestview is the only really close to the red line.

Kramer is like a 15 minute walk... And it's on the 803 line.

This means that if Crestview is removed, there won't be a direct connection to the red line on this line and I think that that is important to have, it makes getting uptown very convenient when I don't want to walk 12-15 minutes from 2nd to 4th downtown

I feel like Braker and Parmer should be rated medium instead of low. I feel like Capmetro currently underestimates service needs in North Austin. A more comprehensive transportation network that includes Pflugerville and Round Rock are desperately needed. We might as well make that investment now instead of latter when it will become costly.

The Triangle has the potential to be a "high" level station especially if the state hospital revitalization goes through.

UT mall ought to be ranked higher

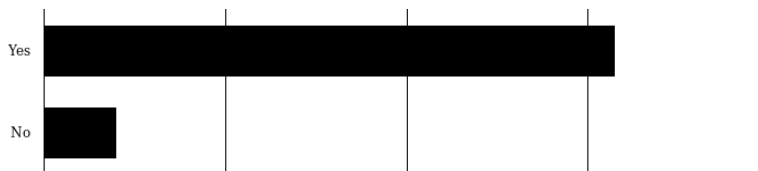
Need to re-evaluate seems outdated and the ratings for park & rides seem backwards.

North Central deserves a higher priority rating. There is a significant amount of the population here that could take advantage of public transportation if were available and more efficient.

The following stations should be ranked as HIGH: Parmer, Crestview, Soco, St Edwards. Stassney, Slaughter and William Cannon should at least be Medium.

I'm a little skeptical that grade separation is really plausible on South Congress district.

Do you agree with the proposed station locations?



Yes	63
No	8

Is there another station location that we should consider?

The Hyde Park station should be moved to 41st & Guadalupe, to position it mid-way between the Triangle and 29th stations. As you may know, the state just approved funds to completely redevelop the State Hospital at that location, so this transit station should be integrated into those redevelopment plans.

I think there should be more than one station for UT, given West Campus just got upzoned for even more height and is already the second densest zip code in the entire state of Texas.

I also think it's very important the Crestview station has a pedestrian bridge to make easy, quick connections to the red line.

As many UT students and employees and future state employees in the Capitol Complex expansion will likely be utilizing the orange line, an additional stop serving UT Campus South/Capitol North might be prudent near MLK/in between 24th St and Capitol West. That area is also showing indications of an impending construction boom that will eventually connect downtown to UT and west campus with continuous high density residential, retail, office, and hospitality projects.

Maybe. If the SOCO transit center is the place under 71 that has just appeared near Central Market, then I would say that a stop just south of the Post Office on SOCO is needed. It's only .4+ miles south of the St. Edwards stop, but the area between SOCO and S. First and the area between SOCO and the Walmart has a lot of destinations (and more and more housing) - so should also be served.

Consider moving the Koenig Station to North Loop (current station on MetroRapid) or between those two. The intersection at Koenig has a lot of traffic and is difficult to access and has safety issues for pedestrians and bicyclists.

Change the name of "Hemphill Park" since no one knows what that is. Move that station to near where the Wheatsville station is now, just south of 31st Street. A lot of people use it to go to the grocery store and other businesses in that area. You can name it "Wheatsville," since that is the historic name of that part of town.

Add a station near to where the "Museum" station is now for MetroRapid. There is too much distance between stations otherwise to access that part of town.

Most people are also not familiar with Wooldridge Square and the current name Austin History Center works well.

A station between MLK and 21st would provide significantly better access to the heart of the UT campus (21st and Speedway), southern West Campus (where hundreds of new units are currently being built), as well as museums such as the Ransom Center, Bullock Museum, and Blanton Museum.

Eliminate NLTC Station due to inefficient station access for buses and pedestrian-unfriendliness (distance, hazard) for walk-ups from nearby neighborhoods. Instead, shift existing Fairfield Station farther south to serve former NLTC walk-ups. Re-develop parking lot at NLTC as affordable housing with direct access to (moved) Fairfield Station. Rename Fairfield to North Lamar Station.

Please reconsider keeping Museum Station at Guad+MLK. It's a long walk from Bullock, Blanton, new State tower, to UT Mall or Capital West Stations. Maybe move Capital West Station south, to also serve Wooldridge Square, near Court House between 10th and 11th.

Could you consider a station on airport so that Highland is easier to access

Replace South Congress Transit Center with a St Elmo station

Anywhere there is a connecting high frequency route there needs to be a station.

Not sure if the proposed stops will benefit the most people not currently served by transit.

None really - This provides a good axis of development to contrast the Red Line in terms of use. Future expansion plans also encourage housing development in cheaper land areas to transport to downtown job centers.

Domain station

Please refer to my previous comment.

add Masterson/Applegate, and maybe Kramer instead of Braker (or a bit south of it) along North Lamar. The stretch between Rundberg and Braker is too long and ignores many immigrant communities and businesses there like Marketplace Austin or the huge Chinatown Center.

The proposed stations are logical locations, but the city will need some type of connection or shuttle. People will not want to walk or bike miles in summer heat or rain storms to get to the stations. There are many residents who do not live close enough to these stations to make the use of public transportation a viable option.

Koenig is not a great station location. There's nothing there, and there never will be -- state property to the east, water utilities to the west. There are a LOT more people living in the North Loop / 51st Street area, and there's a lot of future growth planned in that area. I know that's close to the Triangle, but I don't know if I'd put a stop AT the Triangle. I think instead of a Koenig stop and a Triangle stop, I would put a single stop in the middle at 51st street.

Pickle Research campus? is this already rolled into Rundberg?

walnut creek park. The china town station I assume would be the Braker Station.

There should be a station at North Loop to provide a stop for people that leave between Koenig and 51st a stop to go to. No one lives near the current Koenig stop. That stop should be moved farther north to Denson near the Whataburger. This is a more central location to those living north of Koenig but south of airport.

Stops closer the Domain and the new Austin FC stadium. Maybe there could be a split in the line that goes west toward Burnet Rd, or well-connected transit that links the Domain area to the Orange Line.

CONTINUE SERVICE AT THE MUSEUM STATION

-TO SERVICE THE HIGH TRIP DEMAND BETWEEN 15TH STREET AND MLK DUE TO ALREADY HIGH DEMAND FROM THE ESTIMATED 1 MILLION TRIPS PER YEAR BY STATE OFFICIALS WORKING IN THE NORTH CAPITOL COMPLEX.

There are already over 15 state offices located in the area between Lavaca/San Jacinto and 15th/Martin Luther King. The Capitol Complex Master Plan will reshape the Capitol Complex to host an additional 3,000 full time employees occupying, at full build out, over 5 million square feet of space.

(<https://www.statesman.com/news/20190705/900m-project-capitol-bring-thousands-more-workers-into-downtown-austin>)

(<http://www.tfc.state.tx.us/divisions/commissionadmin/tools/2018%20T>).

The development has received funding for both phases as of the June 2019 Legislative Session. (<https://www.statesman.com/news/20190705/900m-project-will-reshape-area-n...>) Additions to the density will take place north of the capitol grounds, between 15th St. and Martin Luther King Jr. Blvd, and would be better serviced by a transit stop at 18th street rather than 15th.

The lack of a stop servicing the Capitol Complex on the Orange line will only worsen the traffic snarls that will come with the 6% increase in downtown parking that the master plan promises, and prevent this area from becoming the pedestrian haven it seeks to be. (<https://austin.towers.net/capitol-complex-master-plans-first-phase-bring...>)

-TO PREVENT UNNECESSARILY LARGE GAP BETWEEN STATIONS IN THE CENTRAL AUSTIN SEGMENT AND CONNECT WITH THE PROPOSED 18TH STREET CIRCULATOR.

The lack of a stop in between the projected Capitol West and UT/West Mall stations leaves a 9 block gap un-serviced in the downtown area, the largest proposed, omitting cover over a very dense area. To combat this, the Capitol West station should be moved from 15th to 18th street. This move would better service the north capitol complex and the 3,000 new full time employees, in addition to the 5,000 employees that will be moved here from leased office space downtown, that will work in the state office buildings currently being built as a part of the Capitol Complex Master Plan renovations.

(<https://www.statesman.com/news/20190705/900m-project-will-reshape-area-n...>) An 18th street station on the Orange Line would also serve as a seamless connection to the potential east/west 18th street circulator connecting the line to the proposed Blue Line Medical School Station presented in the March 2018 long term plan.

(<http://capmetrotx.iqm2.com/Citizens/SplitView.aspx?Mode=Video&MeetingID=...>)

- TO SERVICE THE DENSITY IN THE REGION BETWEEN 15TH STREET AND MLK TO SERVICE RECENT AND PLANNED HIGH-RISE DEVELOPMENTS.

Austin's commercial real estate is in the middle of a boom that, in the future, will necessitate transit service in areas currently underserved by Project Connect's long term vision. The competitive property market in the Seaholm district, along with zoning changes allowing for much taller buildings in DMU zoned areas has made the area north of downtown, particularly between 17th street and MLK, an attractive spot for burgeoning high-rise developments. The current need for the Museum Station stop exists because "Currently, 5,000 employees in twenty-two leased properties are occupying over 1.5 million gross square feet of office space scattered over Austin" due to lack of office space in the capitol complex. (http://www.tfc.state.tx.us/divisions/commissionadmin/tools/2016.03.23_Te...)

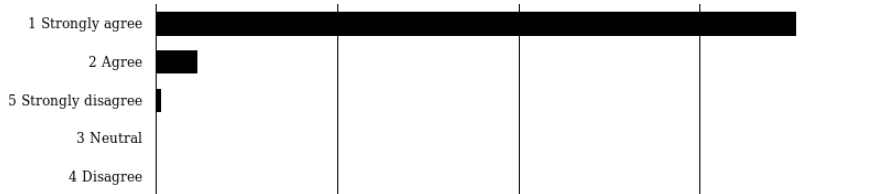
Though the area was historically a dead zone between the CBD and West Campus, recent permit applications indicate plans for several much taller buildings going up in the neighborhood. These include the 17th street hotel (<https://austin.towers.net/west-17th-street-hotel-brings-height-to-downto...>), clocking in at 18 stories; the 17th street condominiums, at 27 stories (<https://austin.towers.net/heres-our-first-look-at-the-condo-tower-headed...>); 410 Uptown office space, at 12 stories (<https://aquilacommercial.com/property/410-uptown/>), the recently completed 13 story SXSW building (<https://www.1400lavaca.com/>), the new county courthouse, as well as over 2 million square feet of office space in the renovated capitol complex. (<https://www.statesman.com/BUSINESS/20170912/2-new-buildings-will-add-1-m...>) Each of these has the potential to bring hundreds of new residents, employees, and visitors to the Museum District whose travel time could be cut down by the addition of the Museum Station stop on the Orange Line.

24th seems like an odd location for the UT station. Just a smidge north of where you want to be. I'd go with the Co-Op.

15th or MLK. I'm not sure where capitol west is, I assume 12th, but 12th - 24th is a long way to go without a stop imo

Dedicated Transitways

It is important to ensure that the Orange Line operates in its own dedicated space (transitway), free of other conflicts.



1 Strongly agree	106
2 Agree	7
5 Strongly disagree	1

Please feel free to elaborate as needed.

This is extremely important, and should not be compromised on. We can't have a mixed-traffic streetcar and expect people to ride.

A careful balance needs to be made between separating the transit from automobiles, and making sure access to the transitway is convenient and safe.

If the transit is stuck in traffic, there won't be as many riders. Because one benefit of riding transit (speed) will be eliminated.

If the system uses a dedicated lane on a regular street, it would still have stops at traffic lights and so would not really be a high-speed alternative.

A long term "best case scenario" option is preferred regardless of initial cost. We need this to ensure the best future possible.

Buses carry more people per vehicle and deserve a proportionate amount of dedicated right-of-way.

Free from conflicts means NO street-running transit (even in dedicated lanes). Just ask Houston how well their “dedicated” lanes have worked out, constantly hitting cars and even their own buses. For the safety and reliability of cross traffic, pedestrians, bikes, scooters, and most importantly your transit (better be light rail, not BRT), we need the transit separated from all of those other modes for the full length of the Orange Line. If segments 1, 6, and 7 don’t justify this, then ditch those segments. They would negatively impact the on-time performance for the full line.

Personally, I do not take transit because it increases travel time immensely. Often, it is 3 times longer to commute even on the 801 or 803 lines. I believe transitways are the only way to solve address this problem substantially.

USE COUPLETS! Don't waste money burying, we need to serve a broader area, so north and south bound do not need to be on the same street.

Underground would be best so as not to take away from regular traffic and bike lanes

although car lanes may be reduced, transit is prioritised and should encourage people to use public transit

Without dedicated transitways, delays will be too great and no one will take advantage of this new transit option.

Anything other than dedicated transit ways would fail to entice people out of their cars and would fail to address the issue that buses are currently too slow to offer feasible transportation over Uber/Lyft.

Elevated or below ground is the only way that it can truly be free of other conflicts.

Public transit is the only way to solve our traffic woes. A dedicated transitway has shown great promise in cities across the world where it has been implemented. Look at even BRTS implementations worldwide and there is no doubt in my mind that this is the way forward for a city like Austin.

Transit not only need protection from traffic, but private vehicle lanes should be actively reduced to make space for active transportation and make private vehicles the least appealing travel option. Transit should not focus on reducing congestion for drivers, it should focus on moving the most people.

The best way to encourage people to use mass transit over single occupancy vehicles is to show a clear benefit for one over the other. I cant think of a

better, more visible example than a bus moving quickly down a congested road while cars pile up next to it.

Especially for middle segments, failure to provide this will add congestion.

If public transport is not faster and easier than driving users will not ride.

Widespread adoption of public transit in any city relies on it being fast and efficient. Transit needs to be seen not just as a viable option, but as a way to reliably avoid congestion in this increasingly crowded city. That necessarily means separating the Orange Line from all other traffic.

It's extremely important. Please, please, please don't just put buses in their own lane next to cars and pretend they will solve the problem. We need to use a transit solution that can go above or below intersections.

Without a dedicated space, we don't have a solution. We have another band aid.

Traffic can get super bad and if this line is part of that traffic than it's no better than just adding a new bus line (and most of the busses are VERY unreliable). I think having it separate would be a fantastic way to significantly improve austin's somewhat disappointing public transportation.

My observation is that busses in regular traffic lanes cause a lot of congestion.

Of course, for the success of this line, the public transportation must be traffic separated, high-capacity, and high-frequency. Buses stuck in traffic is what we've always had -- we need something better.

One of the struggles of taking public transport in this great city is that, even though it's cheaper than driving, it takes twice as long in most of my treks I have attempted. Dedicated right of way would go a long way towards making a more convincing argument for taking public transport

Pedestrian access to the transit lanes that is safe and convenient, ie, no long waiting at crosswalk lights is important.

Any new lines on high traffic routes MUST be separated from other auto traffic.

Transit with mixed traffic is what we currently have. What we have now is broken.

Even if it means taking away car lanes in some areas, we need to dedicate space to our transit network to ensure that it can be efficient enough to transport 20%+ of the population

People do not want to ride buses, stop wasting our money. Buses are gross and used as camps for homeless. I will never ride a bus, except maybe to a UT Football game. Further you make the problem worse with "dedicated buslanes" further restricting room for cars and making turns downtown more difficult. I still do not understand how I cannot cross a solid white line, or drive in a bus lane, but the only option to turn is 10 ft from the intersection and if there are already people in the bus lane I either have to cut them off or break a traffic law. Very well thought out, fail

Dedicated space ensures timeliness of transit and puts incentive on drivers to move to using transit rather than cars if possible.

I feel the public input is very limited and geared to only get input in a way that pushes forward the concepts chosen. It does not appear to provide real input on if the chosen dedicated street path, which seems just based on cost at this time should be implemented without further impact analysis to the safety, local traffic, economy, and local connectivity of local communities in the North Lamar neighborhoods. Currently there are significant pedestrian, bike and car accidents. Thus, adding a train down the middle at street level would seem to ascorbate these impacts. A full traffic and safety analysis should be conducted on more than one option besides the do nothing alternate. A cultural and economic impact analysis should also be completed on more than one option besides the do nothing alternate as adding the ROW for dual trains and station would seem to require taking ROW from neighboring properties and hinder access into those properties, which overall would impact the local economy. Other studies: noise impacts

As a regular rider of the 801 nearly half of the ride time is simply sitting in traffic with other cars. If Public transportation is to be promoted as the preferable means of transportation, it should have its own dedicated transitway to cut commute time in half to be similar to that of a car.

If there isn't a dedicated space, what's the point!

Yes! It needs to move fast and not be stuck in traffic! If its slow, people won't use it.

The corridor needs to have completely dedicated space.

Dedicated right of way is absolutely essential.

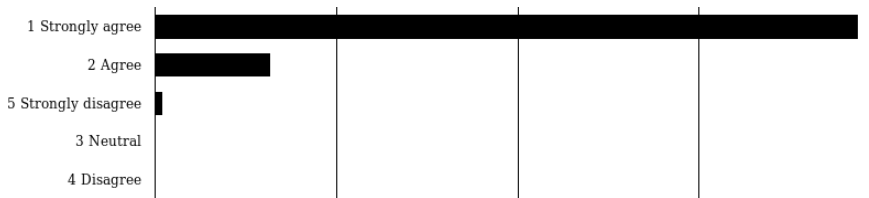
The transitways need to be separated and prioritized to ensure that it will be fast, frequent, and reliable.

Also should be in separate guideway in at least downtown, central and north central to decrease travel times, and allow for longer trains. Downtown block length limits train length

Being that the orange line is the most used road to take people up and down from north and south Austin, the only way that the traffic can be addressed without being in the same girdlock by having dedicated lanes. Not only will this be helpful as it is, but realistically speaking, a BRT lane is not enough for the time many want to commute. If you want people to feel like this is realizable and worth into getting into, it is only best if we invest in LRT for this is not only fast but reliable for the people to use more frequently.

Bruh, if my train gets stuck in traffic I'll be lived

It is important that the Orange Line connects with other lines to form a comprehensive, high-capacity and frequent transit network.



1 Strongly agree	97
2 Agree	16
5 Strongly disagree	1

Please feel free to elaborate as needed.

The orange line should be a trunk line for a later system of light rail routes as Austin becomes a transit-focused city

There should be a strong connection between the Orange and Blue Lines for people going to the airport from North Austin.

More people will ride if there is a comprehensive network. More people can decide not to have cars or to have only one car in a family if there is a comprehensive network.

What about an elevated line?

From looking at the orange-line specific map, it seems like there is a missed opportunity connecting to the 335 bus

We want to be able to explore and connect with other parts of the city that is currently inhibited by the heavy toll of parking availability and the time consideration of the bus system.

Connectivity is key to complete trips.

connection to other lines is very important for facilitating travel and access to all parts of the city, (e.g.) London, NYC, Mex City, Chicago, etc.

The Orange Line needs to connect to the Blue Line (and thus create options to run different lines, such as N Lamar to ABIA).

In particular, connecting lines that run perpendicular to I-35 and Mopac are necessary along with the main lines that will most likely be parallel.

I miss the old Dillos in downtown.

But also getting across town from say Oak Hill to South Park Meadows is too long of a commute.

Connections are important to high frequency routes. Stops should be located here to make connections seamless.

Being able to go north and south into and out of downtown is the first priority and a great start, but being able to go to other neighborhoods more easily would be desired as well.

Other lines include fixed bus lines.

need easy access to connection if stops and routes are kept minimal

Connections are imperative. Not everyone is starting/stopping at the same location.

I struggle much more trying to traverse east/west in Austin than I do north/south. It often takes three times as long to get the same distance. I believe that providing east/west connectors between the Orange line and other

HCT lines, primarily the Blue line would increase ridership and make the system a much more cohesive, synchronized plan. A connection is greatly needed in the area North of the Capitol but South of the University, as there is so many people traveling between the 2 corridors at this point but no transit to carry them across.

In a city like Austin with less than ideal road networks, frequency and connectivity is key to getting higher ridership. I firmly believe that an Orange line with connectivity to other lines is going to be the way forward.

kind of a leading question but, yeah, duh.

what good is one fast route that goes north-south on an already high service area if its not able to benefit the rest of the city, especially the areas where Austin's most vulnerable populations live.

It should serve it's purpose as a spine which may connect to other forms.

One of the major issues with the Red Line is that it currently missed many dense parts of town and doesn't connect in a sensible way with the busiest transit corridors. This is something the Orange Line could potentially rectify, and could drive greater adoption of public transit system-wide.

and transfers between different lines, different transit modes, even if i'm the future there are different companies, are low-cost or included or treated as same ticket fares

Yes, if the bus does not connect, residents will not use it. The reason my family does not often use the Austin rail is that there is no transportation from the stations to where we need to go.

It's of little value if the don't connect.

I would like as many connections the the red, blue(/20), green, and the 803 lines as possible because I would say that that is great north-south, central-east travel.

And, if you do build a park and ride in the four-points area, I would like to see some connector to these lines here to minimize transfers to get around Austin faster and cheaper (as it is right now, I can get to Leander from South Austin for \$4.75 and I would like to see an expansion on where I could go with \$5)

Frequent orange line options must be supported by frequent connections.

In addition, Downtown to Airport transit is a major component to many metropolitan cities. It should be a component to any proposal made.

Obviously!!

People do not want more buses. If you stage the questions in such a way you will get a yes. IE Do you think it is important that undeserved people in our community have access to public transportation? of Course people will say yes and then boom you have a justification to build this massive network that no one wants. We need some buses but until those operate at capacity we do not need any more.

The chronic difficulty of moving east and west in Austin needs to be addressed in some way ASAP.

Orange line will service the main throughfare into downtown, so connectability is essential for access to other parts of town. Otherwise, the orange line will mirror the connectivity issues the rapid lines/standard routes currently have.

The orange line would provide vital connections to two of Cap metro major park and rides in the north to the entire central part of the City. This line would also go by the popular Chinatown and Walnut Metro Park. The two factors that bring people from across the City to North Lamar are those two places.

The current routes on Lamar are used to transport kids to schools. These are local stops so could be kept on a bus system, but it is imperative the routes used by kids that cannot drive keep the stops to assist them to get to school.

Transfers are tricky because of the timing that is all too variable between routes. It makes sense to cross major routes to connect East/West routes with a central North/South route.

Especially the red line.

ADD A DOWNTOWN CIRCULATOR ON 18TH STREET TO CONNECT ORANGE AND BLUE LINES.

Please include a circulator that carries passengers between Guadalupe street, 15th street, Trinity street, and 18th street that would connect the Orange and Blue lines in a way that allows them to function synchronously and spread dense growth outside of the areas immediately surrounding each station

Previous Urban Rail plans in 2011, 2016, and 2018 explicitly included a circulator connecting the western and eastern downtown corridors twice, once by along 18th street and another on 4th St. between the Republic Square and Downtown stations. In regards to the downtown circulator Todd Hemingston said at the March 2018 board meeting “We’ve envisioned [a station] in the northeast by the emerging medical center. Then a smaller one on the Guadalupe corridor at the northern end as well as where that crossing line is right in the heart of where the capitol is doing a massive redevelopment of their complex [18th street]”.

The inclusion of the 18th street circulator connecting the Orange Line to the proposed Medical School Blue Line station should be made explicit in Project Connect’s long term vision; However, in order to fully serve the downtown community, it’s circuit should be changed. Rather than going all the way from 18th street to 4th street, the circuit should make its east-west crossings at 18th and 15th. This would reduce the redundancy of the route, as people are unlikely to choose to ride the circulator between 18th and 4th streets when they could simply ride the orange or blue lines. Additionally, people are unlikely to choose to ride the circulator between the Republic Square and Downtown stations when they could just ride a higher capacity dedicated lane transit line. The only side of the circulator that is serving a purpose currently unserved by the rest of the rapid transit system is the 18th street connection. This should remain, and the 4th street connection should be replaced with a 15th street connection to allow for full access to the downtown area.

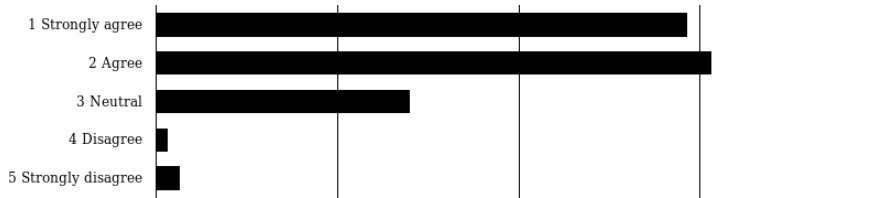
Interest in this downtown circulator is shared by the Downtown Austin Alliance. A Museum District circulator would provide rapid access to and from the eastern side of the Capitol District and the Dell Medical Center, as well as providing a much needed connecting route between the Orange and Blue lines.

Yes! People would love to get from one Austin hotspot to another (say from the airport to downtown to South Congress) without using a car. And connecting with other lines is crucial to realizing that dream.

This can only work if it gets people from point A to point B and there’s no great trek to find the next bus or rail

I don't live on congress, so I would need to eat there first

The total cost of the Orange Line and other high-capacity transit lines must consider both the construction and long-term operation and maintenance costs.



1 Strongly agree	44
2 Agree	46
3 Neutral	21
4 Disagree	1
5 Strongly disagree	2

Please feel free to elaborate as needed.

This is why we should consider low-cost options for street-level light rail in narrow ROW situations, namely by taking car lanes. There are San Francisco lines you can look to for technological solutions to narrow ROW constraints for street-level light rail.

But we cannot use that as an excuse to cut corners today - better to overbuild/invest now as costs will rise disproportionately in the future.

The benefits of transit - including reduced carbon emissions per capita, improved air quality, more equitable access to the city, etc. - must also be factored into total delivered benefits vs. costs.

In my experience great maintenance promotes use of mass transportation

The total cost is important, but so is the quality. I'd rather reduce the length of the line to ensure full grade-separation and then extend the line later as funding allows and the station areas become more ripe for development.

Utilize low maintenance, sustainable vehicles, designed to operate in HOT climates like Austin. Don't make the same mistake you made with the MetroRapid Busses!

It is also important to consider the impact of the O&M costs of the line on the operation of other services, especially fixed bus service, and on the fares.

taxes or bonds?

Everything will have a cost. Not solving congestion on roads is expensive too.

This is a given. The entire Project Connect system will be a decade long project most likely, and the cost of operation post construction must be considered or the entire system will bankrupt itself.

Just build it.

Of course, but those costs need to be compared to the cost of not building transit, IE: Environmental, social, public health, road expansion, etc

Initial construction costs are less important than maintenance.

It's going to be expensive no matter what - the larger goal should be to design a GOOD system that last for decades rather than a cheaper one that does a pitiful job.

It would be good to emphasize keeping the operational costs down, as opposed to capital costs. I suspect that rail would have higher capital costs, but lower operational costs than buses in the long run.

We need to focus on results. All transit system are costly. There needs to absolutely be excellent budgetary oversight, but in terms of cost it's important to remember this is an investment in the future and a way to ensure the region isn't all stuck in horrifying traffic.

But I don't think that this should be a reason to spring for the cheapest solution, I am a proud austinite and I want this city to have a beautiful and functional transportation the likes of which put DC and Denver's networks to shame.

We don't need to build expensive lines to the suburbs that have low ridership. We need to serve the most people and the most low-income people as possible

Is this a pat yourselves on the back question!?! ONLY someone in government would even think to ask this. YES costs should be taken into account. And you should not lie to us like you did for the metro rail when you told us that it would turn a profit and then after installation you back peddled and said oh no it cannot run a profit even if it ran at 100% capacity 100% of the time, it is a service.

I am curious how much we spend total divided by number of riders, not rides. It may be cheaper to shut the whole thing down and give away Uber rides.

Cap Metro needs to take a step back and quit trying to justify their jobs by cramming more ---- on the tax payer (who they work for) that they are not asking for. Build more roads.

Believe it or not private industry will take care of this with out you. More people will live downtown and not need to use their cars as much, people also telecommute to work more and more and do not take up space on the roads.

Just to prove my point could you please point to your "Crowning success"? I think at best you have done a poor job and this is coming from a life long born and raised Austinite. Cut your staff cut your projects and use that money to build more roads (oh wait that would be giving the people what they want and we cannot have that you have to tell us what we want).

Construction and operation costs are important to consider, but with the understanding that this is a large scale investment meant to shift other transportation costs such as road maintainence and upkeep, in addition to sustainabilty priorities.

Many other impacts need to be evaluted prior to chosen a solution besides costs.

This will drastically affect the infrastructure of Austin and should be done with proper planning to cover all possible costs.

Yes cost is a consideration - but, it better to spend \$\$\$ on what is really needed, than \$\$ on what will do.

Cost is always an issue, but if planned accordingly, this can bring great change to the daily commute Austinites take on a daily basis, which will definitely outweigh the costs that many deem to say it's unnecessary, which we cannot afford to delay any further without further displacing minorities from their current spaces in exchange for rich young people who can afford the rent and further contribute to urban sprawl.

I don't see why not

Orange Line Round 3 Outreach

Engagement Summary



January 6, 2020

Engagement Approach

The Orange Line Corridor public engagement process for the detailed evaluation of alternatives phase included sharing information and collecting public feedback on the results of the Orange Line Corridor detailed evaluation of alternatives. This engagement process included holding one joint public meeting for the Blue and Orange Line Corridors and two separate meetings for the Orange Line Corridor. These public Open House meetings were held in the north, central and south segments of the corridor. In addition, a Virtual Open House (VOH) was conducted online to provide an opportunity for the public to review the detailed evaluation of alternatives and provide input. Other engagement activity during this phase included presentations to organizations, tabling at community events, and outreach at transit stops. Documentation of this engagement activity, as well as the VOH, is included in this summary.

Engagement Goals

Public Open House meetings, presentations and outreach activities were conducted to ensure that Capital Metro heard from a variety of community members to gather feedback on how well the Orange Line Corridor build alternative options meet the project's Purpose and Need. These public engagement efforts were designed to:

1. Inform the public about the detailed evaluation of alternatives process, which analyzes how well different combinations of alignment, transitway type, and mode meet the Orange Line Corridor's Purpose and Need, goals and objectives.
2. Allow the public an opportunity to review and comment on the detailed evaluation of alternatives analysis which provides preliminary information on travel time, potential ridership, cost to build and cost to operate.

Public Open House Event Details

The information sharing and input gathering goals of this phase of the process were best achieved by hosting guided Open House public meetings. Three public meetings were conducted at locations that were accessible by transit and offered the opportunity for broad participation. Each public meeting utilized the same format and information. Doors opened at 5:00 p.m. Upon their arrival, attendees were invited to review background information on the project and the work done to date. Attendees were then gathered in small groups for a guided tour through the exhibits. This format allowed community members to share ideas and opinions with each other and with team members, hear others' questions which may help each participant better understand the subject, and ask clarifying questions. It also allowed the team to hear and absorb a diversity of viewpoints and answer community questions. Attendees also had the opportunity to ask a subject-matter expert detailed questions after reviewing the exhibits, and to complete a survey. Each meeting ended at 7:30 p.m. The VOH information and questions were designed to reflect the in-person exhibits and discussions as closely as possible. The materials used are included in Appendix A. Event photos are included in Appendix B.

Set-up included:

- A sign-in table with an Orange Line Corridor project information sheet providing details of the project and an Orange Line corridor map (English and Spanish)
- A survey table with an Orange Line Corridor handout providing project information needed to complete the survey and a participant survey
- An area to ask questions of subject-matter experts
- Twenty-two display exhibits arranged around the room
- Team members to guide tours of exhibits and answer technical questions
- Index cards and pens for attendees to use for notetaking during the guided tour
- A Spanish-speaking team member available to provide translation was present at each meeting

Segment Location	Event Location	Event Date
Central	Bob Bullock Texas State History Museum, 1800 Congress Avenue	Monday, November 4
South	St. Elmo Elementary, 600 W. St. Elmo Road	Wednesday, November 6
North	North Austin YVCA, 1000 Rundberg	Thursday, November 7
Virtual Open House	https://www.capmetroengage.org	Monday, November 4 - Friday, December 6

Event Notifications

The project team utilized email notifications, social media posts, flyer distribution at high-ridership transit stops, emails and phone calls to neighborhood associations, and paid advertising in local media to drive attendance to the public meetings and VOH. Meeting notifications, comment cards and the survey were translated into Spanish. Broad outreach for Project Connect was also conducted across the community during this public input period to raise awareness about Project Connect and encourage participation in the public meetings and VOH. Example event notifications and earned media coverage are included in Appendix C.

Notification	Dates	Number of Recipients	Performance
E-blast to Project Connect/Orange Line contact database	October 14 October 28 December 6	2,095 sent 2,103 sent 2,094 sent	Open: 28%; Click: 3% Open: 25%; Click: 6% Open: 21%; Click: 10.3%
Newspaper ads	El Mundo: October 17 La Prensa: October 17 Villager: October 18 Statesman: October 20 Chronicle: October 18 Community Impact Central: October 29 Community Impact Northwest: October 30 Community Impact Southwest: October 28	Approx. 2 million total circulation	
Radio ads	KUT/KUTX: October 21–November 4 KQOP: October 21–November 4 KAZI: October 21–November 4	Approx. 500,000 total circulation	

Inclusion of event information in Project Connect e-newsletter	October 25; November 25	4,955 sent 5,016 sent	Open: 30%; Click: 8% Open: 29%; Click: 8%
Social media posts	Posts between October 21, 2019 and December 4, 2019	Facebook: Approx. 19K likes/follows Twitter: Approx. 23K followers	
Earned media coverage	Austin Chronicle: October 4, 2019 Daily Texas: October 9, 2019 KUTV: October 16, 2019 Community Impact: October 30, 2019 KUTV: October 30, 2019 KVUE: October 30, 2019 KEYE: October 30, 2019 Austin Monitor: October 31, 2019 KVUE: November 19, 2019		

Participation

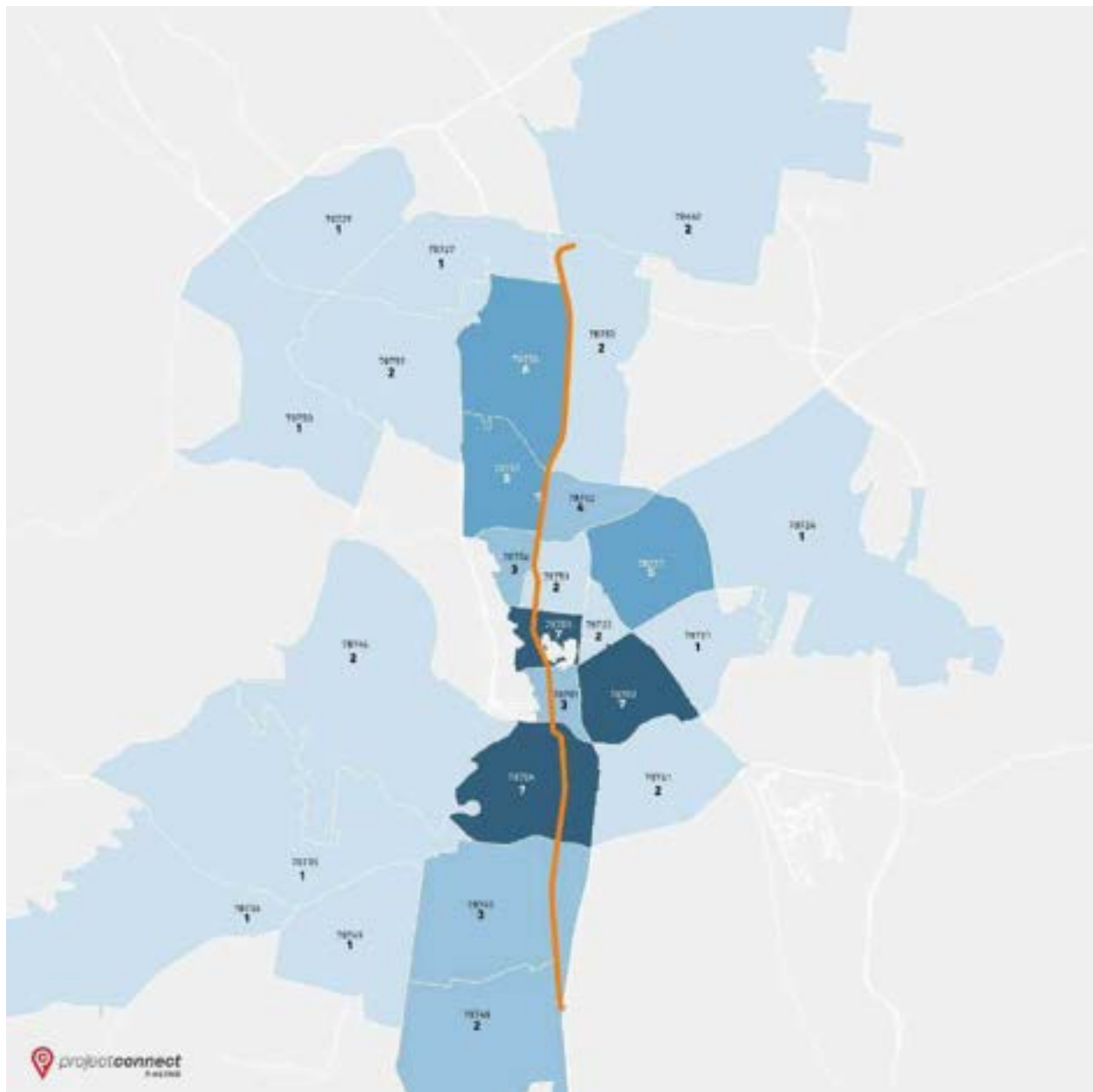
The participation statistics of the Open Houses have been incorporated into the overall Project Connect outreach dashboard and tracker. These statistics are shown in the table below. A summary of the Virtual Open House engagement results is included in Appendix D. Virtual Open House users are not required to submit a zip code to interact with the site. As such, the zip codes in the table and map below represent primarily in-person participants.

Segment Location	Attendance	Number of Comments Received	Zip Codes Represented
Central: Bob Bullock Texas State History Museum	64	36	78240, 78660, 78701, 78702, 78704, 78705, 78722, 78723, 78729, 78735, 78741, 78746, 78748, 78751, 78752, 78756, 78757, 78758, 78759
South: St. Elmo Elementary	9	4	78736, 78745, 78749
North: North Austin YVCA	14	11	77449, 78702, 78723, 78748, 78751, 78753, 78756
Total In-Person	87	51	
Virtual Open House	269*	120	78660, 78681, 78701, 78702, 78704, 78705, 78721, 78722, 78724, 78727, 78734, 78741, 78745, 78750, 78752, 78756, 78757, 78758 (gathered from users who opted to complete an online profile)
TOTAL	1,317	394	

*Indicates number of unique page views of the OL VOH site between November 4, 2019 – December 4, 2019

Participation by zip code residence along the corridor was highest in central segments, followed by northern segments. (Figure 1)

Figure 1 Open House Comment Participation by Zip Code



In addition to the the pubic Open House events, the Project Connect and Orange Line teams conducted tabling at fairs and community events and made presentations about the detailed evaluation of alternatives process to neighborhood associations, community groups and civic organizations along the Corridor. These efforts were designed to share information with and gather feedback from community members that are often harder to reach or who might not typically attend open house events. Project information was provided to community organizations so that they could share notifications via their newsletters. Presentations provided by the Orange Line engagement team between the second and third rounds of outreach are summarized in the table below.

Neighborhood/Organization	Meeting Date
South River City Citizen/Boulton Creek NA	August 14, 2019
People United for Mobility Action	August 15, 2019
North Austin Civic Association	August 15, 2019
Guadalupe Working Group	August 29, 2019
North Parks Estates/Gracyywoods NA	September 3, 2019
Downtown Working Group	September 3, 2019
Bunkhouse Properties	September 6, 2019
Old West NA	September 10, 2019
SoCo Working Group	September 10, 2019
CANPAC	October 21, 2019

What We Heard

The Project Connect team offered participants the opportunity to comment through two channels: (1) community survey made available at meetings; and, (2) online community survey format made available through the Project Connect Virtual Open House.

The data suggests that the community feels that a large-scale transit investment is needed in the Orange Line corridor, and that a narrow majority would prefer Light Rail Transit. Interestingly, this majority dissolves when Bus Rapid Transit responses and mode-neutral responses are combined. Many community members are not deterred from an interest in a tunnel option by the early cost estimate.

Figure 2 I believe a dedicated transitway with either BRT or LRT (build alternative) better meets the projects Purpose and Need than the No build/Do Nothing Alternative.

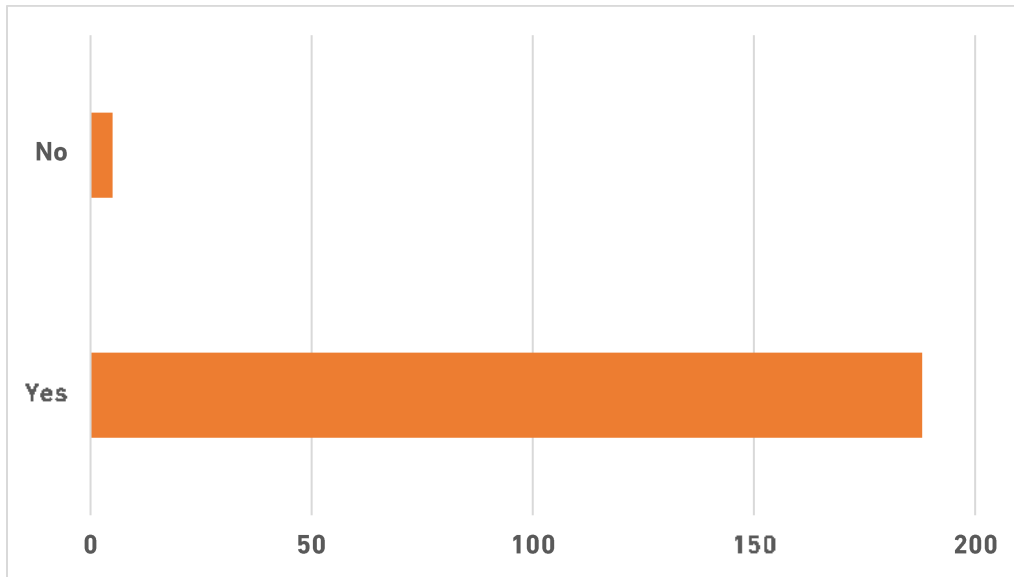


Figure 3 I believe a dedicated transitway with either BRT or LRT (build alternative) better meets the projects Purpose and Need than transit speed and reliability improvements to the existing MetroRapid 801 service (MetroRapid Alternative).

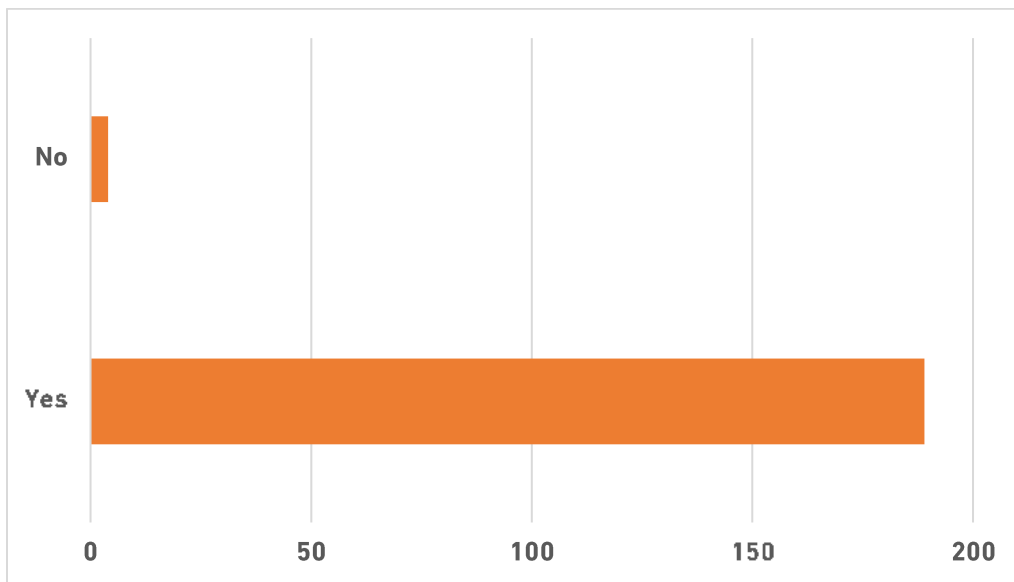


Figure 4. Vehicles types (modes) are evaluated in terms of response to the Purpose and Need, social, economic, and environmental impacts, capital and operations costs, and technical viability, as well as community preference. Based on the information provided, which type of vehicle do you prefer?

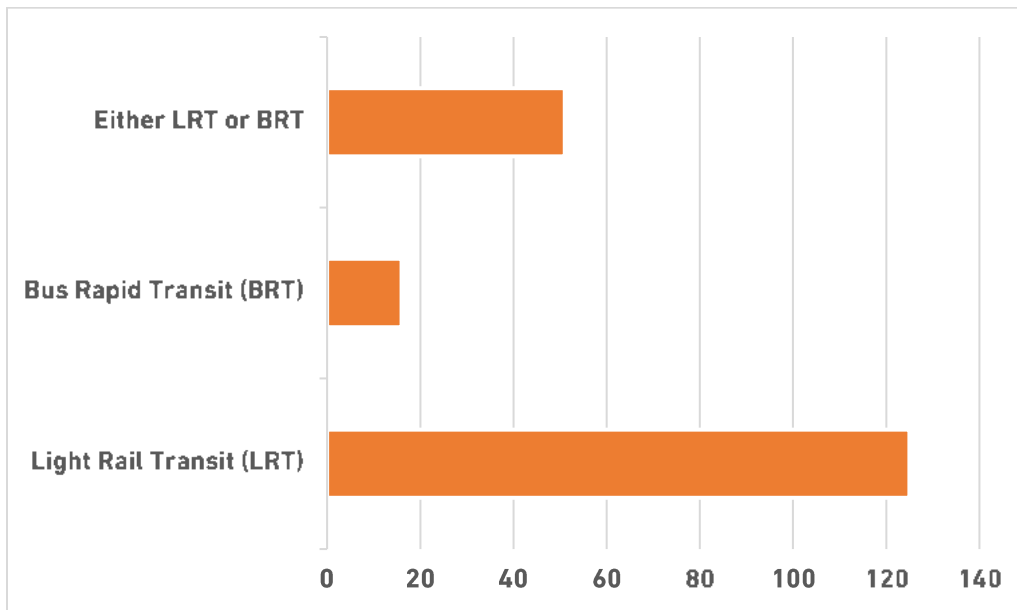
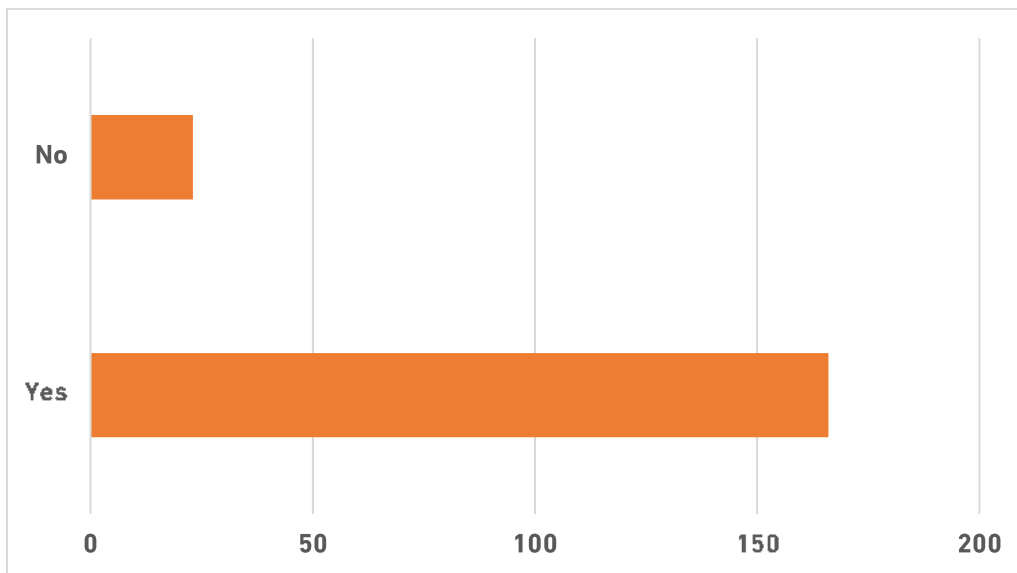


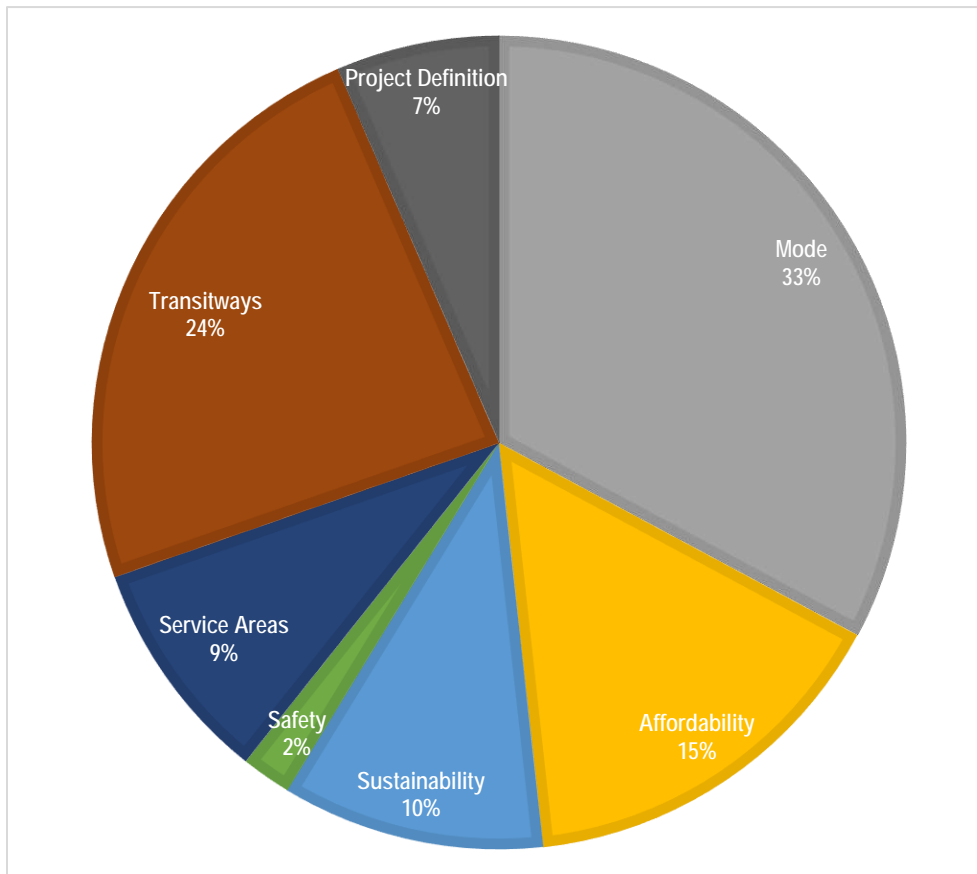
Figure 5. Would you be interested in a tunnel in downtown that provides a conflict-free transitway with improved frequency and reliability for the Orange Line and/or Blue Lines for an additional project cost of approximately \$1.9 billion to \$2.5 billion dollars?



In addition to the quantitative results above, participants were given opportunities to elaborate on their responses and/or to provide additional comments. Record of all comments received, including open response comments, is included in Appendix E. These comments were reviewed by the outreach team and the technical team for grouping into one or more of the following categories:

- **Mode:** Respondent discussed the benefits and/or drawbacks of proposed mode options: Bus Rapid Transit (BRT) and Light Rail (LRT). These would include comments about capacity, commute times and ridership.
- **Affordability:** Respondent discussed the affordability of the presented mode options and overall costs associated with building and maintaining each and/or discussed the role of transit in household budgets.
- **Sustainability:** Respondent discussed the role of each mode presented in overall transportation sustainability, ability of the mode to meet long-term needs, and/or discussed emerging technologies.
- **Safety:** Respondent discussed the safety of cyclists, pedestrians and vehicles as they interact with the transit system.
- **Service areas:** Respondent discussed alternative areas of transit service, Capital Metro's existing transit system, and/or where the Orange Line project could be expanded.
- **Transitways:** Respondent discussed benefits and/or drawbacks of providing dedicated space for transit, and the benefits and/or drawbacks of transitway configuration options (above, below or at-grade).
- **Project definition:** Respondent discussed the purpose and need for the project, and/or how the project is defined. Respondent may have shared a personal transit use story or commented on how the proposed project should operate (hours of service, frequency, connections to other transit corridors, reliability and station locations, etc.).

Figure 5 Categories of comments provided



Lessons Learned and Next Steps

Participation at the public Open House events was close to anticipated and many participants and members the project team commented on the effectiveness of the guided Open House format both for eliciting engagement and facilitating useful feedback. The participation in the VOH was somewhat lower than expected. There are several factors that may have affected participation, including other high-profile planning efforts underway, the holiday season and planning fatigue. Greater involvement is a key priority and increasing attendance in both in-person and online processes will continue to drive the project team's outreach efforts. These efforts will include additional direct outreach, stakeholder group presentations and the use of social media. The next phase of outreach is planned to begin in early 2020 and to conclude by spring 2020.

Appendix A: Materials

WELCOME

PROJECT CONNECT
OPEN HOUSE

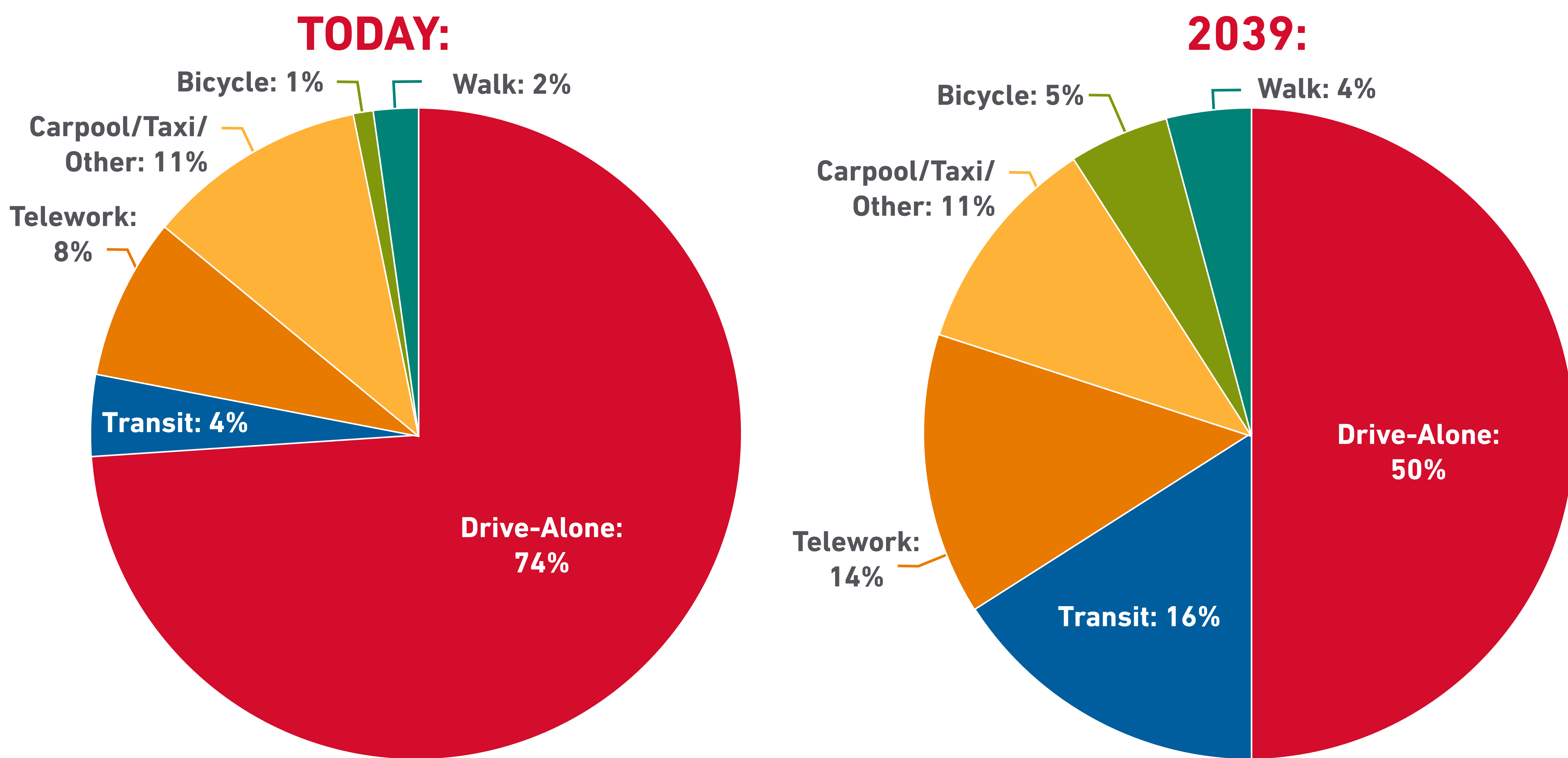
Orange Line



Policy Framework

Austin Strategic Mobility Plan mode split goal

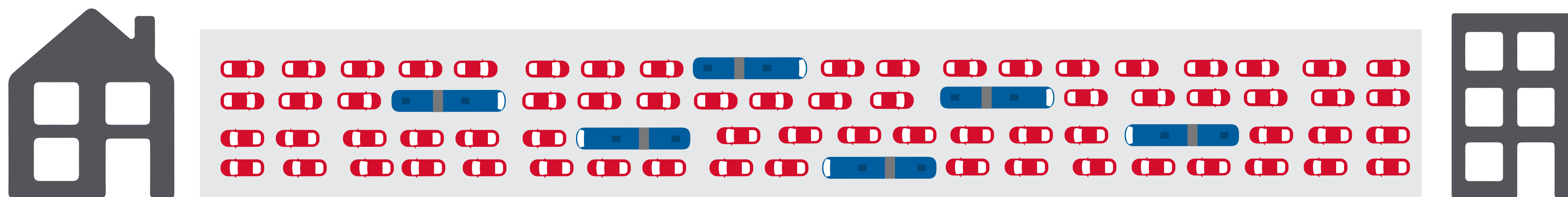
The City of Austin has established a policy goal to improve the mode-split (diversity of travel methods) to more efficiently move the most amount of people. Today, about 75% of all work commutes are people driving alone. City Council unanimously voted in favor of working towards a mode-split goal whereby 50% or less of the City of Austin is commuting alone in a car by 2039. This plan is known as the Austin Strategic Mobility Plan or ASMP.



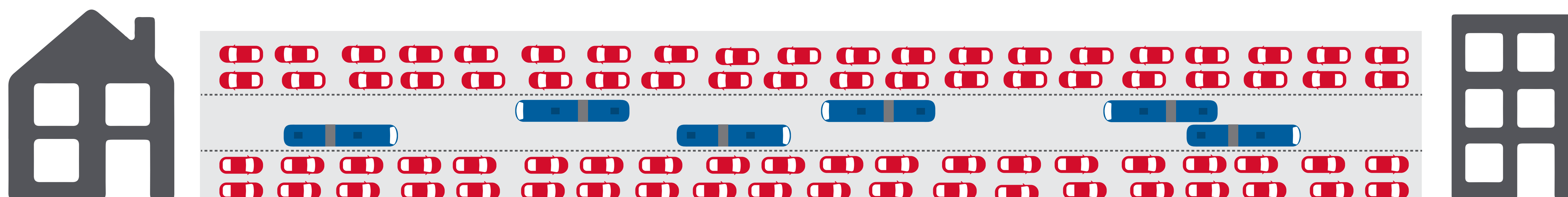
Using transit to move more people

The game-changing approach Project Connect is taking to help foster the 16% transit ASMP mode-split goal, is to introduce dedicated transitways into the transit system. Dedicated transitways would allow traffic-free movement of transit vehicles thereby maximizing the number of people that can move along our streets.

Transit in mixed traffic:



Transit protected from traffic in a dedicated transitway:



Purpose and Need

The **Purpose** of the Orange Line high-capacity transit investment is to meet growing corridor travel demand with a reliable, safe, cost-effective, time-competitive, state-of-the-art high-capacity transit option.

The Orange Line would address the following needs (or problems) within the corridor:



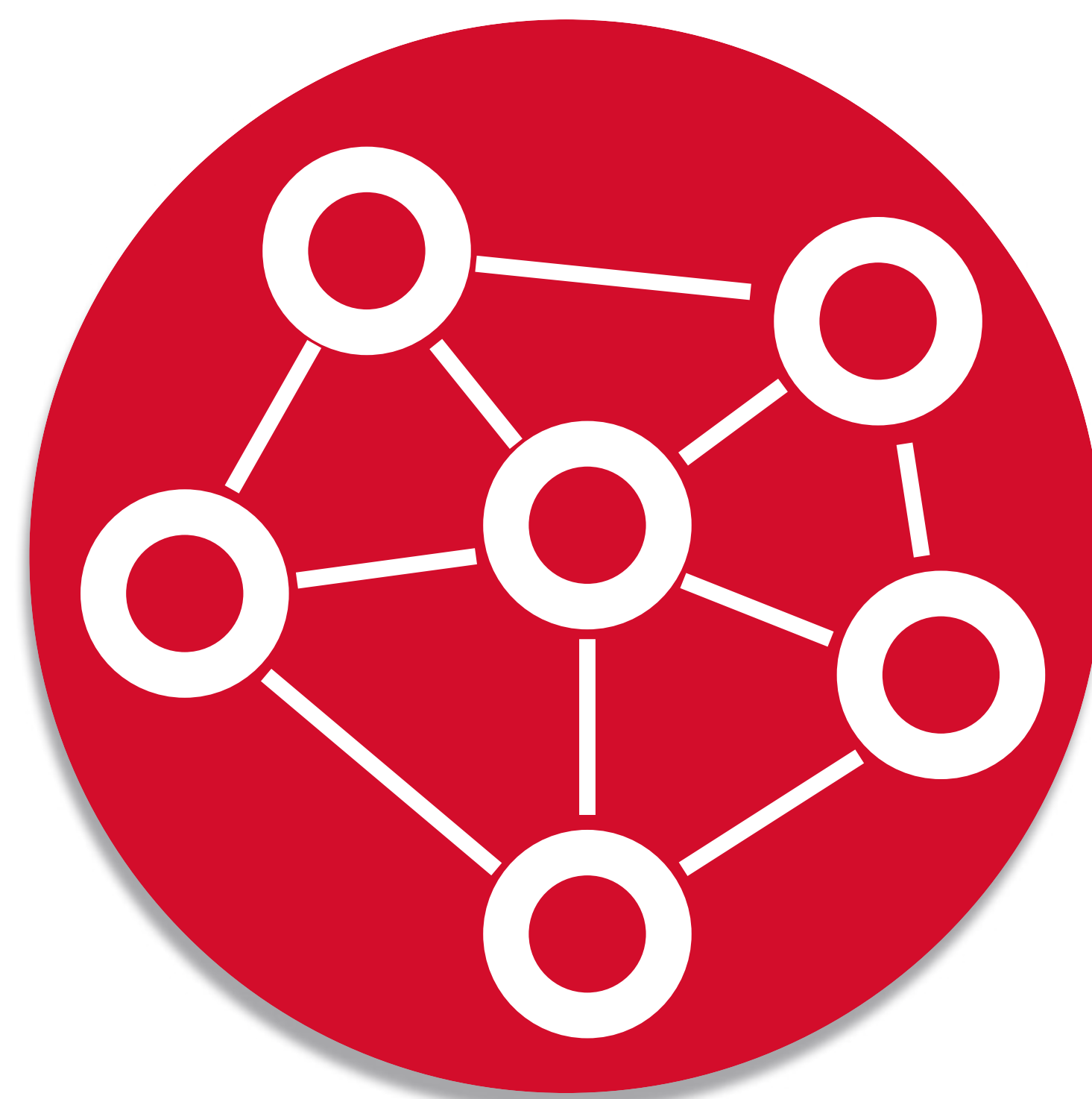
Sustainably support Central Texas' population and economic growth



Increase transportation network capacity to meet increasing travel demand



Improve transit access between affordable housing and jobs



Support growth of and connectivity to regional activity centers

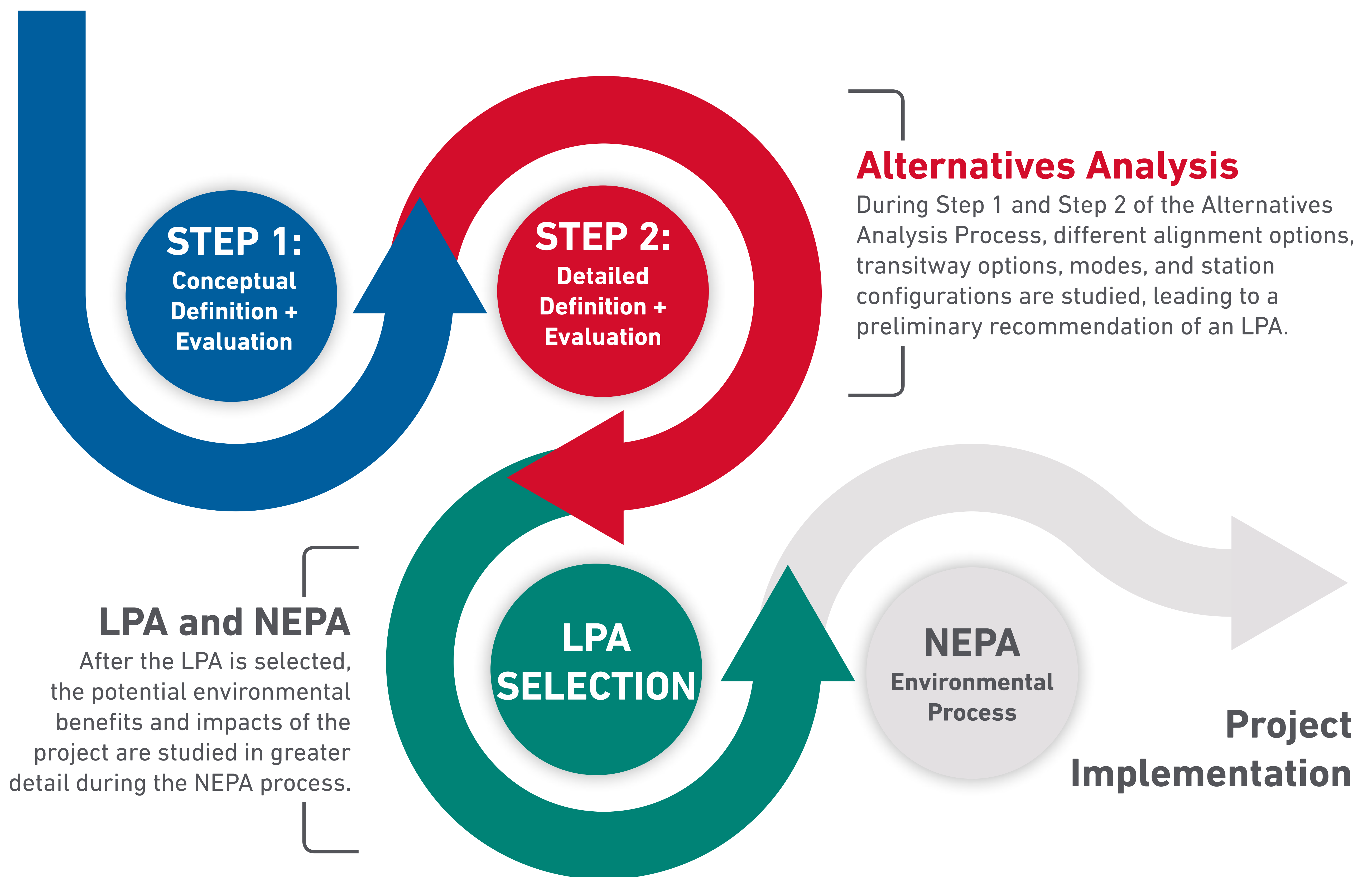
Note: Purpose and Need has evolved and will continue to evolve as the process progresses.

The Evaluation Process

Capital Metro adheres to the Federal Transit Administration (FTA) and National Environmental Policy Act of 1969 (NEPA) process in order to be eligible for capital funding. These formal guidelines require a thorough **alternatives analysis** and dictate the required steps necessary to complete it. Adhering to the FTA process increases competitiveness for federal funding.

After the alternatives analysis process, Capital Metro and its partners will select and seek approval for a **Locally Preferred Alternative (LPA)**. Then, Capital Metro will ask the FTA to initiate the NEPA process to evaluate the LPA's environmental benefits and impacts.

FEDERAL FUNDING AND ENVIRONMENTAL PROCESS:



Work Done to Date

Results from Step 1 of the evaluation process



Orange Line Corridor

The Conceptual Evaluation of Step 1 established a method for carrying forward transitway options for each segment to the Detailed Evaluation of Step 2. Segments were identified along the Orange Line which share similar characteristics such as right-of-way width and neighborhood context. The transitway options that were carried forward into Step 2 Detailed Evaluation are shown below.

	 Street Level	 Elevated	 Underground
1. North Austin	✓	X ¹	X ¹
2. North Central	✓	✓	✓
3. Central Austin	✓	✓	✓
4. Downtown	✓	✓	✓
5. SoCo	✓	✓	✓
6. South Central	✓	X ¹	X ¹
7. South Austin	✓	X ¹	X ¹

¹Elevated and Underground are not necessary due to limited street-level tradeoffs.

Note: Following the Step 1 evaluation, "Cut-and-Cover" and "Tunnel" options were consolidated to a general "Underground" option for future phases of evaluation.

Orange Line Outreach to Date

76% of participants in public outreach held during July “agreed” or “strongly agreed” with the approach to Step 1 evaluation.



Outreach Event

Attendance

Number of Comments

Purpose and need scoping meetings	<i>In person</i>	252	180
	<i>Virtual open house</i>	2,911	487
	TOTAL	3,163	667
Step 1 Conceptual Evaluation meetings	<i>In person</i>	134	96
	<i>Virtual open house</i>	1,183	298
	TOTAL	1,317	394
TOTAL OVERALL		4,480	1,061

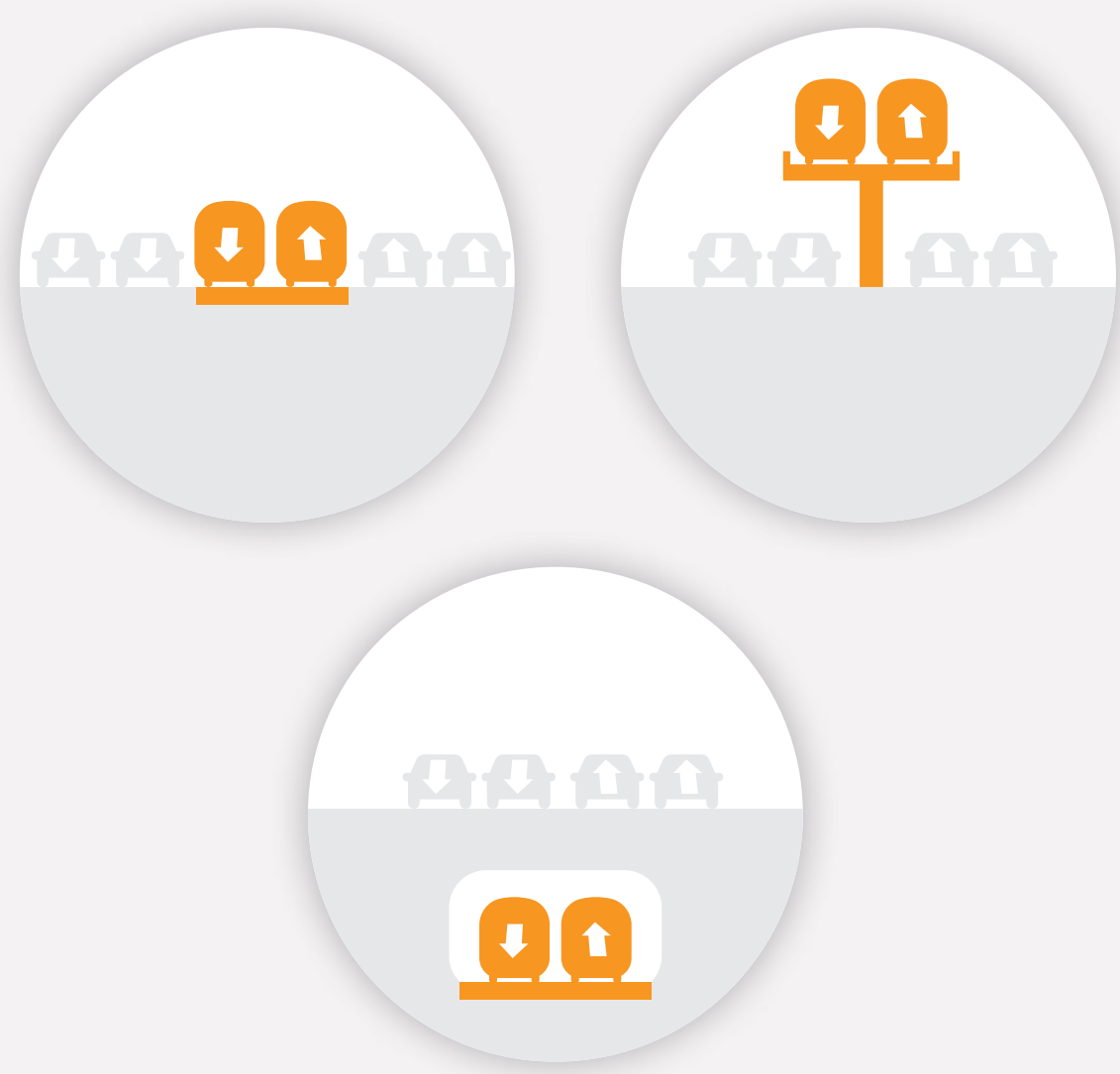
The Community's Local Choice

Elements that make up a "Build Alternative"



ALIGNMENT

Alignment alternatives for the Orange Line Corridor were evaluated and eliminated during the Project Connect system planning phase. Only one alignment is being considered in this current phase of analysis.



TRANSITWAY

The Orange Line Corridor would operate in a street level, elevated, or underground dedicated transitway.



MODE

Two options are being considered for the vehicle type that would operate on the transitway: **Bus Rapid Transit (BRT)** or **Light Rail Transit (LRT)**.

The Build Alternatives are compared to:



DOING NOTHING

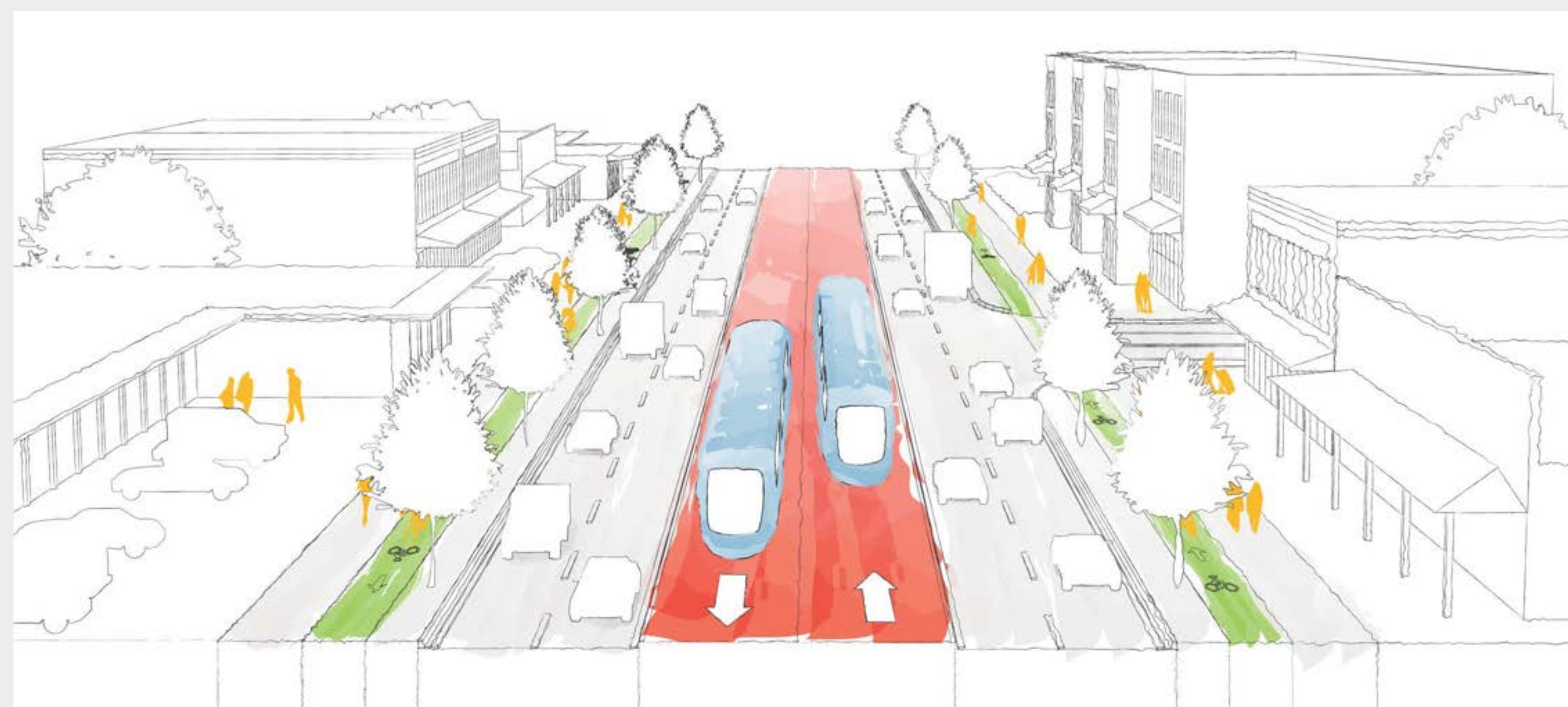
As required by the FTA, we always carry forward a "No-Build" or "Do Nothing" alternative for comparison. For the Orange Line Corridor, this would include making no changes to the existing service on MetroRapid Route 801.

Transitway Options

Dedicated space for transit within the right-of-way

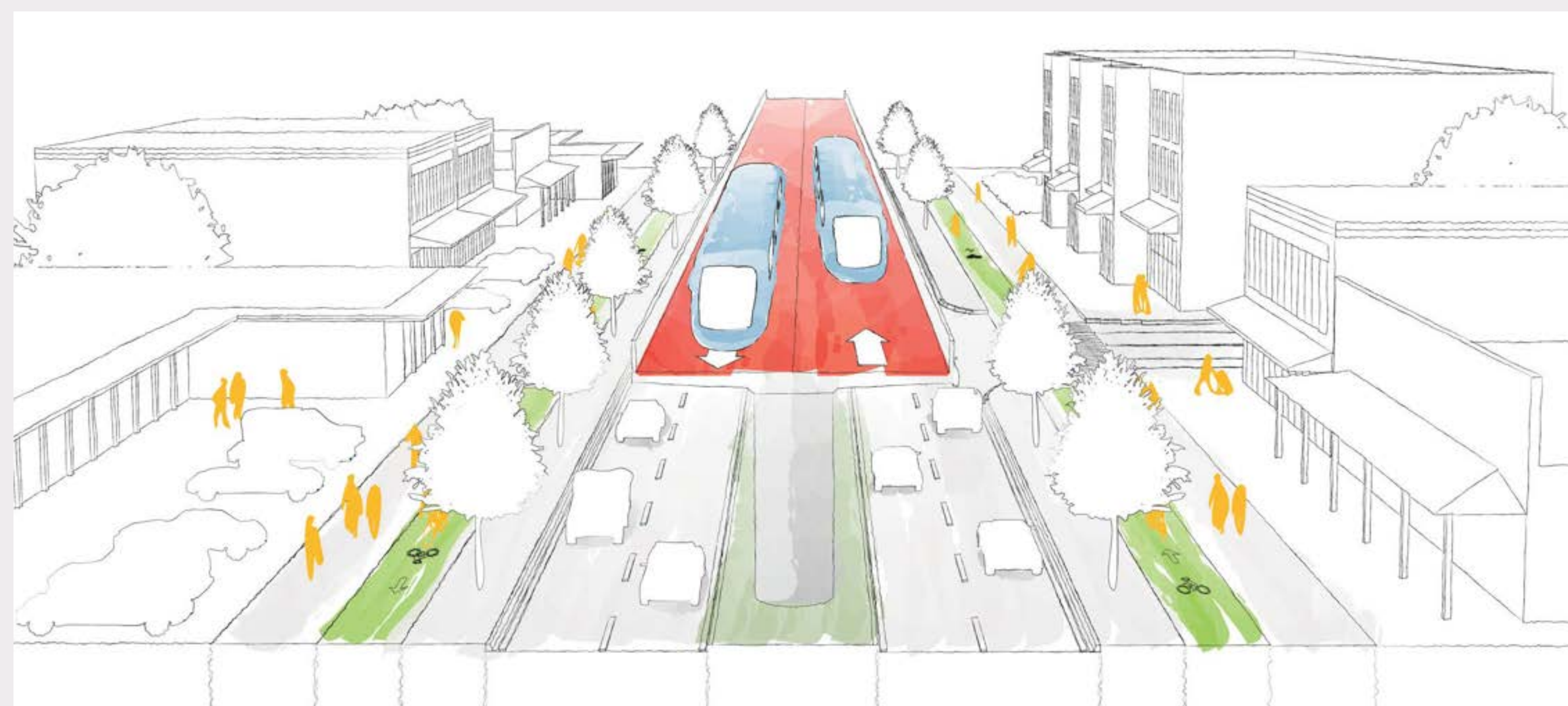
STREET LEVEL

- » A dedicated transitway running along an existing street
- » Operations are affected by conflicts with traffic signals, pedestrians, bikes, intersections, and other street level uses



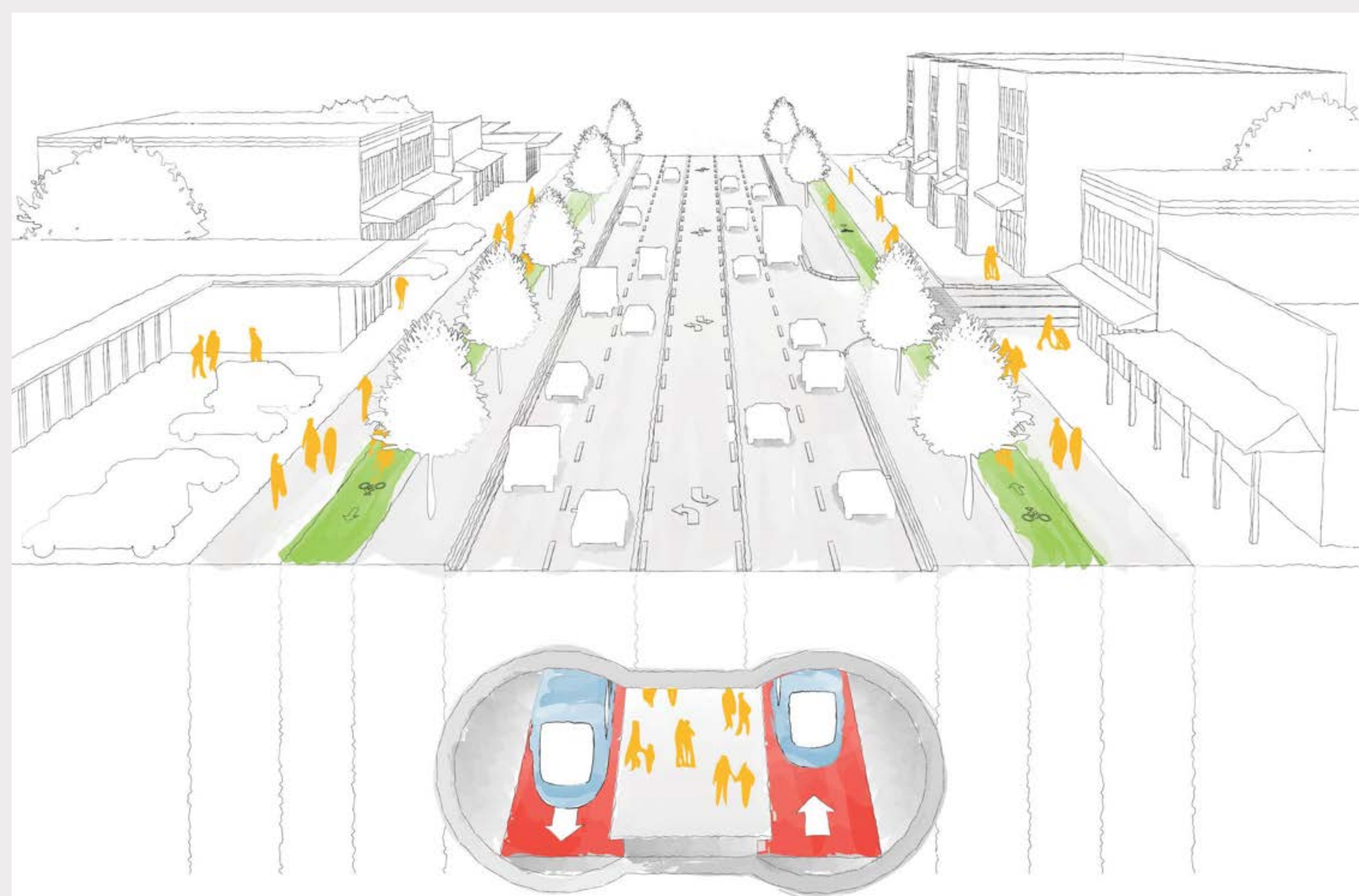
ELEVATED

- » A dedicated transitway built up above street level along an existing street
- » Stations are above street level and are accessed by stairs, escalators, and/or ADA accessible elevators



UNDERGROUND

- » A dedicated transitway under the roadway
- » Stations are underground, and are accessed by stairs, escalators, and/or ADA accessible elevators



Alignment Alternatives

Alignment alternatives for the Orange Line were evaluated and eliminated during the Project Connect system planning phase. Only one alignment moved forward into the current phase of analysis. For analysis purposes, the alignment is divided into segments which share similar characteristics such as right-of-way availability and context of their built environments.



**For illustrative purposes. Proposed station locations subject to change, as well as alignment. Map not to scale.*

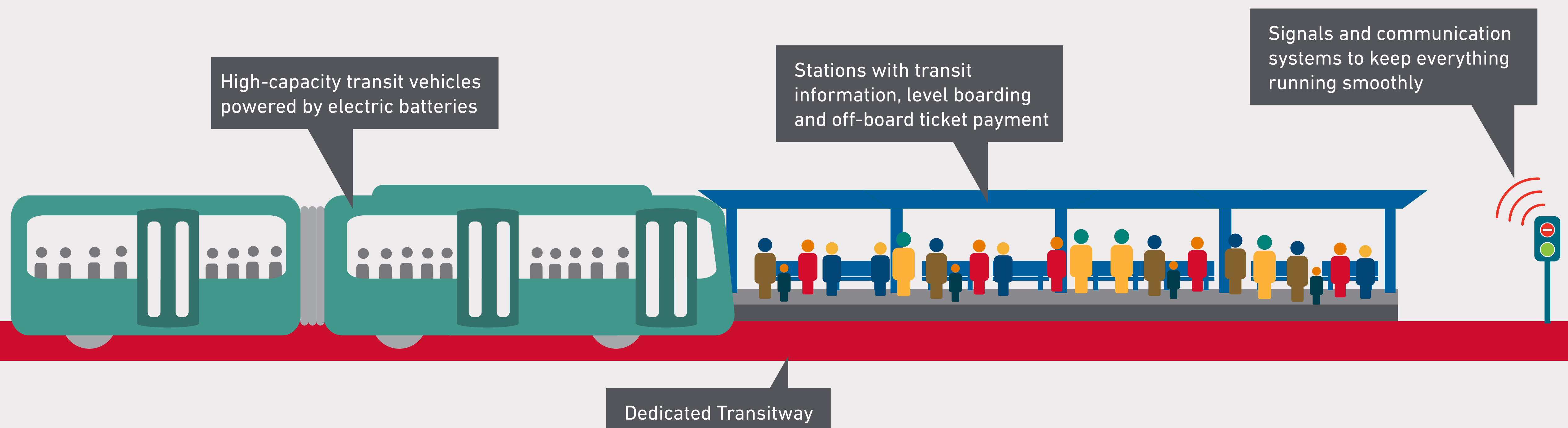
Transit Mode

Both BRT and LRT vehicle fleets would be fully electric. Either mode would benefit from off-board fare collection, larger stations with level boarding, and intersection signal prioritization.



BUS RAPID TRANSIT (BRT)

Rubber-tire vehicles operating in a dedicated transitway.

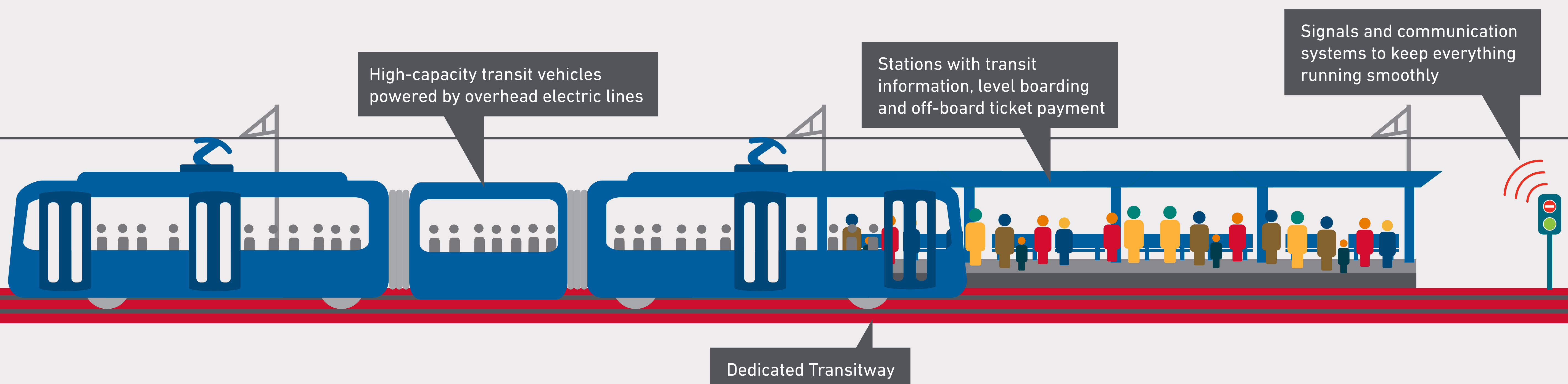


For Illustrative Purposes Only.



LIGHT RAIL TRANSIT (LRT)

Steel-wheel vehicles operating on tracks in a dedicated transitway.



For Illustrative Purposes Only.

People on Board

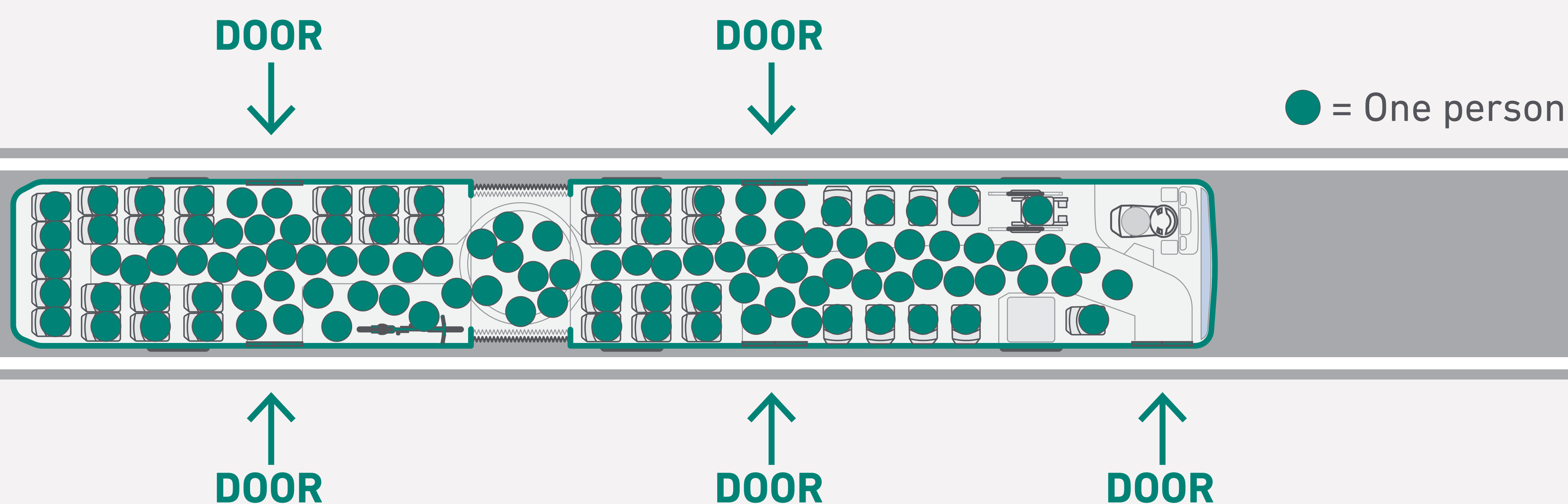
Both BRT and LRT vehicles can carry large numbers of people at a time.



BUS RAPID TRANSIT (BRT)

BRT buses usually have 50-70 seats plus room for 40-50 more standing passengers. There are doors on both sides of the bus to allow people to board and exit from either side depending on where the station platform is located.

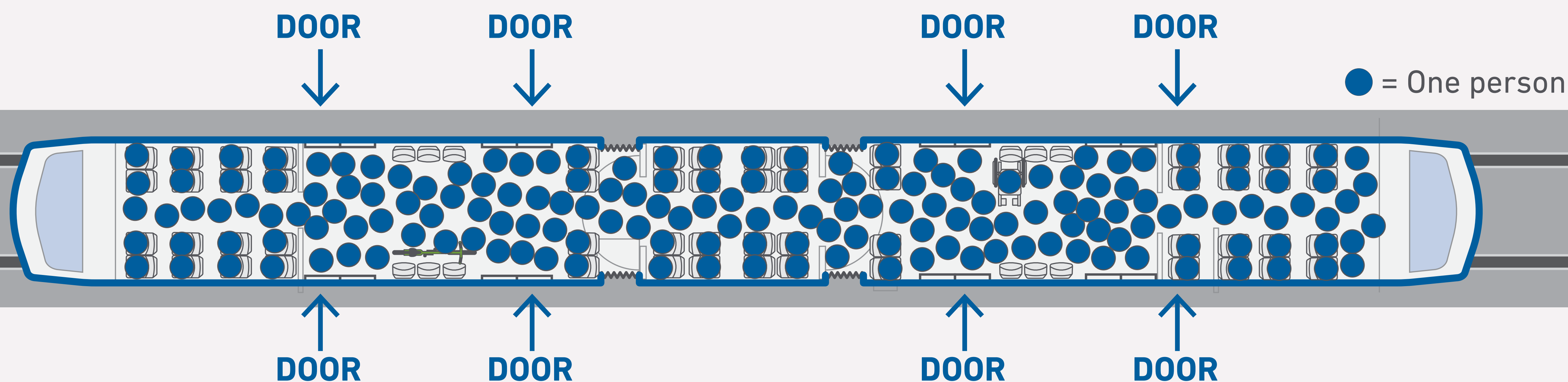
About 115 people can fit on each BRT bus:



LIGHT RAIL TRANSIT (LRT)

LRT train cars usually have 60-70 seats plus room for 100-110 more standing passengers. There are doors on both sides of the train to allow people to board and exit from either side depending on where the station platform is located.

About 172 people can fit on each LRT train car:



Level of Service Scenarios

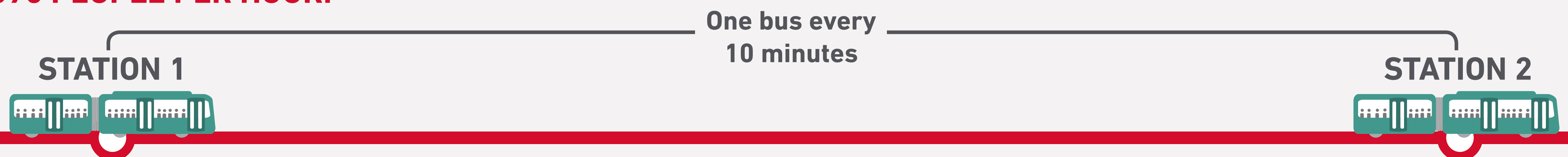
High-capacity transit would help meet the mobility needs of Central Texas for many decades to come. As the region continues to grow, transit service could expand to keep up with demand. Increasing BRT and LRT service works in different ways.



BUS RAPID TRANSIT (BRT)

To carry more people on BRT, more buses are added during the busy times of the day. This means that buses are more frequent and pair up during peak hours, which requires more bus drivers.

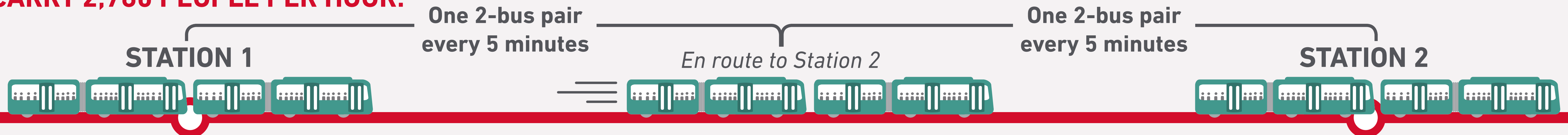
TO CARRY 690 PEOPLE PER HOUR:



TO CARRY 1,380 PEOPLE PER HOUR:



TO CARRY 2,760 PEOPLE PER HOUR:



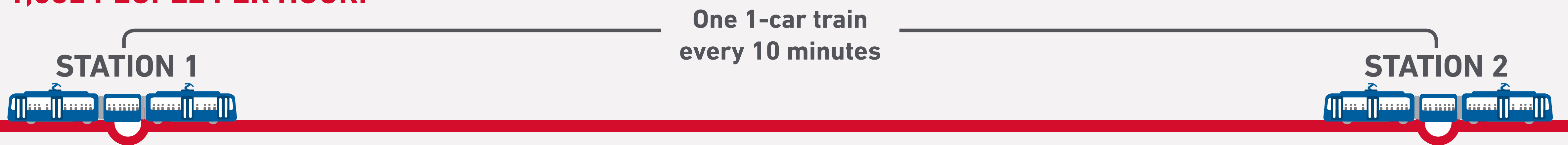
Note: Capacity illustrations are single-direction only.



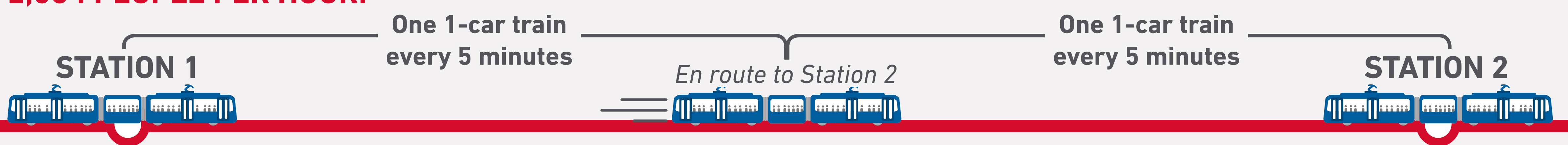
LIGHT RAIL TRANSIT (LRT)

To carry more people on LRT, train cars are linked together. The length of Austin's downtown blocks can accommodate up to three train cars at a time.

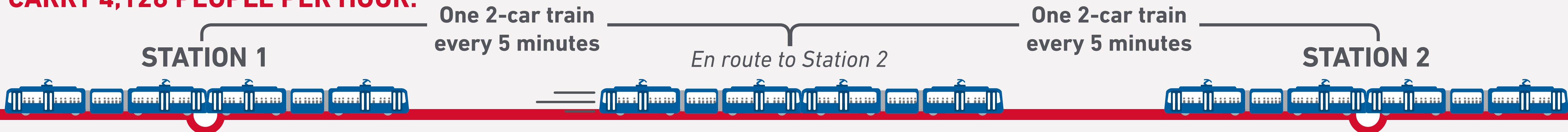
TO CARRY 1,032 PEOPLE PER HOUR:



TO CARRY 2,064 PEOPLE PER HOUR:



TO CARRY 4,128 PEOPLE PER HOUR:



Note: Capacity illustrations are single-direction only.

Evaluating Project Goals

Following the FTA process, the Detailed Evaluation phase (Step 2) analyzes how well different combinations of alignment, transitway type, and mode meet the project's goals.

Focus areas discussed today:



Customer Experience

What it means:

Increase efficiency, attractiveness and utilization of high-capacity transit service within the corridor.

How it's done:

Provide a travel experience that is competitive with the automobile.



Reliability

What it means:

Provide frequent, reliable high-capacity transit service along transitways within the corridor.

How it's done:

Efficiently use the existing transportation network, provide dedicated transitways for transit to operate free from other traffic.



Implementation and Operations

What it means:

Develop and select a community-supported high-capacity transit investment for implementation.

How it's done:

Develop a project with strong public, stakeholder and agency support. Develop a project that balances costs and benefits.



Sustainability

What it means:

Contribute to a socially-, economically- and environmentally-sustainable transit network.

How it's done:

Mitigate the rising cost of living by providing safe, affordable alternatives to car ownership, reduce energy usage and pollution while minimizing impacts to the natural, cultural, and built environment.



Land Use and Policy

What it means:

Support "compact and connected" land use and development patterns.

How it's done:

Expand transit access to local and regional destinations, activity centers and employment centers.

Orange Line Ridership

Ridership forecasts estimate how many riders the Orange Line would draw. Many factors influence whether or not people ride transit. Studying these factors provides an estimate of how many people would use each Build Alternative on a typical day.



DENSITY

Ridership tends to be higher in areas with more people, jobs, and activity centers.



RELIABILITY

When people can depend on fast, frequent transit service, they tend to use it more.



CONNECTIONS

More people ride transit when it makes useful connections to other transportation services.



TRAVEL TIME

Faster travel times tend to make transit a more appealing transportation option.



QUALITY

When transit has great stations and vehicles, more people choose to ride it.

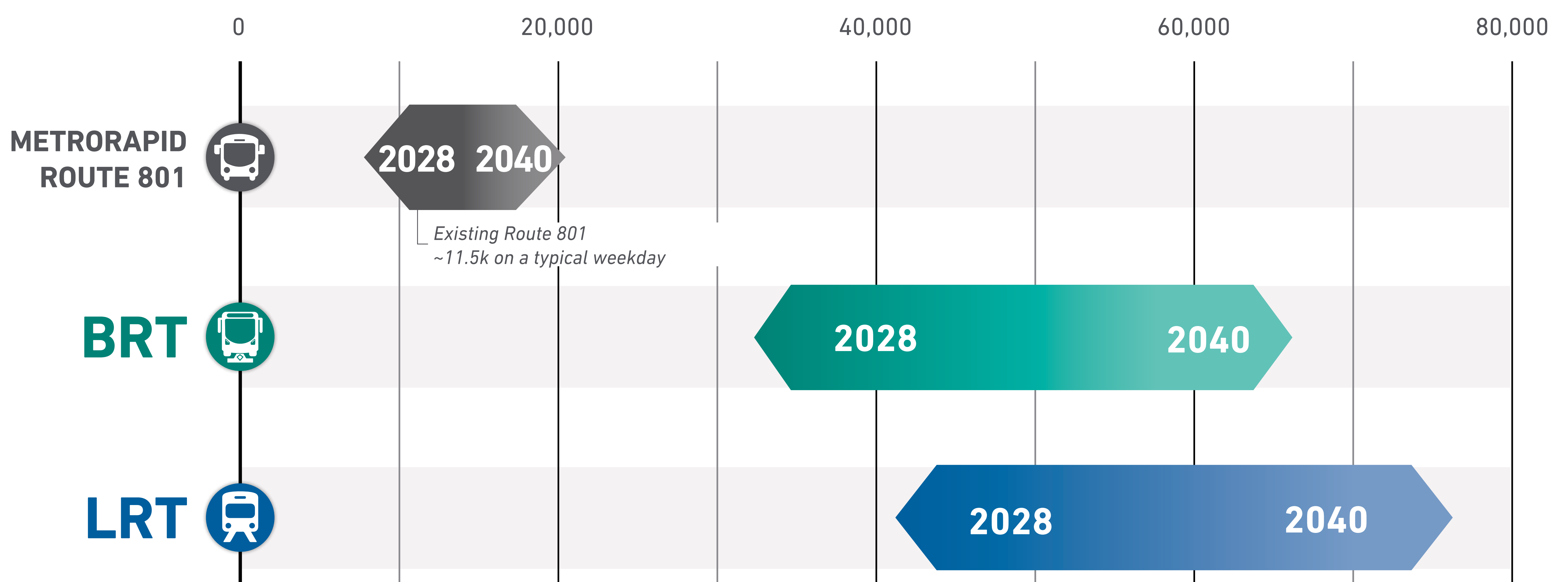


COST

People tend to make choices about how to travel based on what it costs.

POTENTIAL RIDERSHIP DEMAND

Typical Weekday



Note: Potential ridership demand above is presented independently from service capacity.

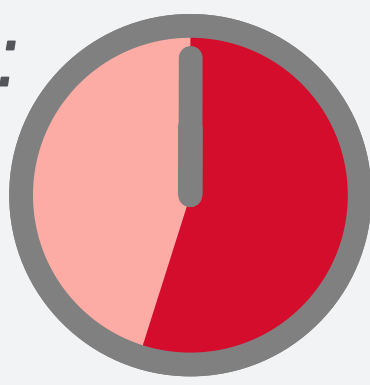
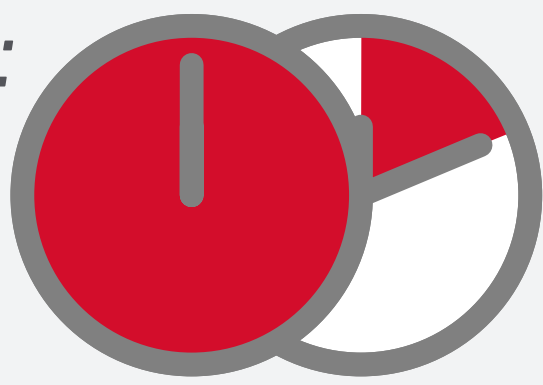
Note: Ridership analysis was conducted using the most recent population and employment forecast available from the Capital Area Metropolitan Planning Organization (CAMPO) for 2040. This forecast was last updated in 2015 and does not reflect a number of recently completed or planned developments. Ridership estimates are subject to change based on the forthcoming 2045 population and employment forecast from CAMPO.

Travel Times

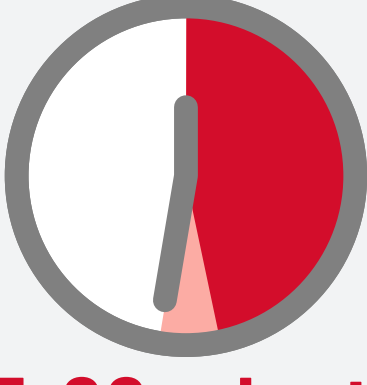
Four different types of trips showing how fast the Orange Line would travel

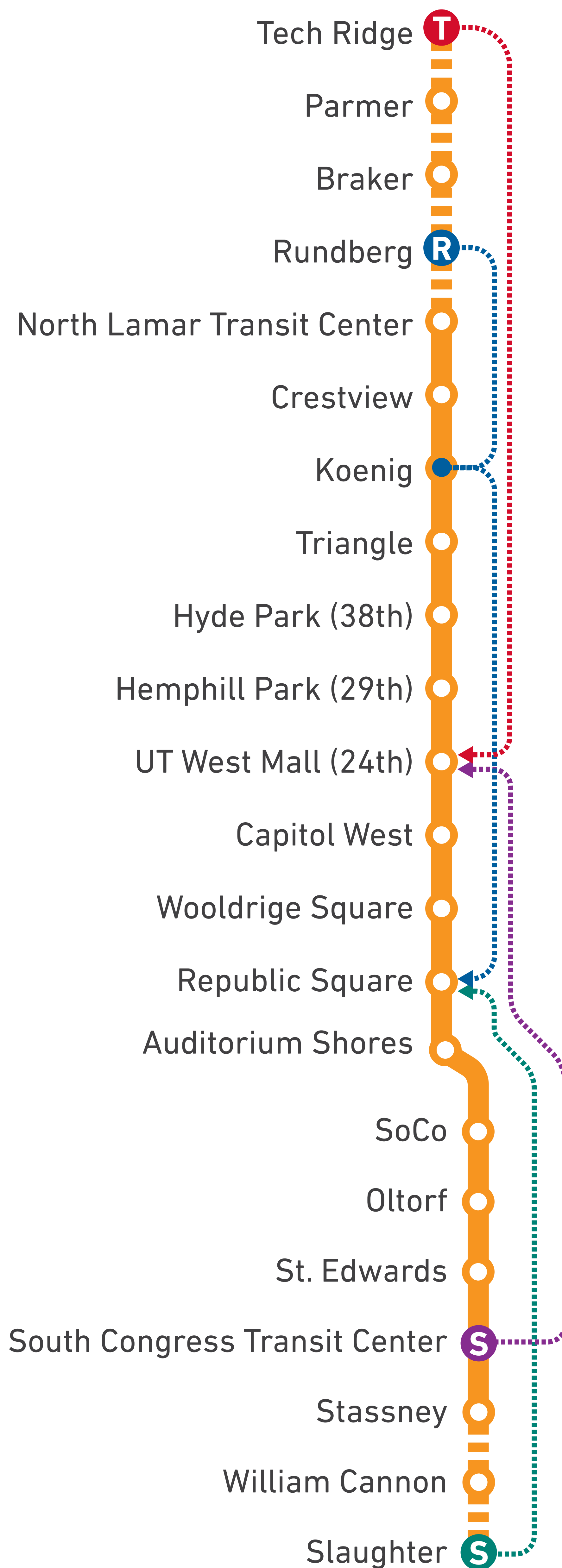
Tom starts his trip at Tech Ridge and works Downtown. His current **commute by car** ranges from **35 to 60 mins**, while his **commute by bus** is **72 mins**.

BEFORE:

Car:  **35-60 minutes** Bus:  **72 minutes**

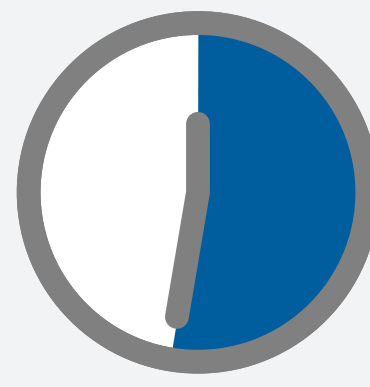
AFTER:

Tom's Orange Line commute would be **27-33 minutes**.  **27-33 minutes**




Ria starts her trip at Rundberg and drops off her son at daycare near Koenig before heading to work at UT. She does not own a car. Her current **commute by bus** is **32 mins** of traveltime but depends on how long she waits for the next bus after her daycare drop off.

BEFORE:

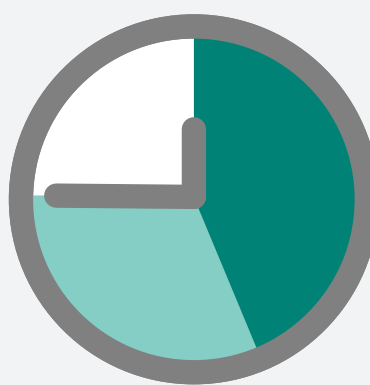

Car: *Ria does not own a car.* Bus:  **32 minutes**

AFTER:


Ria's Orange Line commute would be **16-18 minutes**.  **16-18 minutes**

Sofia starts her trip at Southpark Meadows and works at the Federal Courthouse. Her current **trip by car** ranges from **24 to 45 mins**, while her **trip by bus** is **39 mins**.

BEFORE:

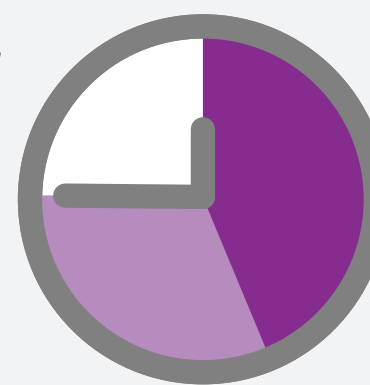
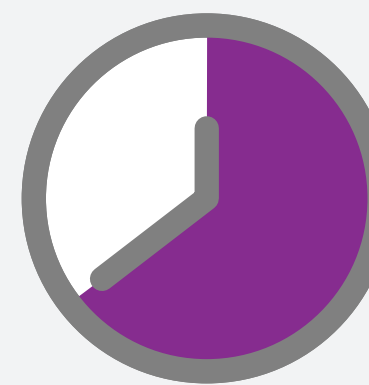
Car:  **25-45 minutes** Bus:  **39 minutes**

AFTER:


Sofia's Orange Line commute would be **15-20 minutes**.  **15-20 minutes**

Sanjay starts his trip near South Congress Transit Center and takes classes at UT. His current **commute by car** ranges from **22 to 45 mins**, while his **commute by bus** is **39 mins**.

BEFORE:

Car:  **22-45 minutes** Bus:  **39 minutes**

AFTER:

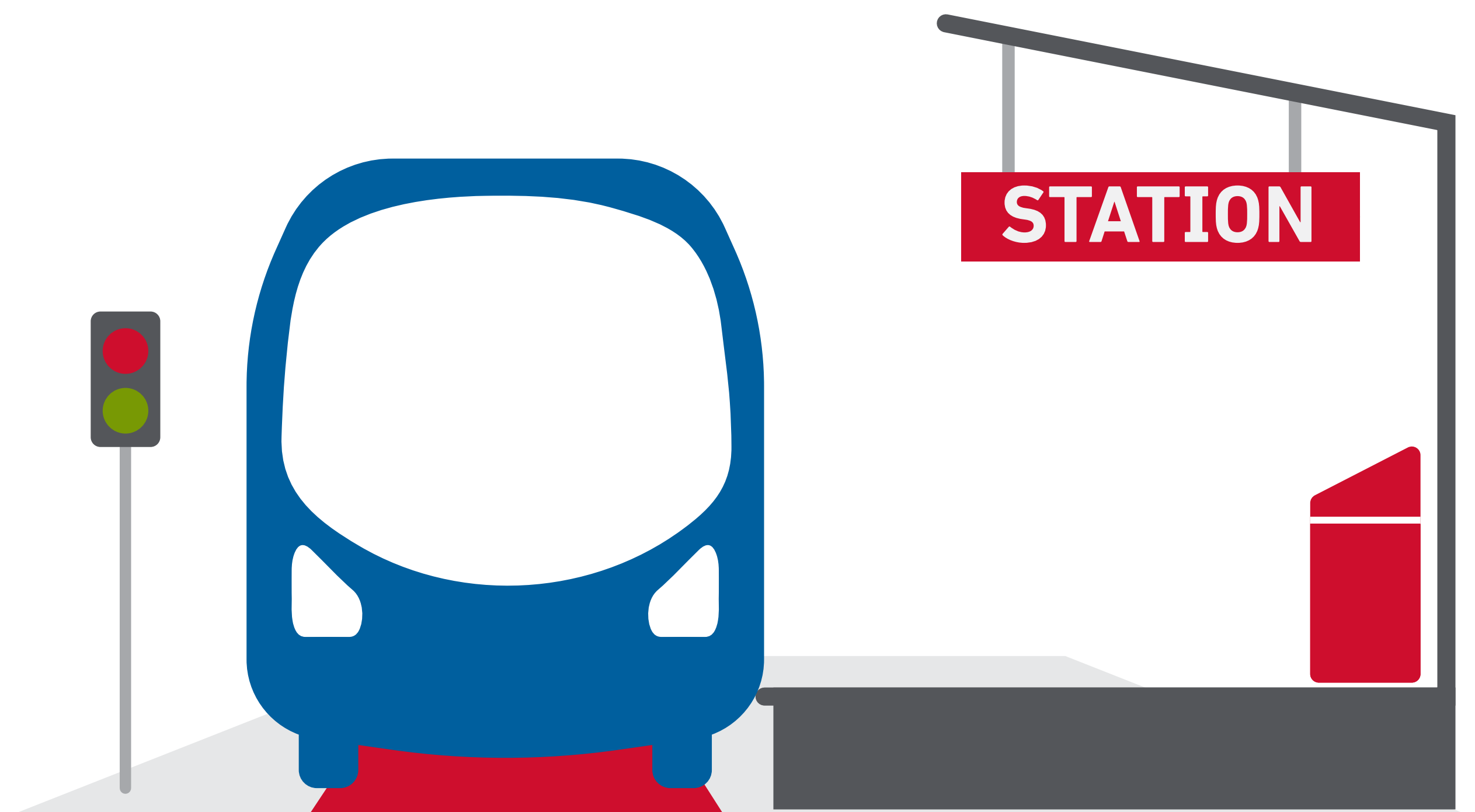
Sanjay's Orange Line commute would be **14-23 minutes**.  **14-23 minutes**

Note: Car travel time does not include time spent finding a parking space.

Building the Project

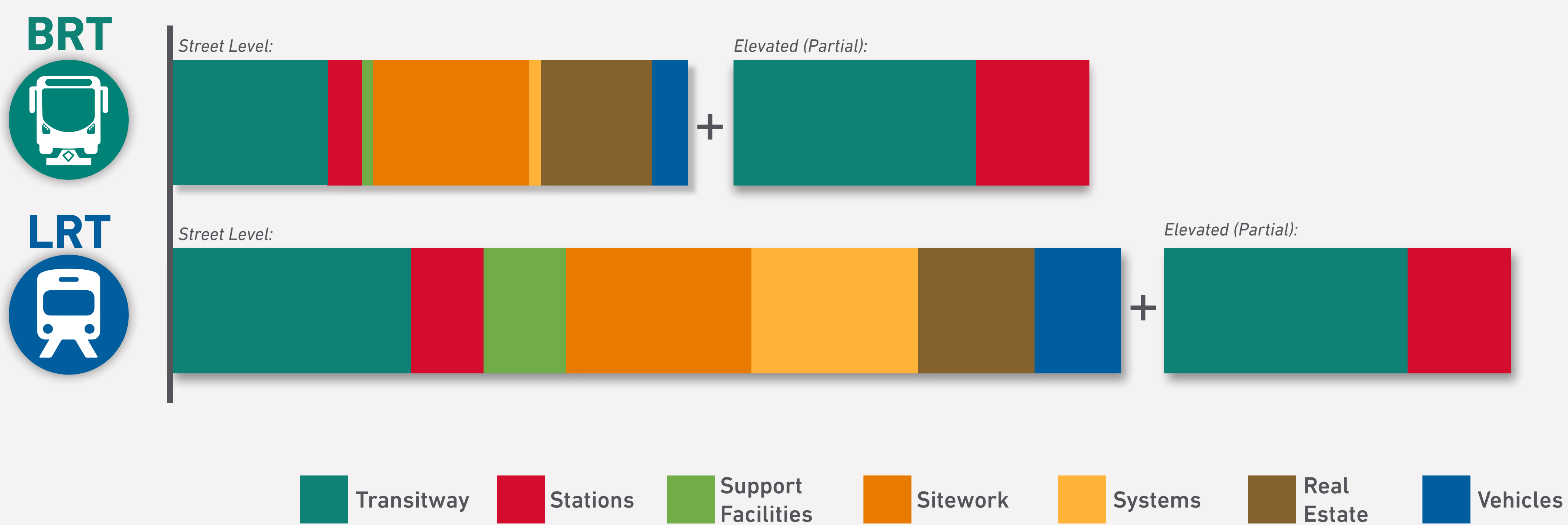
The cost to build the Orange Line includes:

- Building the transitway
- Building stations & station access
- Building a vehicle maintenance facility
- Signals & communications systems
- Building the power supply system (LRT)
- Relocating utilities
- Purchasing the vehicles
- Design and engineering
- Land acquisition



Capital Cost Breakdown

Professional services and contingency are included in capital cost estimates but not shown in breakdown below.



BRT Orange Line Alternatives

Estimated capital cost:

\$2.0B to \$3.5B



LRT Orange Line Alternatives

Estimated capital cost:

\$3.8B to \$5.1B

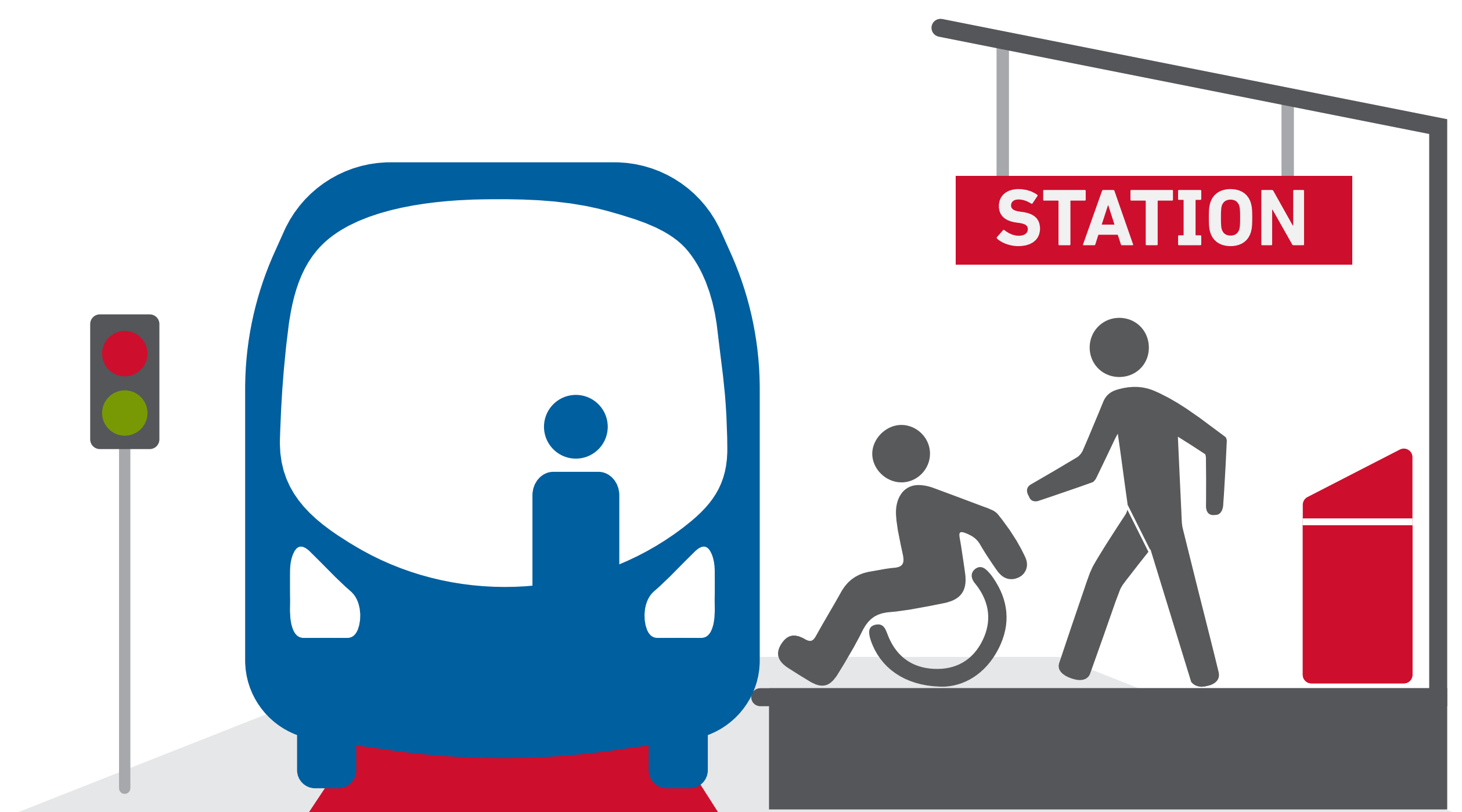
Downtown Tunnel
+\$1.9B to \$2.5B

Note: All costs shown in 2025 (mid-construction) dollars. All cost estimates are subject to change as engineering and design advances.

Operating the Project

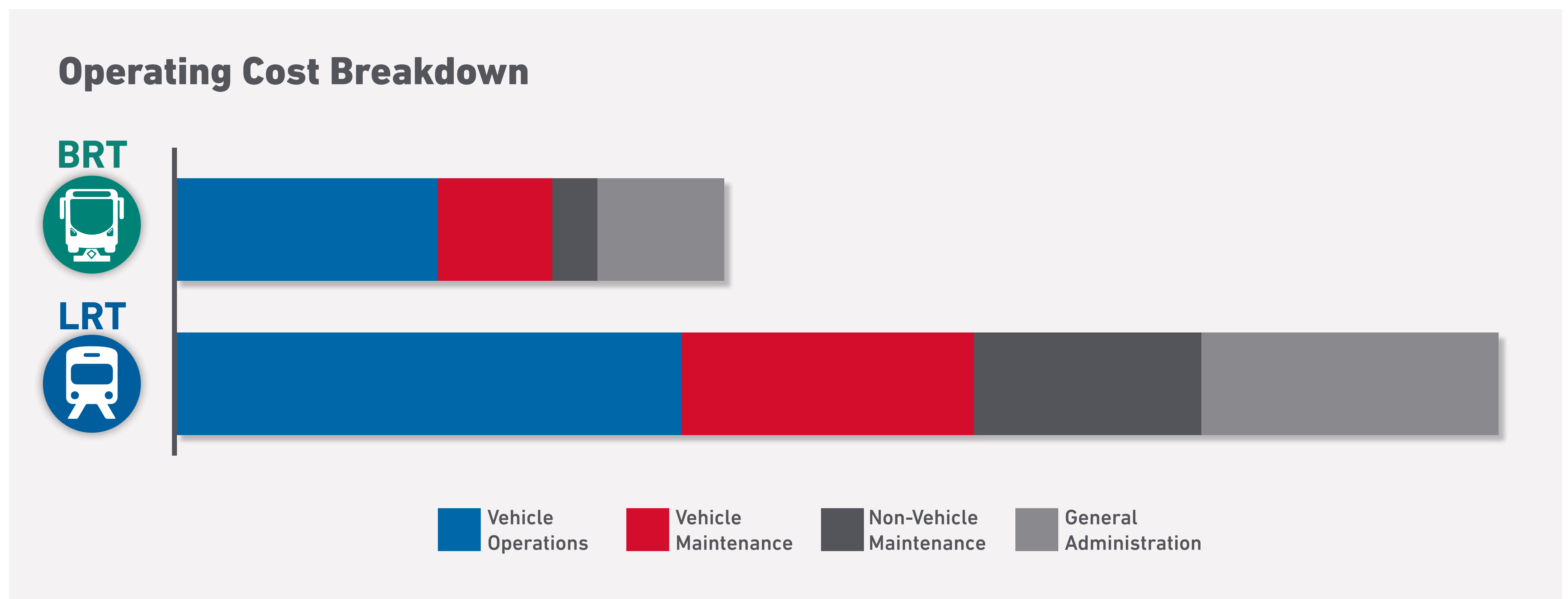
The cost to operate the Orange Line includes:

- Paying vehicle operators
- Routine maintenance of buses or trains
- Maintaining the stations, transitway, and other supporting infrastructure
- Purchasing vehicle power
- Other general and administrative costs



Factors that affect operating costs

BRT systems are usually less expensive to operate per bus than LRT systems are per train, but they also carry fewer people per bus than LRT can carry per train. Operating costs for LRT would also be higher initially since LRT technology would require specialized operating capabilities that are brand new to Capital Metro.



BRT
Orange Line Alternatives
Estimated operating cost:

\$23M to \$32M
Per year

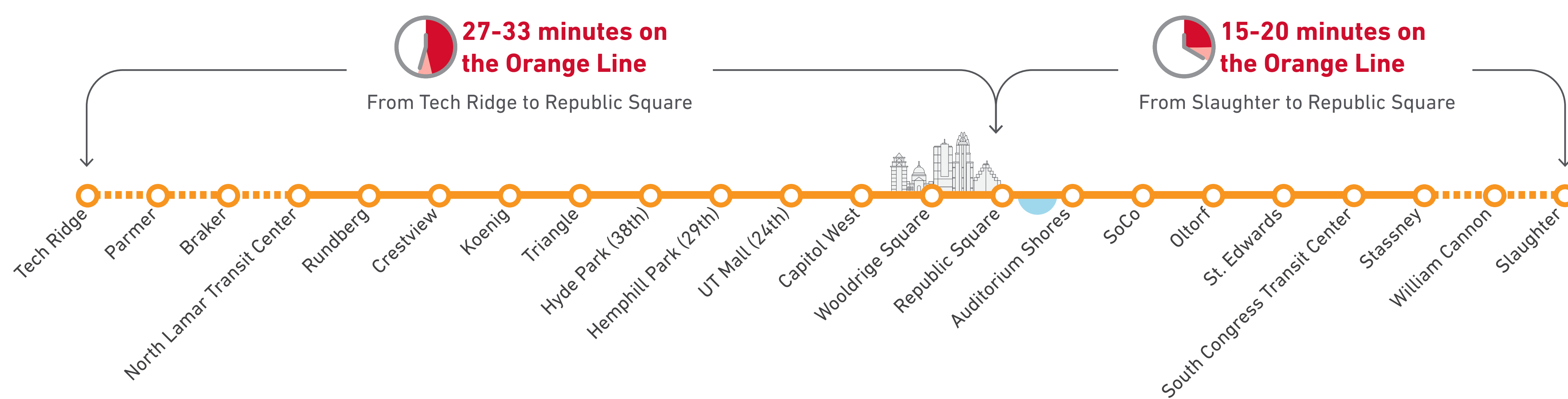
LRT
Orange Line Alternatives
Estimated operating cost:

\$47M to \$57M
Per year

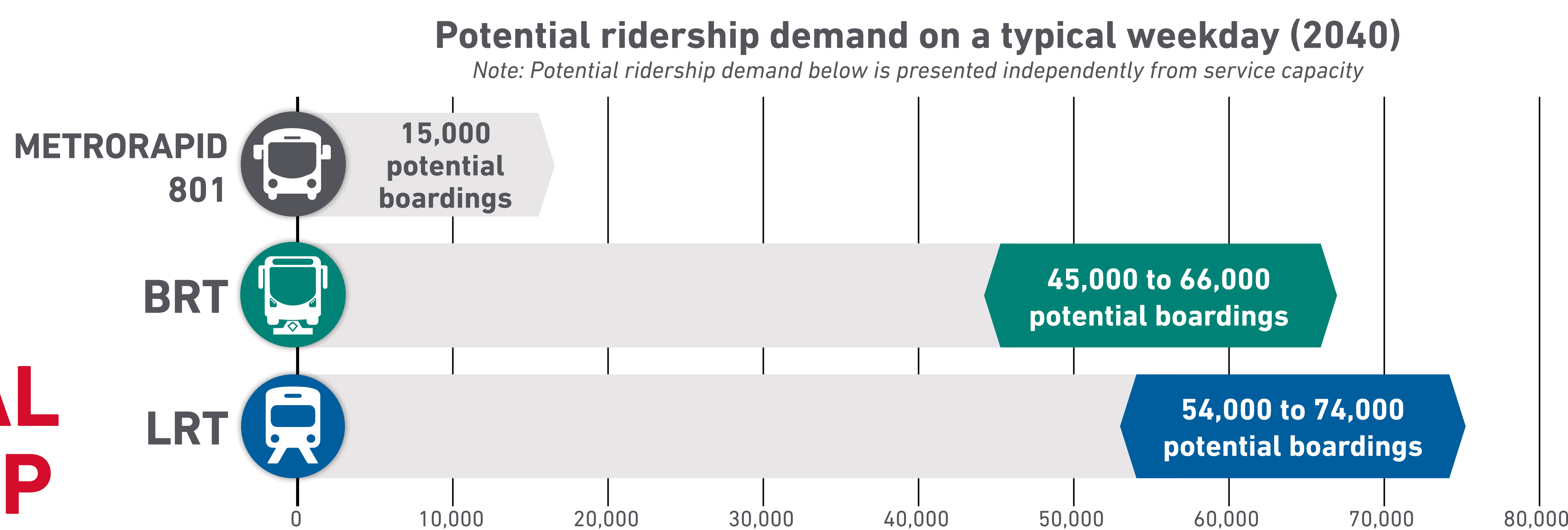
All costs shown in 2028 (opening year) dollars. Operating costs presented above are based on the high-end cost estimates for all alignment alternatives and include an additional +/-5% uncertainty factor. Build examples do not include offset costs resulting from bus service adjustments or impacts on fare revenues. All cost estimates are subject to change as engineering and design advances.

Orange Line Preliminary Results

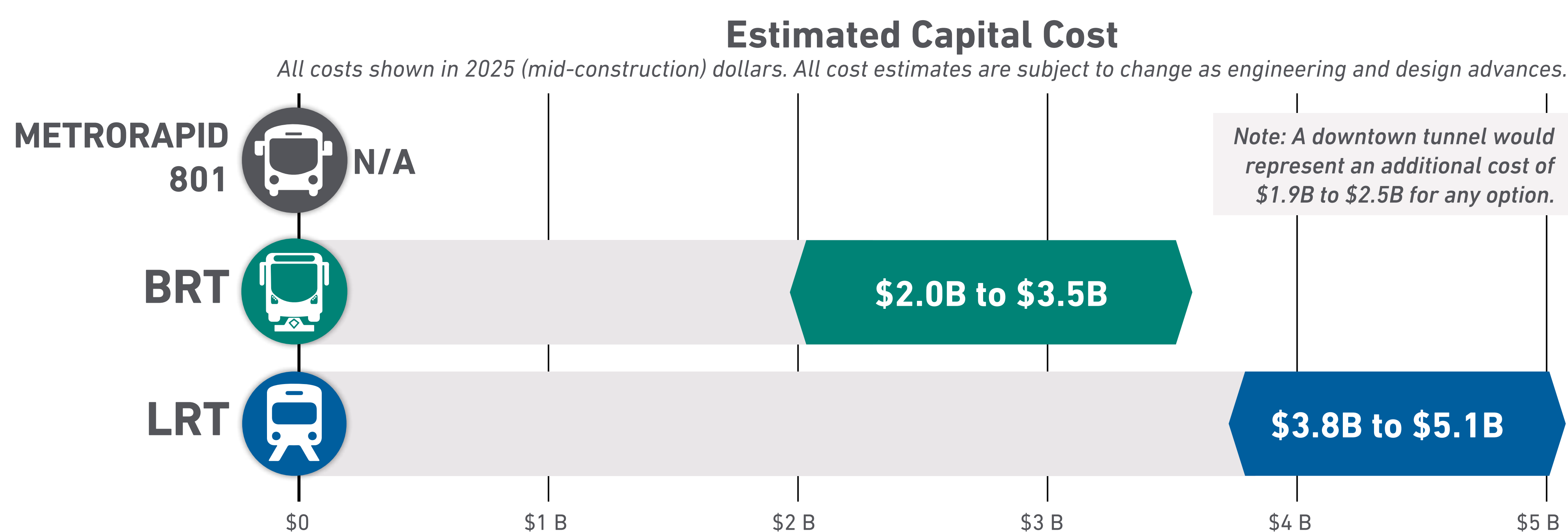
TRAVEL TIME



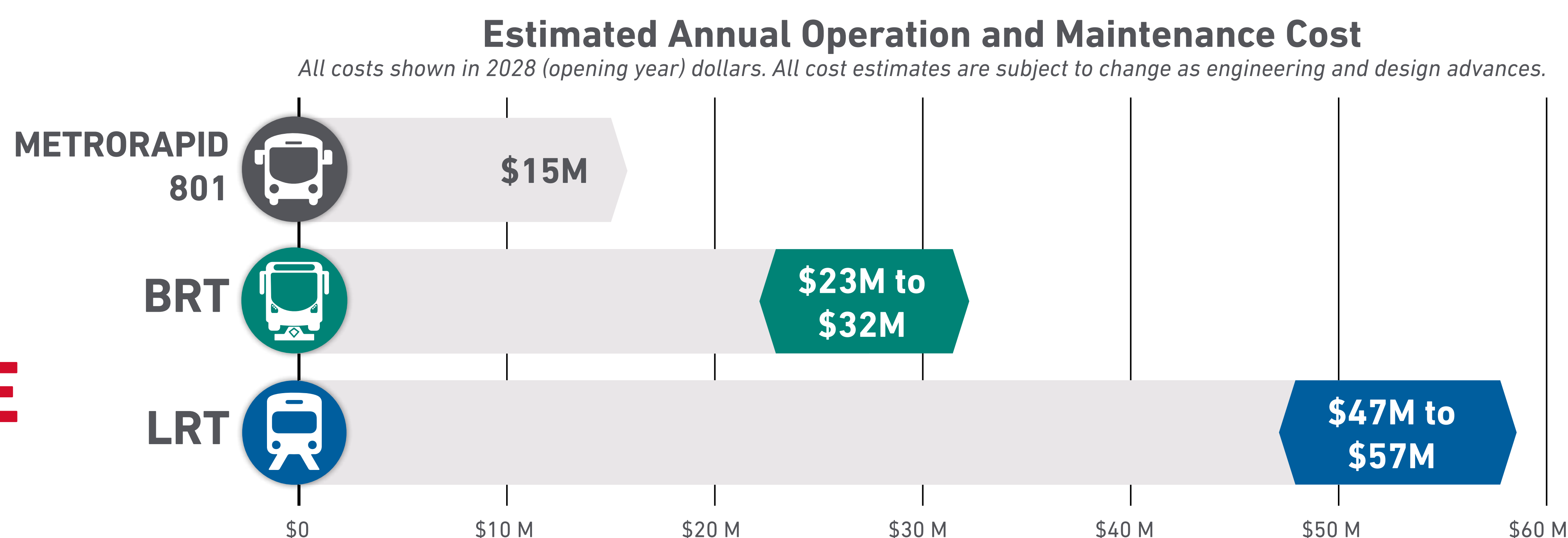
POTENTIAL RIDERSHIP



COST TO BUILD



COST TO OPERATE



What Comes Next?

As we conclude the Step 2 analysis, we will incorporate your feedback, refine the alternatives and generate additional data to help us identify an alternative that best meets the project's Purpose & Need. Capital Metro will release a preliminary recommendation for a Locally Preferred Alternative (LPA) in 2020, based on the feedback received from agency partners and the community.

The LPA Evaluation will consider criteria that the Federal Transit Administration (FTA) uses to score the project for its competitiveness for receiving Capital Investment Grant (CIG) program funding.

HOW DO I

Stay Informed?



Visit ProjectConnect.com

Take our survey and sign-up to receive updates or learn about upcoming meetings.



Visit the Project Connect Community Office located at 607 Congress Ave.

Stop by any time Monday - Friday between 9 a.m. and 4 p.m.

Talk with project staff, ask questions and provide feedback.



PROJECT CONNECT & ORANGE LINE CORRIDOR

NOVEMBER 2019 OPEN HOUSE

Project Connect is our community’s plan for a complete regional system of reliable and frequent transit. It will include two major proposed routes, the Blue Line and Orange Line, that provide service within dedicated transitways and connect to the broader Capital Metro system.

ABOUT THE ORANGE LINE CORRIDOR

The proposed Orange Line corridor runs north to south from Tech Ridge to Southpark Meadows.



Map for illustrative purposes. Proposed station locations subject to change, as well as alignment, and map not to scale.

ORANGE LINE CORRIDOR PURPOSE AND NEED

The Purpose of the Orange Line high capacity transit investment is to meet growing corridor travel demand with a reliable, safe, cost-effective, time-competitive, state-of-the-art high capacity transit option that is congestion proof. The Orange Line would address the following Needs (or problems) within the corridor.



Sustainably support Central Texas' population and economic growth



Improve transit access between affordable housing and jobs



Increase transportation network capacity to meet increasing travel demand



Support growth of and connectivity to regional activity centers

PROJECT GOALS

Following the FTA process, the Detailed Evaluation phase (Step 2) analyzes how well different combinations of alignment, transitway type, and mode meet the project's goals.

Focus areas discussed today:

 <p>Customer Experience</p> <p>What it means: Increase efficiency, attractiveness and utilization of high-capacity transit service within the corridor.</p> <p>How it's done: Provide a travel experience that is competitive with the automobile.</p>	 <p>Reliability</p> <p>What it means: Provide frequent, reliable high-capacity transit service along transitways within the corridor.</p> <p>How it's done: Efficiently use the existing transportation network, provide dedicated transitways for transit to operate free from other traffic.</p>	 <p>Implementation and Operations</p> <p>What it means: Develop and select a community-supported high-capacity transit investment for implementation.</p> <p>How it's done: Develop a project with strong public, stakeholder and agency support. Develop a project that balances costs and benefits.</p>	 <p>Sustainability</p> <p>What it means: Contribute to a socially-, economically- and environmentally-sustainable transit network.</p> <p>How it's done: Mitigate the rising cost of living by providing safe, affordable alternatives to car ownership, reduce energy usage and pollution while minimizing impacts to the natural, cultural, and built environment.</p>	 <p>Land Use and Policy</p> <p>What it means: Support "compact and connected" land use and development patterns.</p> <p>How it's done: Expand transit access to local and regional destinations, activity centers and employment centers.</p>
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ORANGE LINE ALTERNATIVES

Capital Metro continues to analyze alternative transit modes, alignment, and design options for high-capacity transit in the Orange Line Corridor. This analysis is based on how well the alternative meets the Purpose, Need, Goals and Objectives of the Orange Line Project.

Alternatives include:

Build Alternatives: Dedicated Transitways

Fully dedicated lanes or facilities set aside for public transportation vehicles that allow for traffic-free travel. These lanes could serve:

- » Bus Rapid Transit (BRT)
- » Light Rail Transit (LRT)

Examples of dedicated transitways



MetroRapid Alternative

Continued operation of MetroRapid 801 with transit speed and reliability improvements.

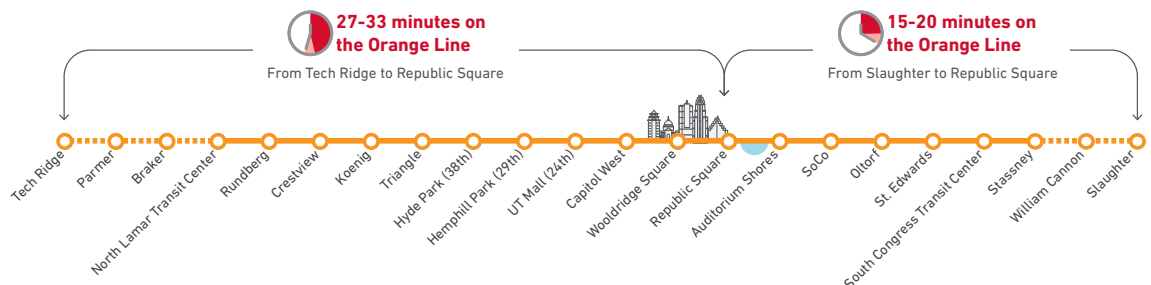
No Build/Do Nothing Alternative

As required by the FTA, we always carry forward a "No-Build" or "Do Nothing" alternative for comparison. For the Orange Line Corridor, this would include making no changes to the existing service on MetroRapid Route 801.

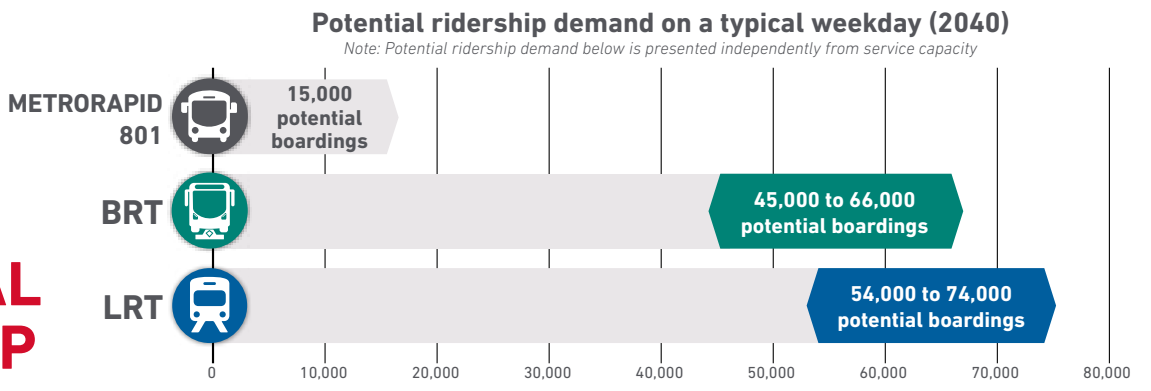
Orange Line Preliminary Results



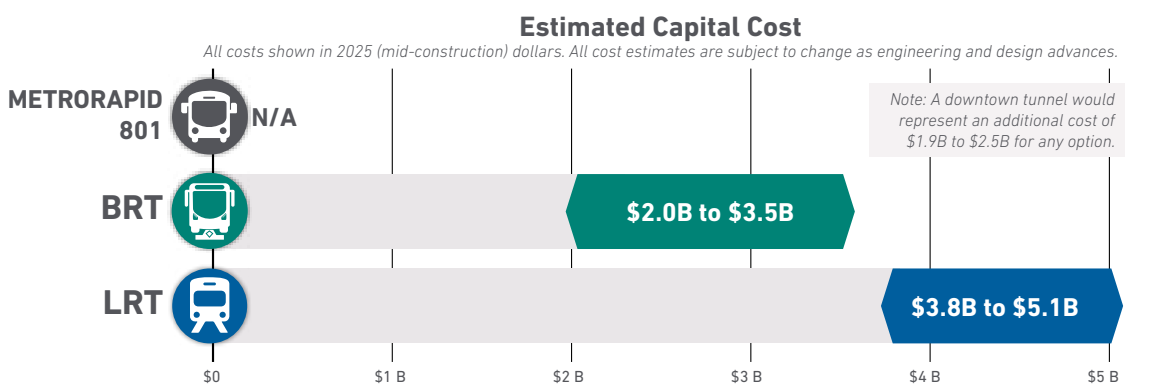
TRAVEL TIME



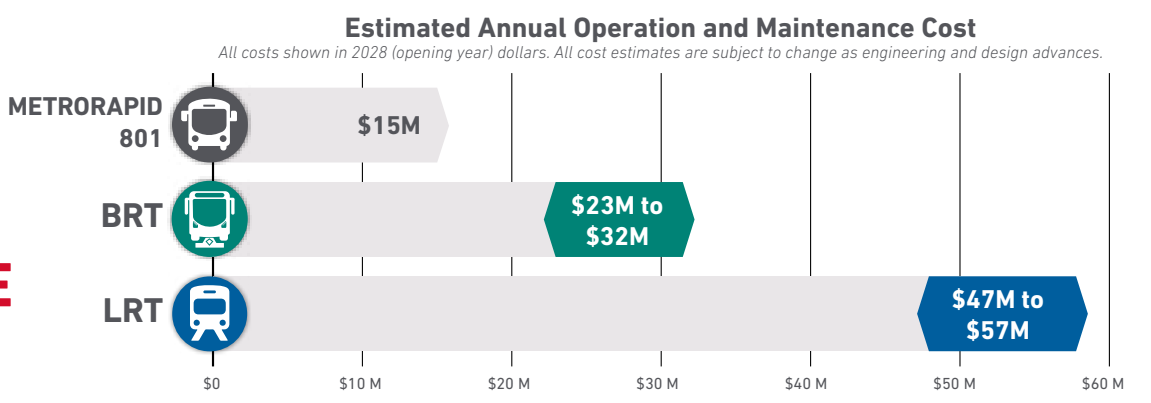
POTENTIAL RIDERSHIP



COST TO BUILD



COST TO OPERATE



ORANGE LINE CORRIDOR NOVEMBER 2019 OPEN HOUSE SURVEY

After reviewing the information provided in the Orange Line Corridor Open House regarding the evaluation of alternatives, please provide your feedback on the survey questions. Your input will be used in the development of a Locally Preferred Alternative (LPA).

Name: _____

Email Address: _____

Zip Code: _____

Question 1 I believe a dedicated transitway with either BRT or LRT (Build Alternative) better meets the project's Purpose and Need than the No Build/Do Nothing Alternative. *Please circle **one** response below.*

Yes

No

Question 2 I believe a dedicated transitway with either BRT or LRT (Build Alternative) better meets the project's Purpose and Need than transit speed and reliability improvements to the existing MetroRapid 801 service (MetroRapid Alternative). *Please circle **one** response below.*

Yes

No

If your response to both Question 1 and 2 above is "Yes", please skip to Question 4.

Question 3 If your response to either Question 1 and 2 above is "No", please tell us why.

Question 4 Vehicle types (modes) are evaluated in terms of response to the Purpose and Need, social, economic, and environmental impacts, capital and operational costs, and technical viability, as well as community preference. Based on the information provided, which vehicle type do you prefer? *Please circle **one** response below.*

Bus Rapid Transit (BRT)

Light Rail Transit (LRT)

Either BRT or LRT

PROJECT CONNECT Y CORREDOR LINEA NARANJA EXHIBICION PUBLICA NOVIEMBRE 2019

Project Connect es el plan de nuestra comunidad para un sistema regional completo de transporte público confiable y frecuente. El plan incluirá dos rutas principales propuestas, la Línea Azul y la Línea Naranja, que proveerán servicio dentro de vías dedicadas y conectarán al sistema Capital Metro.

ACERCA DEL CORREDOR LINEA NARANJA

El Corredor Línea Naranja propuesto correrá de norte a sur desde Tech Ridge hasta Southpark Meadows.



Mapa para propósitos ilustrativos. Las ubicaciones, así como la alineación propuestas para las estaciones están sujetas a cambios, y el mapa no está a escala.

PROPOSITO Y NECESIDAD DEL CORREDOR LINEA NARANJA

El propósito de la inversión en transporte publico de alta capacidad del Corredor Línea Naranja es satisfacer la demanda creciente de traslado en el corredor con una opción de transporte público confiable, seguro, de bajo costo, de tiempos competitivos (rápido), y de vanguardia, a prueba de la congestión vehicular. La Línea Naranja aborda las siguientes Necesidades (o problemas) dentro del corredor.



Apoyar sustentablemente a la población y crecimiento económico de la comunidad.



Proporcionar mejores opciones de transporte público para conectar zonas residenciales de bajo costo y centros de trabajo.



Incrementar la capacidad de la red de transportación para satisfacer la creciente demanda de traslado.



Apoyar el crecimiento y la conectividad de los centros de actividad.

METAS DEL PROYECTO

Siguiendo el proceso de la FTA, la fase de Evaluación Detallada (Paso 2) analiza que tan bien las diferentes combinaciones de alineación, tipo de vías de tránsito, y modo logran las metas del proyecto.

Áreas de enfoque para discutir hoy



Experiencia del Usuario

Lo que significa:

Incrementar la eficiencia, atractivo y utilización del servicio de transporte público de alta capacidad dentro del corredor.

Como se logra:

Proporcionando una experiencia de viaje que sea competitiva con el uso del automóvil.



Confiabilidad

Lo que significa:

Proporcionar un servicio de transporte público de alta capacidad frecuente y confiable sobre las vías de tránsito dentro del corredor.

Como se logra:

Usando la red de transport existente de manera eficiente, proporcionando vías de tránsito dedicadas para el transporte público para que opere libre de tráfico.



Implementación y Operaciones

Lo que significa:

Desarrollar y seleccionar una inversión para la implementación de transporte público de alta capacidad que sea apoyado por la comunidad.

Como se logra:

Desarrollar un proyecto con fuerte apoyo del público, grupos interesados y agencias. Desarrollar un proyecto que equilibra los costos y beneficios.



Sostenibilidad

Lo que significa:

Contribuir a una red de transporte público que sea social, económica, y ambientalmente sostenible.

Como se logra:

Aliviando los altos costos de vida promoviendo alternativas al uso de autos que sean seguras y de bajo costo, reduciendo el consumo de energía y la contaminación mientras se disminuyen los impactos a los ambientes naturales, culturales y urbanos.



Política y Uso de Suelos

Lo que significa:

Apoyar el uso de suelos y patrones de desarrollo "compacto y conectado".

Como se logra:

Expandiendo los accesos de transporte público a destinos locales y regionales, centro de actividades y centros de trabajo.

ALTERNATIVAS A LA LINEA NARANJA

Capital Metro continúa analizando alternativas de los modos de transporte, alineación, y diseño para transporte público de alta capacidad en el Corredor Línea Naranja. Este análisis esta basado en que tan buenas son las alternativas para satisfacer el Propósito, Necesidad, Metas y Objetivos del Corredor Línea Naranja.

Alternativas incluidas:

Alternativas de construcción: Vías de tránsito dedicadas

Carriles completamente dedicados o infraestructura apartada para vehículos de transporte público que permitan un traslado libre de tráfico. Estos carriles podrían servir a:

- » Bus de Tránsito Rápido (BRT, por sus siglas en inglés)
- » Tren de Tránsito Ligero (LRT, por sus siglas en inglés)

Ejemplos de vías de tránsito dedicadas



Bus de Tránsito Rápido HealthLine en Cleveland. Fuente: Streetsblog USA.



Sistema de Tren Ligero METRORail en Houston.

Alternativa MetroRapid

Continuar la operación de MetroRapid 801 con mejoras a la velocidad y confiabilidad del transporte público.

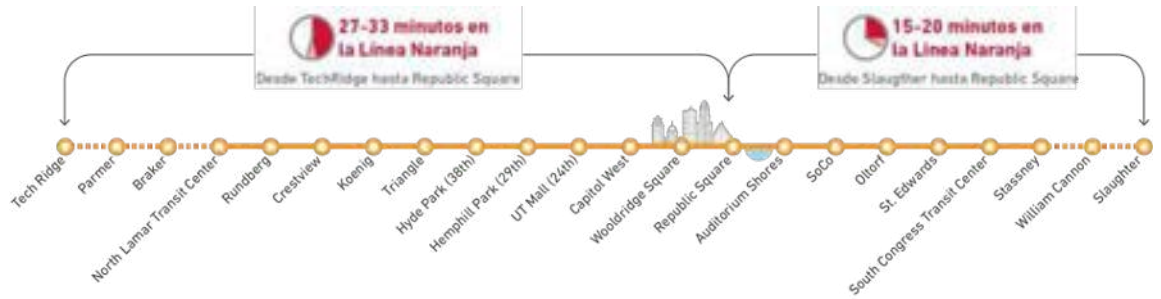
Alternativa de construcción/acción nula

Como es requerido por la FTA, siempre mostramos la alternativa de "construcción nula" o "acción nula" para comparación. Para el Corredor Línea Naranja, esto incluiría no hacer cambios a los servicios de MetroRapid 801.

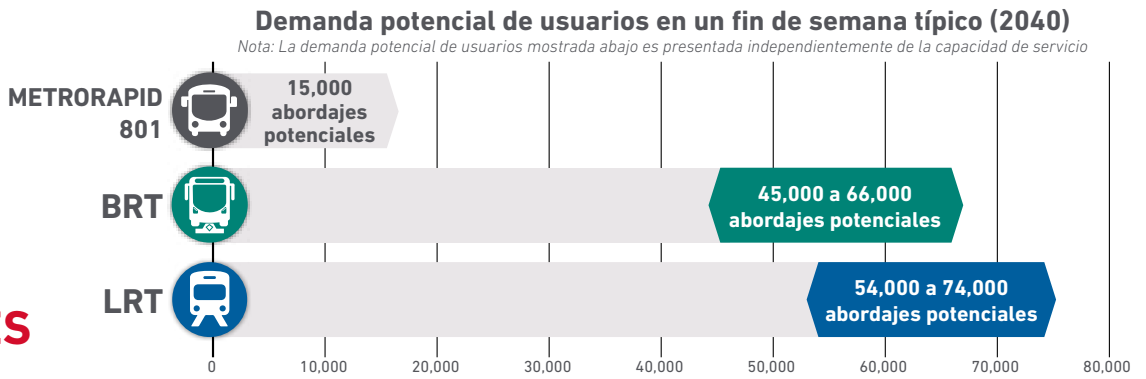
Resultados Preliminares de la Línea Naranja



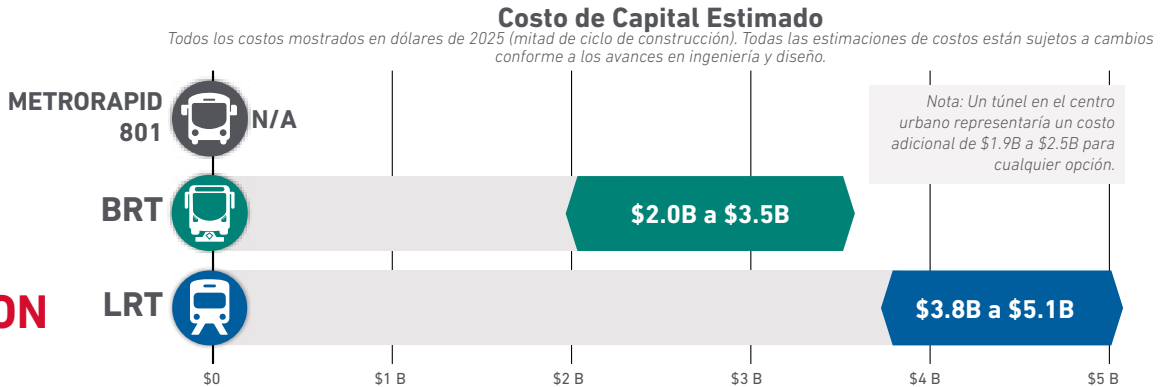
TIEMPO DE TRASLADO



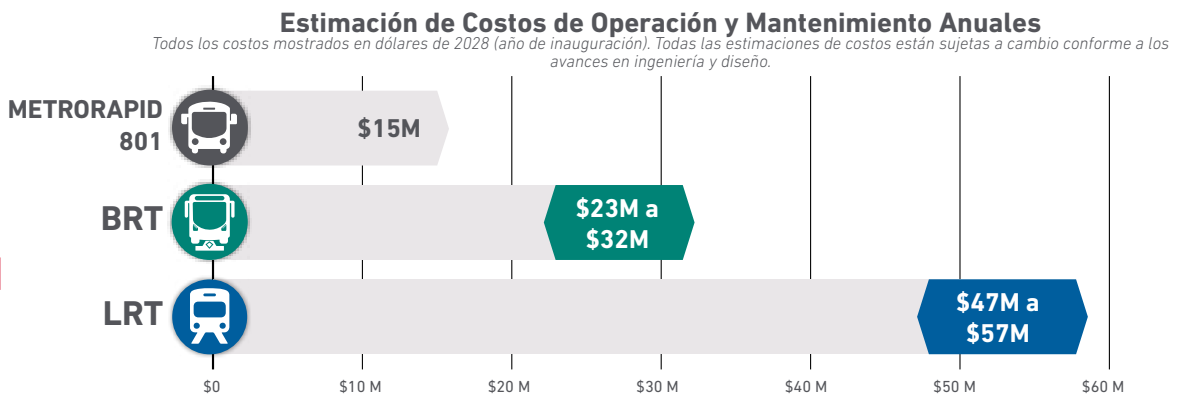
USUARIOS POTENCIALES



COSTO DE CONSTRUCCIÓN



COSTO DE OPERACIÓN



CORREDOR LINEA NARANJA

ENCUESTA DE LA EXHIBICION PUBLICA DE NOVIEMBRE DE 2019

Después de revisar la información proporcionada en la Exhibición Pública del Corredor Línea Naranja con respecto a la evaluación de las alternativas, por favor proporcione su respuesta en las preguntas de la encuesta. Su opinión será usada en el desarrollo de una Alternativa Local Preferida (LPA por sus siglas en inglés).

Nombre: _____

Correo electrónico: _____

Código Postal: _____

Pregunta 1

Creo que una vía de tránsito dedicada ya sea con BRT o LRT (Alternativa de Construcción) satisface mejor el Propósito y Necesidad del proyecto en comparación a la Alternativa de Construcción Nula o Acción Nula. *Por favor seleccione una respuesta de abajo.*

Si

No

Pregunta 2

Creo que una vía de tránsito dedicada ya sea con BRT o LRT (Alternativa de Construcción) satisface mejor la Propuesta y Necesidad del proyecto en comparación al servicio existente de MetroRapid 801. *Por favor seleccione una respuesta de abajo.*

Si

No

Si respondió "Si" a las Preguntas 1 y 2, por favor diríjase a la Pregunta 4.

Pregunta 3

Si su respuesta a cualquiera de las Preguntas 1 y 2 es "No", por favor díganos por qué.

Pregunta 4

Los tipos de vehículos (modos) son evaluados en términos de la respuesta al Propósito y Necesidad, los impactos sociales, económicos y ambientales, costos de capital y de operación, viabilidad técnica, así como la preferencia de la comunidad. Basado en la información propuesta, ¿Qué tipo de vehículo prefiere? *Por favor seleccione una respuesta de abajo.*

Bus de Transito Rápido (BRT)

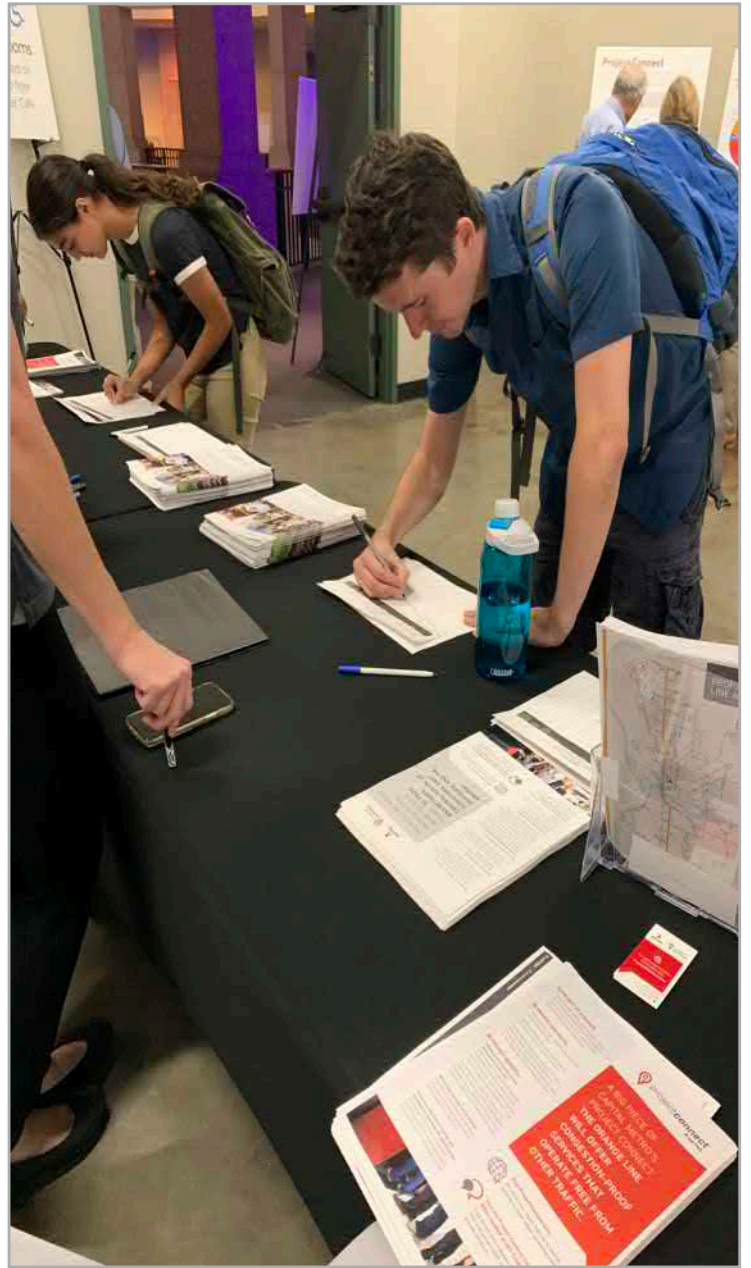
Tren de Transito Ligero (LRT)

Cualquiera, BRT o LRT

Appendix B: Photos









Appendix C: Notifications and Earned Media



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▶ Provide Your Feedback

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Orange & Blue Lines | November Open House
Bullock Texas State History Museum | 1800 Congress Ave
Nov. 4, 2019 | 5-7:30 p.m.

Routes 1, 3, 18, 19, 20, 663, 801, 803, 982

Orange Line

North to south
from Tech Ridge to
Southpark Meadows

November Open Houses

St. Elmo Elementary
600 W. St Elmo Rd
Nov. 6, 2019 | 5-7:30 p.m.

Route 10

North Austin YMCA
1000 W. Rundberg Ln
Nov. 7, 2019 | 5-7:30 p.m.

Routes 1, 142, 324, 325, 801

Blue Line

From ACC Highland
through downtown to
the airport

November Open Houses

ACC Highland
6101 Highland Campus Dr
Nov. 6, 2019 | 5-7:30 p.m.

Routes 7, 324, 337, 350

Allison Elementary
515 Vargas Rd
Nov. 7, 2019 | 5-7:30 p.m.

Routes 217, 350

Unable to attend?

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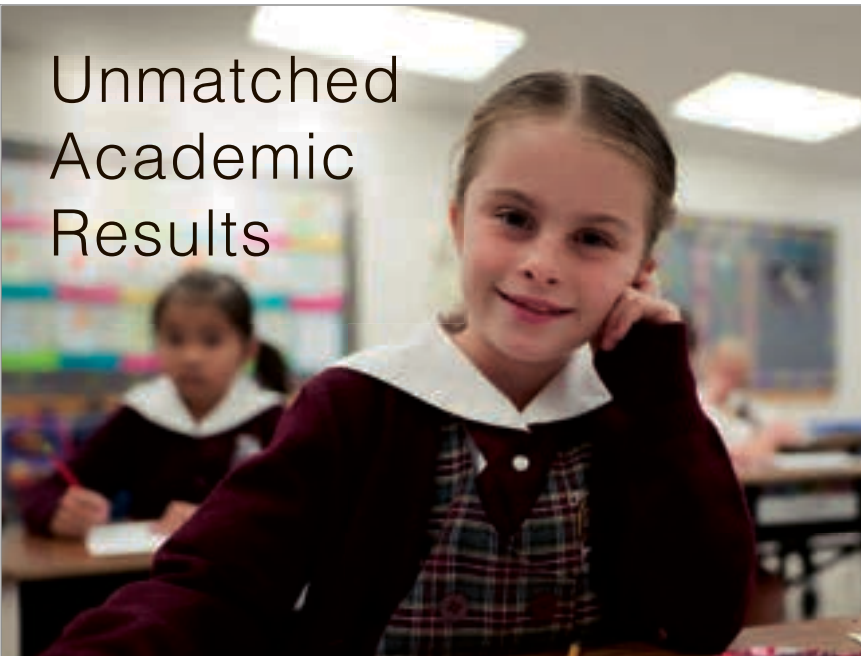
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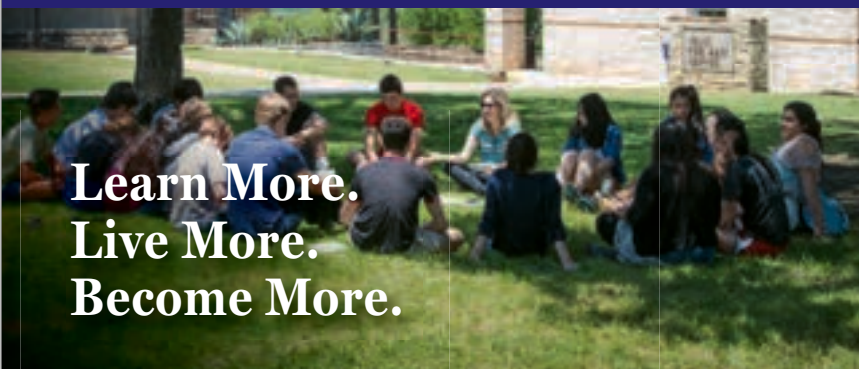
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10/18/19	146282	LR

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plan that worked, and publicly blamed the ARA for the inaction. Meanwhile, the ARA was still getting the \$250K a year. Finally, in 2010 the city dropped them and scrapped the Tri-Party Agreement. It had been five years with no major projects completed. The URB was kept alive to sell off the few properties it still held. Through it all, beyond a couple of minor projects, nothing substantial had gotten done on 12th Street.

But on 11th, on those properties not controlled by the URB or ARA, the market was running amok. As the ARA's efforts stalled out, new private enterprises came in – white ones – and took the places of the street's former black-owned businesses seemingly overnight. Ben's Long Branch became Franklin; down the street the Dandelion Cafe opened, then became Blue Dahlia; the old Longbranch Inn was reborn and later became Nickel City; Gene's Po'Boys (housed in what in Dr. Urdy's youth had been the neighborhood drugstore) became Hillside Pharmacy. The businesses thrived, filled with newcomers enthusiastic about the changes.

Longtime residents felt differently. UT professor Eric Tang, who has studied East Austin gentrification for a decade, interviewed half of the neighborhood's households in 2018. On average, they have lived in the area for 38 years; 93% said they don't patronize the new businesses. More to the point, residents say they now feel invisible in their own neighborhood. Many have left. Tang has numbers for the displacement and they are shocking: Between 2000 and 2010, black residents in the Central East Austin neighborhoods flanking East 11th and 12th streets decreased by 60%. Latinx residents by 33%. "Few people have been able to hang

on," writes Tang, "and they aren't hanging on because the changes are beneficial. Rather, they're hanging on because they feel a responsibility to black and brown East Austin, a right to the city."

McMillan feels his neighbors' pain and draws a connection to the work left uncompleted in the Urban Renewal Plan. "The disappointment is [that] no, we didn't end up with a neighborhood medium-sized grocery store, and pharmacy, and nightlife, and dining options that were actually directed at developing a clientele from the people here in the neighborhood." He sees a last chance for that slipping away.

STANDING AT A FORK IN THE ROAD

After the collapse of the Tri-Party Agreement in 2010, there wasn't much on the URB's plate. The city merely directed them to sell off the five properties they still held. Three (one on 11th, two on 12th) were eventually sold, after HUD gave the city an ultimatum to do so. The other two were more tricky – tracts containing multiple individual lots, with some longstanding site-specific issues, both on 11th – and are unsold to this day. Feelings about the URB and NHCD have fluctuated over the years, but many stakeholders' ardor for the vision embodied in Urban Renewal Plan itself has never dimmed.

That's why McMillan and others were distressed by Council Member Natasha Harper-Madison's action during a Council meeting on Sept. 19. She stopped what was intended as a routine vote to continue the URB and tried to kill its funding. "We're talking about a process that has been in place since 1999 and properties that have

CONTINUED ON P.20



The plans for a revitalized East 11th and 12th are 20 years old; they've since been folded into the city's Imagine Austin Comprehensive Plan and, now, its revised Land Development Code. The surrounding neighborhoods that make up a great deal in that time, but their leaders still want to see the old plans implemented.



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Bullock Texas State History Museum | 1800 Congress Ave

Nov. 4, 2019 | 5-7:30 p.m.

Routes 1, 3, 18, 19, 20, 663, 801, 803, 982

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Un plan de tránsito comunitario

▶ Déjenos sus comentarios

Project Connect es el plan de nuestra comunidad para un sistema regional completo de tránsito confiable y frecuente. Ponga manos a la obra junto a los miembros de su comunidad y examine alternativas para dos vías de tránsito propuestas: los corredores de la Línea Naranja y la Línea Azul.

Líneas Naranja y Azul | Junta pública de noviembre

Bullock Texas History Museum
4 de noviembre de 2019 | de 5 a 7:30 p. m.
Rutas 1, 3, 18, 19, 20, 663, 801, 803, 982

Línea Naranja

De norte a sur desde Tech Ridge hasta Southpark Meadows

Juntas públicas de noviembre

St. Elmo Elementary
6 de noviembre de 2019 |
de 5 a 7:30 p.m.
Ruta 10

North Austin YMCA
7 de noviembre de 2019 |
de 5 a 7:30 p.m.
Rutas 1, 324, 325, 801

Línea Azul

Desde ACC Highland pasando por el centro hasta el aeropuerto

Juntas públicas de noviembre

ACC Highland
6 de noviembre de 2019 |
de 5 a 7:30 p.m.
Rutas 7, 324, 337, 350

Allison Elementary
7 de noviembre de 2019 |
de 5 a 7:30 p.m.
Rutas 217, 350

¿No puede asistir?

Revise los materiales y envíenos comentarios en la junta pública virtual, disponible desde el 4 de noviembre hasta el 4 de diciembre de 2019 en projectconnect.com.

Siempre que sea posible, se completará anticipadamente una solicitud de modificaciones o adaptaciones razonables. Las solicitudes podrán enviarse por correo electrónico a feedback@projectconnect.com o por teléfono al 512-474-1200.

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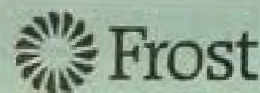
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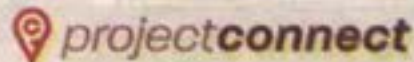
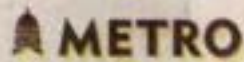
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Líneas Naranja y Azul | Junta pública de noviembre

Bullock Texas History Museum

4 de noviembre de 2019 | de 5 a 7:30 p. m.

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TEXAS DIGEST

DALLAS
Service canceled for woman shot by officer

A service for a woman shot in her home by a Fort Worth police officer that had been scheduled for Saturday was canceled amid a family dispute over funeral arrangements.

Atatiana Jefferson's funeral had been set to be held Saturday — with the Rev. Al Sharpton to deliver remarks — at Potter's House Church in Dallas. But a judge Friday issued a temporary restraining order sought by Marquis Jefferson, the father of Atatiana Jefferson. The father sought the order to gain control over the funeral arrangements of his daughter from his daughter's aunt, Bonita Body.

Lee Merritt, Body's attorney, tweeted that the funeral had been "post-poned" and that "updated information concerning the reschedule will

be provided as soon as it becomes available."

SAN ANTONIO
Ex-Border Patrol agent pleads guilty in child porn case

A former Border Patrol agent has pleaded guilty to charges that he produced child pornography, including videos of himself sexually assaulting a minor.

Vernon Lee Millican, 37, of Leakey pleaded guilty Thursday in a San Antonio court to one count of production of child pornography and another count of possession of child pornography.

Millican was arrested in January after federal authorities searched his home. He was a Border Patrol agent at the time assigned to the station in Uvalde. He was later fired.

A criminal complaint shows the investigation began when the Clackamas

County sheriff's office in Oregon collected evidence indicating a 13-year-old girl who previously lived in Texas had been sexually assaulted by Millican over several years.

Millican is scheduled to be sentenced in January and faces between 15 and 30 years in prison.

CINCO RANCH
Surveillance video shows car of interest in slaying

Investigators have released public surveillance video of a car they think carried two men who broke into a suburban Houston family's home and shot and killed a 29-year-old father.

The Fort Bend County Sheriff's Office says 29-year-old Brenton Estorffe was killed early Wednesday at his home in Cinco Ranch, a community 26 miles west of Houston. The car is described as a light-colored, four-door sedan with a sunroof.

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Free Dementia Education Seminar

Thursday, October 24, 2019

9:00 am - 9:30 am Registration • 9:30 am - 11:00 am Seminar

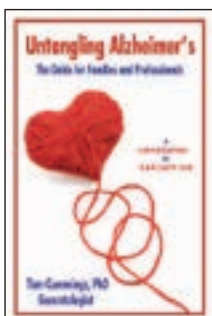
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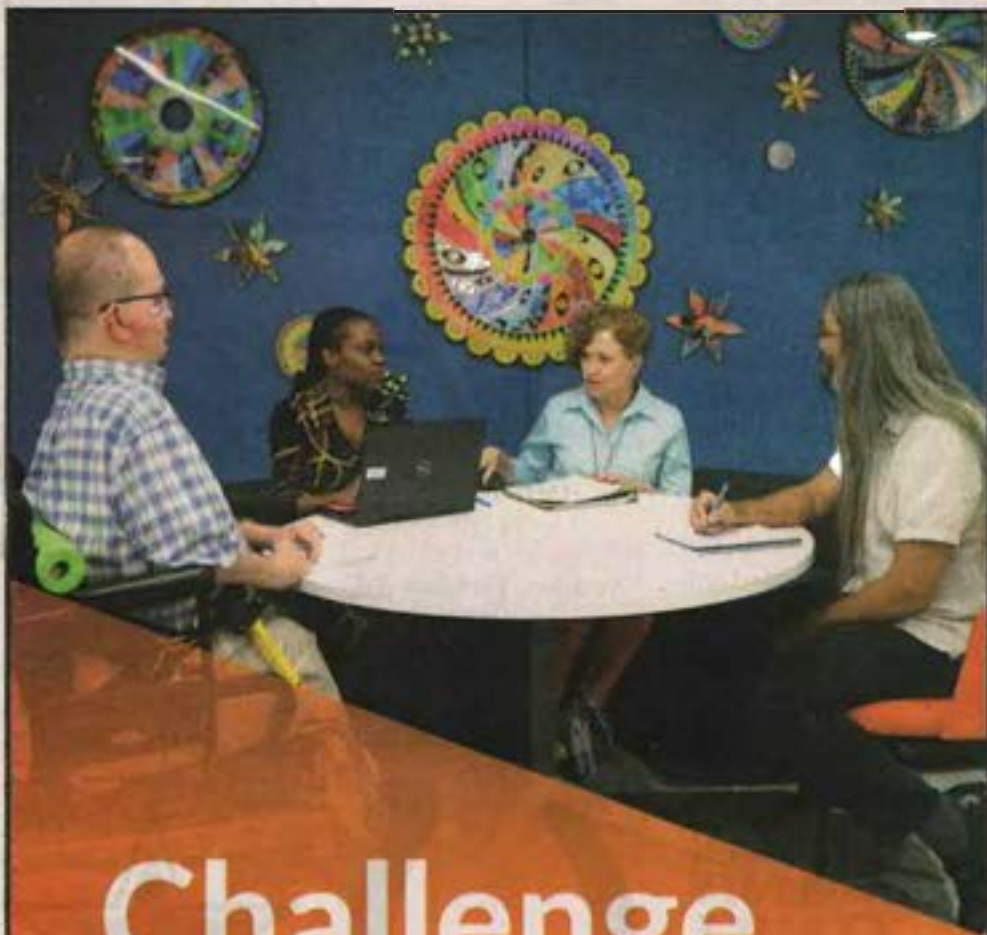
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Nov. 4, 2019 | 5-7:30 p.m.

Routes 1, 3, 18, 19, 20, 663, 801, 803, 982

Orange Line

North to south from Tech Ridge to Southpark Meadows

November Open Houses

St. Elmo Elementary
600 W. St Elmo Rd
Nov. 6, 2019 | 5-7:30 p.m.

Route 10

North Austin YMCA
1000 W. Rundberg Ln
Nov. 7, 2019 | 5-7:30 p.m.

Routes 1, 142, 324, 325, 801

Blue Line

From ACC Highland through downtown to the airport

November Open Houses

ACC Highland
6101 Highland Campus Dr
Nov. 6, 2019 | 5-7:30 p.m.

Routes 7, 324, 337, 350

Allison Elementary
515 Vargas Rd
Nov. 7, 2019 | 5-7:30 p.m.

Routes 217, 350

Unable to attend?

Review materials and provide comments at the virtual open house available from Nov. 4 through Dec. 4, 2019 at projectconnect.com.

Whenever possible, a request for reasonable modifications or accommodations will be filled in advance. Requests may be submitted via email to feedback@projectconnect.com or by phone to 512-474-1200.

A Community Transit Plan

Provide Your Feedback

Project Connect is our community's plan for a complete regional system of reliable and frequent transit. Roll up your sleeves with your fellow community members and review alternatives for two proposed transitways, the Orange and Blue Line corridors.

Orange & Blue Lines | November Open House

Bullock Texas State History Museum | 1800 Congress Ave

Nov. 4, 2019 | 5-7:30 p.m.

Routes 1, 3, 18, 19, 20, 663, 801, 803, 982

Orange Line

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METRO



projectconnect

Un plan de tránsito comunitario

Déjenos sus comentarios

Project Connect es el plan de nuestra comunidad para un sistema regional completo de tránsito confiable y frecuente. Ponga manos a la obra junto a los miembros de su comunidad y examine alternativas para dos vías de tránsito propuestas: los corredores de la Línea Naranja y la Línea Azul.

Líneas Naranja y Azul | Junta pública de noviembre

Bullock Texas State History Museum | 1800 Congress Ave

4 de noviembre de 2019 | de 5 a 7:30 p.m.

Rutas 1, 3, 18, 19, 20, 663, 801, 803, 982

Línea Naranja

De norte a sur desde Tech Ridge hasta Southpark Meadows

Juntas públicas de noviembre

St. Elmo Elementary | 600 W. St Elmo Rd
6 de noviembre de 2019 | de 5 a 7:30 p.m.

Ruta 10

North Austin YMCA | 1000 W. Rundberg Ln
7 de noviembre de 2019 | de 5 a 7:30 p.m.

Rutas 1, 324, 325, 801

Línea Azul

Desde ACC Highland pasando por el centro hasta el aeropuerto

Juntas públicas de noviembre

ACC Highland | 6101 Highland Campus Dr
6 de noviembre de 2019 | de 5 a 7:30 p.m.

Rutas 7, 324, 337, 350

Allison Elementary | 515 Vargas Rd
7 de noviembre de 2019 | de 5 a 7:30 p.m.

Rutas 217, 350

¿No puede asistir?

Revise los materiales y envíenos comentarios en la junta pública virtual, disponible desde el 4 de noviembre hasta el 4 de diciembre de 2019 en projectconnect.com.

Siempre que sea posible, se completará anticipadamente una solicitud de modificaciones o adaptaciones razonables. Las solicitudes podrán enviarse por correo electrónico a feedback@projectconnect.com o por teléfono al 512-474-1200.

Events

Events



Project Connect: Orange Line Open House

Public Hosted by Capital Metro and North Austin YMCA | YMCA of Austin

Interested

Thursday, November 7, 2019 at 5:00 PM – 7:30 PM CST
about 1 month ago

North Austin YMCA | YMCA of Austin
1800 W Rundberg Ln, Austin, Texas 78758 [Show Map](#)

21 Went · 219 Interested
[Share this event with your friends](#)

Details

This event will take place at the North Austin YMCA in the community room.

Please join us at an upcoming Project Connect community meeting! The meetings are come-and-go, so swing by whenever you have time.

Project Connect is our community plan for a complete system of reliable and frequent transit, with congestion-proof services that operates free from other traffic.

ABOUT THE ORANGE LINE

The proposed Orange Line will be a north-south transit line that offers more frequent, reliable travel to, from and within Central Austin and the surrounding region. It would provide high-capacity service within dedicated transitways and

[See More](#)

[Causes](#) [Kid-Friendly](#)

About Capital Metro



Capital Metro
Transportation Service, Austin, Texas
We connect people, jobs and communities by providing high-quality and sustainable transportation choices to Central Texas.

About the Venue



[Go to Page](#)

Related Events

A Very Merry More Housing & ...
Tomorrow CST at Dilly Martin's
153 guests

Annual Mayor's Mobility Brea...
Wed Feb 5, 2020 CST at Hotel ...
15 guests

Japanese breakfast Class (co...
Sun/Mar 1, 2020 CST at Uteko
40 guests

Star Party Campout
Fri Jan 17, 2020 CST at Pace B...
99 guests

New Year's Day Parade
Wed Jan 1, 2020 CST at Doug ...
534 guests

WYF Tacky Christmas Sweats ...
Wednesday CST at Dure's Drest
1st game

English (US) Español Português (Brazil) Français (France) Deutsch [+](#)

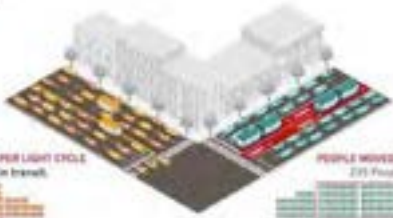
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Capital Metro October 29 at 8:31 PM · 🌐

The population in and around Austin is projected to double by 2040. Capital Metro's Project Connect is a bold vision for we move people today and plan for tomorrow. It includes MORE. More options, expanded MetroRapid, Neighborhood Circulators, expanded MetroExpress, more Park & Rides, and more MetroRail. Plus, two proposed transitways - a dedicated space for transit - so cars don't get stuck behind a transit vehicle, and transit doesn't get stuck behind cars. Learn more at <https://capmetro.org/ProjectConnect>

Project Connect Key Differentiator

TRANSITWAYS



CAPMETRO.ORG

Transitways Keep People Moving [Learn More](#)

👍 🙌 🗨️ 30 8 Comments 12 Shares

Capital Metro November 4 at 10:00 AM · 🌐

It's time! Tonight at the Bullock History Museum from 5:00 pm - 7:30 pm for the Joint Blue and Orange Line Corridors Open House. Capital Metro and agency partners will be answering questions and collecting feedback on the Blue and Orange Line Corridors initial assessment of alternatives. Unable to attend? Visit the Project Connect website for the Virtual Open House (through December 4) or call/email Project Connect with your feedback. Individual Blue and Orange Line Corridor Open Houses on 11/6 and 11/7 from 5:00 pm to 7:30 pm. <http://expl.co/01nyk3>

Capital Metro @CapMetroATX · Nov 4

It's time! Tonight at the @BullockMuseum from 5-7:30 pm for the #ProjectConnect Joint Blue & Orange Lines Open House. Unable to attend? Virtual Open House at Project Connect website. Individual Blue and Orange Line Open Houses on 11/6 and 11/7 from 5-7:30 pm.

Capital Metro @CapMetroATX · Nov 4

NOW OPEN: we're at the first of our November open house events for Project Connect. Tonight, we focus on Orange & Blue Lines. Full schedule and virtual open house at projectconnect.com #ax #tagtime



Capital Metro November 5 at 3:00 PM · 🌐

Join in on the great community conversation after yesterday's #ProjectConnect Joint Blue and Orange Line Open House.

11/6 Blue Line Open House at ACC Highland Campus: www.facebook.com/events/1486294018174995/

11/6 Orange Line Open House at St. Elmo Elementary: www.facebook.com/events/907764059594961/ See More

Capital Metro @CapMetroATX · Nov 5

Join us 11/6 and 11/7 from 5-7:30 p.m. for Individual Open Houses on Blue and Orange Lines. Unable to attend? Visit the #ProjectConnect website for the Virtual Open House (through December 4) or call/email Project Connect with your feedback. expl.co/01nyk3

Capital Metro @CapMetroATX · Nov 5

Great community conversation last night at #ProjectConnect Joint Blue & Orange Line Open House! Thanks to all who provided feedback. Capital Metro & our partners will continue to seek public feedback. Virtual Open House through December 4: expl.co/01nyk3

Capital Metro November 5 at 8:00 AM · 🌐

Great community conversation last night at the Joint Blue and Orange Line Open House! Capital Metro and our agency partners have collected feedback on the initial assessment of alternatives for Blue and Orange Line Corridors. Thank you to all the people and groups who provided feedback, including neighborhood groups, community organizations, the business community, and elected officials. #ProjectConnect

Capital Metro @CapMetroATX · Nov 6

It's time! Open Houses TONIGHT 5-7:30 p.m. Blue Line Corridor Open House at @accdistrict ACC Highland Campus. Orange Line Corridor Open House at St. Elmo Elementary @AustinISD. Visit website for ways to provide feedback & see Virtual Open House expl.co/01nyk3

Capital Metro @CapMetroATX · Nov 6

#ProjectConnect Blue & Orange Line Corridor Open Houses happening now! Blue Line at @accdistrict Highland Campus and Orange Line at @austinisd St. Elmo Elementary. Unable to attend? More ways to provide feedback: capmetro.org/get-involved/

Capital Metro @CapMetroATX · Nov 6

Orange Line and Blue Line open house events continue tonight and tomorrow. Come on over, or attend the virtual open house at projectconnect.com.

Get involved. It's Go Time!

[#ax #tagtime](#)



Capital Metro @CapMetroATX · Nov 7
 It's time! Open Houses TONIGHT 5-7:30 pm for the Blue Line at @AustinISD Allison Elementary and Orange Line at the North Austin YMCA. @YMCANorthAustin. Can't come? Participate online, call, come by the office! capmetro.org/get-involved/

Capital Metro
 November 7 at 11:00 AM · 🌐

UPDATE: Our Capital Metro team is always working to better connect our community through our services and how we plan for services. Tonight's open houses will have American Sign Language interpretation. We hope all will join us.

It's time! Open Houses TONIGHT 5 to 7:30 p.m. for the Blue Line Corridor Open House at Allison Elementary on East Riverside Drive and Orange Line Corridor Open House at the North Austin YMCA on Rundberg Lane. Unable to attend? Visit the Project Connect website for the Virtual Open House (through December 4) or call/email Project Connect with your feedback. <https://capmetro.org/get-involved/>

Capital Metro @CapMetroATX · Nov 7
 Great turn out for the #ProjectConnect community meeting! Our community is ready for better travel options to get in & around #ATX. We heard you-it's Go Time! Thx for your time in making our community a better place to live, works & play for everyone. ProjectConnect.com



👍 2 ❤️ 3

Capital Metro @CapMetroATX · Nov 7
 🙌🙌🙌 Thanks to our @austinisd future transit planners for their input on #ProjectConnect! It's our community's plan for today & the future-their future too. Have you seen the vision for how we can move better through & around #ATX? ProjectConnect.com



👍 4 ❤️ 13

Capital Metro is at AllisonElementary.
 November 7 at 7:03 PM · Austin · 🌐

🙌🙌🙌 Thanks to our Austin ISD future transit planners & their families for their input!

The hard work that goes into #ProjectConnect is for us today and everyone's future. It is a plan that could benefit all Central Texas, whether you ride transit or drive. A modern transit system is a vital part of the solution to give us more options to get where we're going. www.ProjectConnect.com



👍 4

Capital Metro @CapMetroATX · Nov 8
 We value the feedback received at the #ProjectConnect Blue & Orange Line Corridor Open Houses. Unable to attend? Visit the virtual open house to provide feedback on the initial assessment of alternatives for these proposed transitways. [#CapMetro expl.co/01nZ6s](https://capmetro.expl.co/01nZ6s)

Capital Metro @CapMetroATX · Nov 18
 We want to hear from you! Visit #ProjectConnect Virtual Open House until 12/4 & provide feedback on the Blue & Orange Line initial assessment of alternatives for these proposed transitways. Please feel free to call/email Project Connect with your feedback. expl.co/01nZcc

👍 4 ❤️ 2

Capital Metro November 18 at 11:00 AM · 🌐

We want to hear from you! Visit the Project Connect website for the Virtual Open House (through December 4) and provide feedback on the Blue and Orange Line initial assessment of alternatives for these proposed transitways. Please feel free to call/email Project Connect with your feedback.

Thank you again to all the folks who have already provided Capital Metro and its agency partners feedback including neighborhood groups, community organizations, the business community, and elected officials.

<http://expi.co/01nZed>

3 1 Comment 1 Share

Capital Metro November 22 at 12:00 AM · 🌐

Provide feedback on the initial assessment of alternatives for the proposed Blue and Orange transitways. Visit the Project Connect website for the Virtual Open House (through December 4) or call/email Project Connect with your feedback. <http://expi.co/01nZrh>

3 3 Comments 1 Share

Capital Metro @CapMetroATX · Nov 22

There's still time! We want to hear from you! Visit #ProjectConnect Virtual Open House until 12/4 & provide feedback on the Blue & Orange Line initial assessment of alternatives for these proposed transitways. expi.co/01nXbX

1

Capital Metro Yesterday at 12:00 AM · 🌐

There are only TWO days left! Visit the Project Connect Website for the Virtual Open House (through December 4) or call/email Project Connect with your feedback n the initial assessment of alternatives for the proposed Blue and Orange Lines. <https://capmetro.org/ProjectConnect/>

1

Capital Metro December 4 at 4:50 PM · 🌐

Interested in venturing into the technical realm of the #ProjectConnect Orange and Blue Lines? Join Capital Metro and the technical team Dec. 11, 5:30 p.m. - 7:30 p.m., for a deep dive into Orange and Blue line information.

We'll be sharing information on ridership modeling, cost, operation and maintenance estimates. Warning, this is going to get wonky. Feel free to ask questions or pull a team member aside to get the info you need.

Register here: <http://bit.ly/2sEmqyK>

Capital Metro @CapMetroATX · Dec 4

LAST DAY! Reminder! We're looking forward to receiving feedback on the initial assessment of alternatives for the proposed #ProjectConnect Blue & Orange Line. Last day to visit the virtual open house. expi.co/01naaH

1 1



EVENTSBRITE.COM

Project Connect Ambassador Network Technical Deep Dive Meeting

3 2 Comments

Project Connect Ambassador Network Technical Deep Dive Meeting
Warning acronyms ahead
eventbrite.com



Capital Metro

@capitalmetro

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Videos

Posts

View 7 more comments



Capital Metro

November 21 at 10:00 PM · 🌐

Provide feedback on the initial assessment of alternatives for the proposed Blue and Orange transitways. Visit the Project Connect website for the Virtual Open House (through December 4) or call/email Project Connect with your feedback. <http://expi.co/01nZrh>



3

3 Comments 1 Share



Like

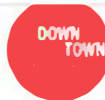


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Conversation Corps



Smart Trips Austin



Capital Metro

@CapMetroATX

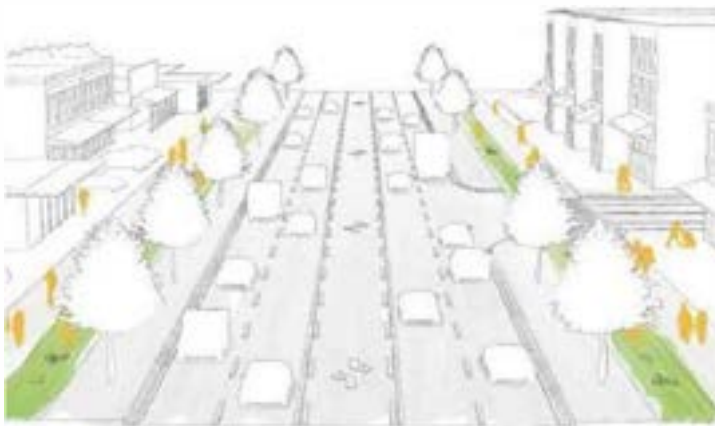
Follow



We're researching what kind of corridor works best for our community. There are different options for street configuration of dedicated transitways: underground, elevated and street level. We have studied different options for both the Orange & Blue Lines.

#ProjectConnect

UNDERGROUND



ELEVATED



STREET LEVEL



1:26 PM - 30 Oct 2019

10 Retweets 45 Likes



22

10

45

A Community Transit Plan

Provide Your Feedback

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Orange Line North to south from Tech Ridge to Southpark Meadows

Blue Line From ACC Highland through downtown to the airport

Orange & Blue Lines November Open House

November 4, 2019

Bullock Texas State History Museum, 1800 Congress Ave.

5:00 - 7:30 p.m.

Please [plan your ride](#) by using transit routes 1, 3, 18, 19, 20, 663, 801, 803, 982

Orange Line November Open Houses

November 6, 2019

St. Elmo Elementary, 600 W. St. Elmo Rd.

5:00 - 7:30 p.m.

Please [plan your ride](#) by using transit route 10

November 7, 2019

North Austin YMCA, 1000 West Rundberg Ln.

5:00 - 7:30 p.m.

Please [plan your ride](#) by using transit routes 1, 142, 324, 325, 801

Blue Line November Open Houses

November 6, 2019

ACC Highland Campus, 6101 Highland Campus Dr.

5:00 - 7:30 p.m.

Please [plan your ride](#) by using transit routes 7, 324, 337, 350

November 7, 2019

Allison Elementary, 515 Vargas Rd.

5:00 - 7:30 p.m.

Please [plan your ride](#) by using transit routes 217, 350

Unable to attend?

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Please [plan your ride](#) by using transit route 10

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North Austin YMCA, 1000 West Rundberg Ln.
5:00 - 7:30 p.m.

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November 6, 2019

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Orange Line

North to south from Tech Ridge to Southpark Meadows

Blue Line

From ACC Highland through downtown to the airport

YOU CAN STILL PROVIDE FEEDBACK AT THE PROJECT CONNECT VIRTUAL OPEN HOUSE!! Survey ends tonight!

Review materials and provide your comments at projectconnect.com



Share Your Feedback on MetroRapid Corridors

Join us in October and November for a series of Open Houses (come and go as you please) across the Austin region. See the list of upcoming open house dates at ProjectConnect.com and in the events section below. If you can't make an in-person open house, you'll be able to review materials and provide comments via the virtual open house available on the Project Connect website, extended from now until Dec. 6.

Join Us For the Orange and Blue Lines Joint Open House, Nov. 4

Roll up your sleeves with your fellow community members and review alternatives for two proposed transitways, the Orange and Blue Line corridors.

Orange & Blue Lines Joint November Open House
Bullock Texas State History Museum Nov. 4, 2019 | 5 - 7:30 p.m.
Routes 1, 3, 18, 19, 20, 663, 801, 803, 982

Visit ProjectConnect.com to review materials and provide comments at the virtual open house available from Nov. 4 through Dec. 4, 2019.

Downtown Station Opening

The temporary Downtown Station is expected to open at the end of 2019, allowing riders to travel on-rail all the way downtown. Saturday service will resume at the beginning of 2020, with service expanding to include the Leander station. The permanent Downtown Station is set to open in 2021. For more information, visit capmetro.org/downtownstation.

Pickup Launch in Leander

Pickup is coming to Leander! A new service zone is expected to launch in mid-November. Riders will be able to request on-demand transit within the service zone on the Pickup app, all for the same price as a bus ride. For more information, visit capmetro.org/pickup.

Electric Bus Art Contest

CapMetro is partnering with Creative Action and AISD to launch an artwork contest for our new electric buses. Students at LL Campbell Elementary will submit their artwork for judging, and the winners will have their artwork worked into the design of CapMetro's first two electric buses, set to hit the streets in January.

Metro Access Electric Van Pilot

We recently completed our demonstration of two fully electric paratransit vans, manufactured by Phoenix Motorcars and GreenPower. The vans were operated for one week each to test vehicle performance, rider comfort, and maintainability. This is an important step in our goal to purchase cleaner, more sustainable vehicles.

Upcoming Event Calendar

Project Connect: MetroRapid Corridors Open House
Oct. 28, 2019, 5-7 p.m.
University Hills Branch Library
4721 Loyola Ln. 78723

Project Connect: MetroRapid Corridors Open House
Nov. 4, 2019, 5-7:30 p.m.
Bullock State History Museum
1800 Congress Ave. 78701

Project Connect: MetroRapid Corridors Open House
Nov. 5, 2019, 5-7 p.m.
ACC Highland Business Center
5930 Middle Fiskville Rd. 78752

Project Connect: Orange Line Open House
Nov. 6, 5-7:30 p.m.
St. Elmo Elementary
600 W. St. Elmo Rd. 78745

Project Connect: Blue Line Open House
Nov. 6, 5-7:30 p.m.
ACC Highland
6101 Highland Campus Dr. 78752

Project Connect: Orange Line Open House
Nov. 7, 5-7:30 p.m.
YMCA North Austin
1000 W. Rundberg Ln. 78758

Project Connect: Blue Line Open House
Nov. 7, 5-7:30p.m.
Allison Elementary
515 Vargas Rd. 78741

Project Connect: MetroRapid Corridors Open House
Nov. 14, 5-7 p.m.
University Hills Branch Library
4721 Loyola Ln. 78723

Project Connect: MetroRapid Corridors Open House
Nov. 19, 5-7 p.m.
Vesper Austin
3106 E 14 1/2 St. 78702

Project Connect: MetroRapid Corridors Open House
Nov. 20, 5-7 p.m.
Mendez Middle School
5106 Village Square 78744

Project Connect: MetroRapid Corridors Open House
Nov. 21, 5-7 p.m.
Austin Central Library
710 W. Cesar Chavez St. 78701

Project Connect: MetroRapid Corridors Open House
Nov. 25, 5-7 p.m.
Circle C Community Center
7817 La Crosse Ave. 78739

Project Connect: MetroRapid Corridors Open House
Nov. 26, 5-7 p.m.
Little Walnut Creek Branch Library
835 W. Rundberg Ln. 78758

GET INVOLVED



Visit ProjectConnect.com
We value your input! Sign up to receive updates or learn about upcoming meetings. Send comments to feedback@projectconnect.com.



Visit the Project Connect Community Office located at 607 Congress Ave.
Stop by any time between 9 a.m. and 4 p.m. Talk with project staff, ask questions and provide feedback.



Follow us on social media
@Connect_centex
/capitalmetro
projectconnect





Project Connect Virtual Open Houses Open Through Dec. 6

Review materials and provide comments via the [virtual open houses](#) available on the Project Connect website until Dec. 6.

We've received a lot of great feedback from these open houses, but they're not over yet. Here is a brief summary of what we've heard from you so far:

Blue Line & Orange Line

- Most respondents prefer the dedicated transitway option over both the MetroRapid improvement option and the Do Nothing option.
- There is an even split between respondents who prefer the Lady Bird Lake crossing at Trinity Street and those who prefer the crossing at S. 1st Street.
- Most respondents are interested in the addition of a downtown transit tunnel.
- Most respondents prefer the Light Rail Transit (LRT) option over the Bus Rapid Transit (BRT) option.

MetroRapid

These are the themes we've received the most comments on so far:

- Service area & connectivity
 - Interest in spacing of station locations
 - Interest in extending service
- Accessibility & frequency
 - Interest in additional transfer points
 - Support of frequent service
- Mode
 - Interest in dedicated lanes
- Amenities
 - Support of improved passenger amenities
 - Interest in bicycle accommodations and improved station environment

Check Out the New Project Connect Website

We're excited to share with you our newly updated [Project Connect website](#), here you can find a listing of all of our upcoming open houses and events, Technical Reports and Data, as well as opportunities to share your feedback.

Participate in the Green Line VOH Survey

Capital Metro is currently working on a Transit-Oriented Development (TOD) Study for the Green Line to plan for future growth in Northeast Austin in a way that allows people to walk to more things and use transit as part of their daily life. We encourage you to participate in the [virtual open house](#) and take the survey to help shape the future of transportation in Central Texas.

Upcoming Event Calendar

**Project Connect: MetroRapid Corridors
Open House**
Nov. 25, 5-7 p.m.
Circle C Community Center
7817 La Crosse Ave. 78739

**Project Connect: MetroRapid Corridors
Open House**
Nov. 26, 5-7 p.m.
Little Walnut Creek Branch Library
835 W. Rundberg Ln. 78758



» GET INVOLVED



Visit [ProjectConnect.com](#)

We value your input! Sign up to receive updates or learn about upcoming meetings. Send comments to feedback@projectconnect.com.



Visit the Project Connect Community Office located at 607 Congress Ave.

Stop by any time between 9 a.m. and 4 p.m. Talk with project staff, ask questions and provide feedback.



Follow us on social media

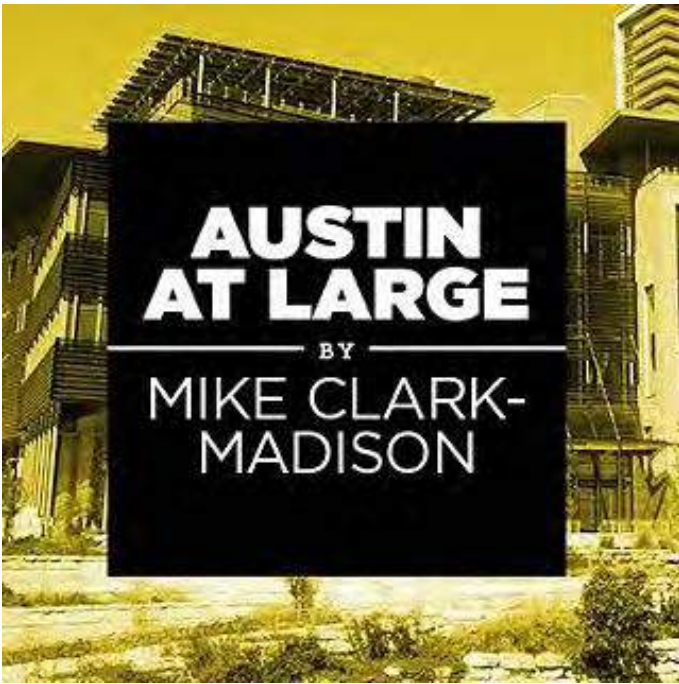
-  @Connect_centex
-  /capitalmetro
-  projectconnect

NEWS

Austin at Large: Lord, Gotta Keep On Moving

New and welcome spirits animate the fight for transit

BY MIKE CLARK-MADISON, FRI., OCT. 4, 2019



On Monday morning, a whole bunch of people from a variety of Austin's civic power centers gathered at the Central Library to lift up in praise the mammoth transit bond package local voters will almost surely see on their November 2020 ballots. Organized as Transit for Austin, the coalition used different words, because that package still requires some assembly; big questions remain as to what kind of transit, and what routes, will emerge from the current Project Connect (v. 3.0) process to be costed out and pitched to the community. But what I think will most likely happen is a \$1 billion-plus initiative with some amount of light rail and more stretches of bus rapid transit along the familiar core transit corridors Austin has been preparing for a generation now.

This same news conference has happened before; we in the consulting trade (where I was 2005-17) even had a nickname for it: the "we-are-the-world." This mighty cloud of witnesses from Austin's grassstops also brought you a medical school, a plan to end homelessness, and other milestones in Austin's emergence as a big city, under the auspices of elders like Deacon Sen. Kirk Watson. It didn't, however, bring you a transit system in 2014 – not a good electoral year for progressives in general, and one which saw the Project Connect 2.0 rail plan go down by 10 points under fierce lashings from both its left and its right. (Of the 80 or so people who ran for City Council in 2014, the first 10-1 election cycle, maybe 10 at most supported the rail plan.)

On Tuesday morning, there was another media release, this time by the Austin Coalition for Transit, which is different from Transit for Austin. These include the old heads, the prophets in the desert, the people who've been

fighting for rail transit – just rail, only rail – since Capital Metro was created in 1985. They've dashed their feet upon stones not once but twice, in 2014 and with the 0.8-point loss of the 2000 plan that would have put urban rail transit on the ground in Austin a decade ago. Imagine how different Austin would be.

Moving On Up a Little Higher

The ACT folks are great people whom everyone appreciates, but they've heard "Yes, but ..." for a generation from political and community leaders who think a transit package can only win if it either involves little to no risk or has "something for everyone," which means road investments in the suburban fringe, even if these be merely symbolic or clearly superfluous. The 2014 package included a lot of road spending to buoy up this prosperity gospel, but lo, it did not open the hard hearts of reddish edge-city voters. Modern Austin's one successful transit election, in 2004, was to create the Capital MetroRail Red Line, which – since it was just repurposing an existing freight line – seemed to carry little to no risk, and even that didn't work out so well at first.

So here we are for our third walk up to God's heaven – a genuine high-capacity system, preferably rail, that connects Austin's jobs and opportunities, still clustered in the center of town, with the people who need them – with a *third* group, which held its rollout Tuesday evening at the Carver Museum. People United for Mobility Action – PUMA – has a nifty logo that is both roaring mountain lion and rolling transit line, and its own spin on we-are-the-world. It's "dedicated to transforming Austin so that every person has access to safe, affordable, and convenient choices to get around and meet their daily needs." Its ministry will include "community organizing, building local capacity, and supporting existing and future mobility efforts."

If you were around in 2014, you may be thinking PUMA sounds like AURA – then Austinites for Urban Rail Action, advocating for a plan different and better than Project Connect 2.0, now de-acronymized and decoupled from transit to fight the larger urbanist fight. Indeed, there is some overlap. But there is also notable inclusion within PUMA of folks who were not welcomed, and indeed were abused, by AURA before.

But more importantly, PUMA includes folks who have too often been strangers to this town's 30-year transit dialogue – leaders and advocates for social and environmental justice, for equity above all things, for those on the margins who (in PUMA's words) "are most dependent on the outcomes of transportation planning," especially now in the hot shadow of the looming climate crisis. PUMA is about both faith and works; it's not limiting itself to engagement around a November 2020 big-ticket transit plan, but foresees a broad coalition that can "work directly with communities to identify and implement practical projects that will improve access to transportation."

It is not a secret that Austin has not lifted every voice during the political calculations to make transit or any other big-ticket initiative happen, because "they" don't vote. But all around us, the story of Austin 2020 and Texas 2020 is one in which respecting justice and demanding equity *are* the values buoying a progressive agenda to political success. It can, will, and must be so in our schools, in our houses (especially the ones we still need to build), and now, in the streets. Let the people say amen.

CapMetro planning to release proposal to make routes more safe, accessible



Photo Credit: Joshua Guenther | Daily Texan Staff

TAGS

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Published on October 9, 2019 at 12:47 am

BY [SARA JOHNSON](#)

CapMetro is planning to release a billion dollar bond proposal by 2020 to improve reach and accessibility of public transportation in Austin.

CapMetro board member Jeffrey Travillion said the specific details of the Project Connect CapMetro transportation bond haven't been finalized. However, he said the bond will set aside funding for bus line extensions, general service route maintenance and initiatives to improve accessibility for areas underserved by the current routes.

“A lot of the communities getting left out by these routes are communities of color that are getting more and more removed from the city by gentrification,” Travillion said. “These are people who rely on public transportation to get to work more than anyone else in the city. We can't allow these communities to be shut out of jobs because they can't get to work.”

Travillion said diversifying the routes and standardizing vehicles would allow for easier and safer transportation for students as they travel both to and from campus and around the city. The exact bond amount has yet to be finalized, but Travillion said he expected the total to be more than \$1 billion because of the broad area of improvements CapMetro hopes to implement.

“We keep students in mind a lot when we talk about what kind of changes we want to make in our program,” Travillion said. “Students make up a lot of our service users, and that doesn’t just mean keeping the lines that go by campus up to par. All parts of the city means all parts.”

Exercise science junior Keyona Taylor, who lives in Riverside, said she relies on the CapMetro transit system to get to and from campus. She said she would support a bond that extended the current routes.

“Where I’m living, I have to transfer a couple of buses and really plan out my day down to the minute,” Taylor said. “If I had a straight shot to campus and back, my life would be a lot easier.”

Taylor said there is not much she thinks can be done to improve the safety of rides. She said she would rather see line extensions into underserved areas.

“Getting longer bus lines is way more in control of CapMetro than safety just because nobody can control who uses the bus,” Taylor said. “I’d rather they do something they know they can do that will get more people who need it using the buses.”

Pharmacy graduate student Chris Dy said improvements on transit routes offered interested him as potential changes from the CapMetro bond.

“I know there are express routes for areas with a lot of student housing, but I live in Mueller, so I think that’s seen as less traditional for students,” Dy said. “Austin is pretty good about having lanes just for buses, but that doesn’t really matter when they don’t reach you when you need them.”

Travillion said he’s confident the bond will earn approval from citizens once the full plan goes public.

“Improving transportation is something everyone can get behind,” Travillion said. “Making public transportation more common and accessible is going to make the entire city run smoother.”

#GI INGTUESDAY December 3, 2019



It's Not Just Light Rail. Capital Metro Wants To Expand Rapid Bus Service, Too.

By SAMUEL KING | KUT • OCT 16, 2019



SPENCER SELVIDGE / KUT

Austin's regional transit agency, Capital Metro, is taking feedback from the public on a plan to add up to five new rapid bus lines.

It comes as ridership on the existing rapid bus lines, known as MetroRapid, has been rising. In September, Capital Metro saw a 10.1% increase in passengers over the same month in 2018. Ridership was up 14% for the 2018-2019 fiscal year.

"The thing that makes that service great is it's more frequent, it has priority lanes like downtown and even signal prioritization to help it go faster than the local bus service," says Jackie Nirenberg, Capital Metro's community engagement manager.

MetroRapid service started in January 2014 with the 801 line, which runs from SouthPark Meadows to Tech Ridge. The 803 line came along in August 2014, running from Westgate Mall to the Domain.

Ridership on the existing lines has increased by more than 37,000 riders over the past year. [Crowding has become an issue](#) during some parts of the day.

“I was on the 801 the other day, and it was standing room only. Which is great! It means you have more people riding it,” says Grace McDonald, a college student. “But it was also standing room only for the entire trip.”

Capital Metro says it has been adjusting spacing between buses and capacity on the routes to address overcrowding, including adding buses as needed to meet demand. Cap Metro Long-Range Planner Jacob Calhoun says his team is taking what they’ve learned from the current lines as they contemplate the expansion.

“One of the things it definitely means is we have to find ways to improve that service even more,” Calhoun says. “So that means do we need to look at how we move it. Is there some ways to get better signals to allow us to move the service faster? Can we get people on and off the service faster?”



A map of Capital Metro's Project Connect, a long-term proposal for building out Austin's transit network.

Cap Metro is [looking at adding](#) up to five new MetroRapid lines:

- Cherry Line from ACC Highland to Tech Ridge
- Navy Line from Berkman to McKinney Falls
- Pink Line along Seventh Street from Shady Lane to Red Bud and Exposition
- Lime Line along MLK from Springdale to West Austin
- Purple Line from Downtown and along Manor Road to the Expo Center

Another line, the Yellow Line, is basically a rebranding of the existing MetroRapid 803 line which runs along the Burnet/South Lamar Corridor.

The new routes would complement the two major new transit lines that are proposed under Project Connect: the Orange Line, which would run in the Guadalupe/Lamar and South Congress corridors, and the Blue Line, which would run from near the UT campus through downtown and out to the airport. Those lines would have dedicated transit lanes, and be either light rail trains or bus rapid transit.

“We’re adding layers of access to the system to create one big seamless system that ideally people can use easier than driving a car,” Nirenberg said. “Once that happens, people say ‘oh, I get it now.’”

But some who attended a recent open house on the proposal wondered if that would happen since the proposed new MetroRapid lines would not have dedicated lanes along their entire routes. That means they could be subject to some of the same rush hour delays that impact the current lines.

“That’s probably the big one: the bus still gets caught up in traffic and it still stops,” said Matthew Novacek, who lives in North Central Austin. “So I was kind of hoping to see more improvement in that area, to kind of improve these lines.”

Cap Metro is hoping to fund the transit expansion with both local money and federal grants. Compared to the Orange and Blue Lines, the proposed MetroRapid service would take less time to get going, since there are fewer startup costs and obstacles. The original MetroRapid project cost \$39 million. The costs of light rail projects could be in the billions.

“The MetroRapid lines are relatively easy to implement, working with the city to get the priority treatments, we’re talking about maybe two to three years,” Nirenberg said. “It’s definitely the low-hanging fruit.”

Cap Metro is [collecting more feedback](#) over the next few months as it continues to shape its proposals. The agency’s board and the Austin City Council will meet Oct. 30 to discuss Project Connect, and start narrowing down choices to present to voters in a likely November 2020 ballot referendum.

The last transit referendum in 2014 was [defeated](#) by a 14-point margin.

Correction: An earlier version of this story misidentified the name of Grace McDonald, a college student.

Total Project Connect costs could range from \$4.7B-\$9.8B for expanding transit in Austin area



Project Connect proposes to expand MetroRapid throughout Austin.

By [Amy Denney](#) | 5:12 AM Oct. 30, 2019 CDT



Capital Metro officials released the estimated costs and potential ridership numbers Oct. 29, a day ahead of a joint meeting with city officials, to discuss expanding transit in the Austin area.

The transit plan, called Project Connect, outlines the vision for adding high-capacity transit such as light rail or bus-rapid transit in dedicated lanes to the Austin region.

Project Connect staffers have been meeting with residents for years gathering input on routes, mode options and transit needs, culminating in the vision map.

“For some people the fact that we’re talking billions of dollars might be a new idea,” said Jackie Nirenburg, Project Connect community engagement manager. “It’s a paradigm shift.”

Because a mode of transportation has not yet been selected, estimated costs for the plan range from \$4.7 billion-\$9.8 billion. However, because Capital Metro expects to receive federal funding for 40% of those costs, the local portion of funding would be about \$2.8 billion-\$5.9 billion.

Project Connect is being designed to build off of Capital Metro’s existing system of bus and rail services as well as its newest on-demand bus service called Pickup, Project Connect Program Manager Dave Couch said.

“It gives us that base starting point for the system,” he said. “This really is an expansion.”

About 4% of the region’s population uses transit on a daily basis to commute, according to Capital Metro. The Austin Strategic Mobility Plan, approved by City Council in April, aims to quadruple that figure to 16% by 2039.

“The way to achieve that [goal] is by having those high-capacity dedicated lanes,” Couch said.

Capital Metro and city staff have been meeting weekly to discuss how these dedicated lanes would operate on city streets.

Because the Project Connect map and plans are still proposals, residents have time to provide input and weigh in on their preferred options, Nirenburg said. She said existing feedback has been incorporated into the draft plan.

“We’re funneling into the final alternative that will be recommended using community input and technical analysis and not to mention conversations with the policymakers who have to set the tone and policy on how this will move forward,” she said.

Project Connect is hosting several open house events in November for residents to learn more about the plan. Additional information about the events is available at www.capmetro.org/get-involved.

Here are other details of the plan:

Orange and Blue lines

The spine of the Project Connect plan are the Orange and Blue high-capacity transit lines. These routes would consist of bus-rapid transit in dedicated lanes or light rail. The Orange Line is essentially the same route as the MetroRapid Route 801 that operates on North Lamar Boulevard and South Congress Avenue. The Blue Line is a similar path proposed in 2014 on Riverside Drive. However, it would begin at the Austin-Bergstrom International Airport and continue to The University of Texas and potentially to Austin Community College’s Highland campus.

This is what affects the cost ranges the most. Choosing bus-rapid transit for the Orange and Blue lines would cost \$3.2 billion-\$5.5 billion, and going with light rail would cost \$6.3 billion-\$8.1 billion.

Expanding MetroRapid

Proposed new MetroRapid routes, which are bus-rapid transit lines that do not solely operate in dedicated lanes, would be added to the system. Routes are proposed for Parmer Lane, connecting Tech Ridge with ACC Highland, to Oak Hill, to

McKinney Falls and to the Travis County Exposition Center.

Expanding MetroRapid would cost an estimated \$150 million-\$170 million.

Other transit options, infrastructure

Also included in the plan are other transit options, such as adding the MetroRail Green Line to Manor, investing in additional MetroRail Red Line upgrades, adding neighborhood circulars, and building Park & Rides and other support facilities.

In total, these other transit options, facilities and the new MetroRapid routes would cost a total of \$1.5 billion-\$1.7 billion.

Public comment continues

In January, Capital Metro officials expect to announce the recommended plan. Public comment is ongoing and will be used in the determination of the final plan. City Council could then decide to call an election for November 2020 to fund the plan.

No matter the mode selected, the entire system will be electrified.

“Everything we do moving to the future for Project Connect is something that would be electrical,” Couch said. “We’re moving away from the diesel fleet. It is something that would be electric, whether it is buses, rail.”

#GIINGTUESDAY December 3, 2019

KUT 90.5

Cost Vs. Capacity: Capital Metro Crunches The Numbers On Future Transit Plans

By SAMUEL KING / KUT • OCT 30, 2019



GABRIEL C. PÉREZ / KUT

Capital Metro isn't yet sure whether to favor light rail or rapid bus service as it expands its network, but an analysis shows adding trains would cost more, while buses would move fewer people. The projections were released ahead of a joint meeting Wednesday afternoon between the Capital Metro Board of Directors and the Austin City Council. It's part of a process to come up with a plan to present to voters for a potential bond election next year.

The centerpiece of Capital Metro's plan is to have two dedicated routes that don't mix with regular car traffic, known as the Orange and Blue Lines. The lines could operate on street level for their entire length, or be elevated and underground for portions of the route.

The Orange Line would run in the Guadalupe/Lamar and South Congress corridors, with potential extensions to Tech Ridge and Slaughter. The Blue Line, would run from near the UT campus through downtown and out to the airport, with a potential extension to ACC Highland.

"Whether it is at street level, whether it's elevated, what that configuration could be, depending on what the availability is, real estate, things of that



nature, that's one component," said Dave Couch, project manager for Project Connect. "The second component is what is that mode, what is the vehicle that will run on that infrastructure: is it going to be light rail? Will it be bus? That are open questions."

The answers to those questions will determine how much the plan costs.

- For light rail trains on both the Orange and Blue Lines, Cap Metro projects costs would run between \$6.3 billion and \$8.1 billion
- For bus rapid transit only, Cap Metro projects costs would run between \$3.2 billion and \$5.5 billion.
- Putting both lines underground in downtown Austin would add another \$1.9 billion to \$2.3 billion to the costs.

Mayor Steve Adler said at the work session that while some may balk at the potential price tag for a full buildout of Project Connect, it will take a big plan to solve the region's mobility issues. "What that number represents is an opportunity to actually talk about how much we want generational, transformative change in our city," Adler said.

Other officials cited the examples of regions like Denver, Minneapolis and Seattle, which have undertaken large transit projects in recent years. "We're retrofitting a city, and it's going to cost a lot of money," said District 1 Council Member Natasha Harper-Madison. "We have to go big, if we're going to do it well." While bus rapid transit would cost less overall, light rail trains would have a higher capacity. For both the Orange Line and the Blue Line, Cap Metro gave estimates for service running either on the street-level or partially above traffic. Overall, it projects more people would ride on an elevated line.

"We have to make a decision as a community with a limited amount of resources that yes, we can build BRT cheaper, we will be able to build BRT faster, but you will run up to the theoretical capacity much earlier than you will with LRT," said Capital Metro President and CEO Randy Clarke. "That is one of the biggest decisions the whole group will have to make."

On the high end, Capital Metro projects running light rail on the Orange Line could have a daily ridership of 74,000 passengers by 2040, with 66,000 passengers on buses.

On the Blue Line, it would be 52,000 passengers on rail, with 45,000 on buses.

Andrew Clements with the Austin Coalition for Transit said he and other advocates want to better know how Cap Metro came up with its projections.

"It's not such a clear cut close call between light rail and bus rapid transit, especially for the Orange Line," Clements said. "We actually still think there's some real strong reason to go with light rail, and we'd like for more accurate data to come out."

Capital Metro would be seeking federal funding for the projects, would could account for 40% of the dollars needed to complete them. The rest would come from local funding, if voters approve the bond.

The long-range plans also include a new commuter rail line, called the Green Line, which would run between Downtown Austin to Manor and Elgin, as well as expansion of the existing MetroRapid bus service. Capital Metro would also add neighborhood connectors, similar to its current Pickup service, in areas where fixed route bus service isn't practical.

The two bodies will meet jointly once again in January to discuss financing the transit plan, with final decisions on a proposed referendum expected sometime in the spring.



Capital Metro presented the transit plans to the city council at a joint meeting on Wednesday. Part of the plan involves the addition of two new rail lines.

Author: Tori Larned, Bryce Newberry
Published: 8:54 AM CDT October 30, 2019
Updated: 6:32 PM CDT October 30, 2019

AUSTIN, Texas — In efforts to [improve public transportation by 2040](#), on Wednesday, [Capital Metro](#) presented the [Austin City Council](#) with new transit plan options, including the installation of new rail lines. The price tag is upwards of \$9.8 billion.

Rail lines are a large majority of the project's estimated costs, according to initial engineering studies conducted by CapMetro as part of [Project Connect](#), the City's initiative to improve public transit.

"Compared to cities similar to us, that's a very small number," said [Delia Garza](#), vice-chair of the CapMetro board and Austin Mayor Pro Tem. "The cost of not doing anything is even more than that."

City leaders point to this plan as a way of resolving some of the traffic congestion in the region, by getting more residents on transit.

According to CapMetro, approximately 40% of the funding will be through state grants from the [Federal Transit Administration](#). The remainder of the funds will be derived from local dollars – either through bonds or taxes.

"We have to invest, and we have to change the way we're doing things. I think a lot of people forget that we are the 11th largest city in the country," Garza said.

The Orange Line would run along North Lamar Boulevard and Guadalupe Street, through downtown and along South Congress Avenue.

The Blue Line would run from [Austin Community College](#)'s Highland campus in Central Austin to [Austin-Bergstrom International Airport](#).



The more expensive option involves Light Rail Transit (LRT), ranging between \$7.8 billion to \$9.8 billion, but it would transport a higher capacity of commuters and would be more environmentally and economically efficient in the future. The less expensive option is Bus Rapid Transit (BRT), ranging between \$4.7 billion to \$7.2 billion.

"It's Austin that's choking on our traffic, and it's Austin that needs new mobility options. So our investment has to be transformational, we need to think of this opportunity as a generational one," Austin Transportation Department Director Rob Spillar told the council and CapMetro board on Wednesday.

The agency estimates local funds would have to foot between \$2.8 billion to \$5.9 billion of the bill, depending on what option is selected.

The key differentiation of the project versus transportation as it is now would be creating two dedicated lanes for public transportation, whether it is buses or rail lines. There would still be two lanes per the direction of travel for regular traffic.

In addition to street level travel, parts of the lines could include tunnels and elevated platforms, the agency said.

CapMetro predicts the Orange Line will accommodate between 45,000 to 74,000 commuters daily, with travel times estimated between 42 to 53 minutes end-to-end.

RELATED: [Capital Metro approves \\$403M budget for 2020](#)

The Blue Line's estimated commuter traffic would be 30,000 to 52,000 people daily, with a travel time of 35 minutes to 42 minutes end-to-end.

The [Greater Austin Chamber of Commerce](#) endorsed the Project Connect plan earlier this year.

"As a community, congestion is one of our top talked about issues, whether it's for existing companies, small businesses, or companies looking to relocate to Austin," said Matthew Geske, vice president of regional infrastructure and mobility for the Austin Chamber.

The chamber has not decided whether to support LRT or BRT, but Geske said transportation is a top quality of life concern for businesses looking at Austin.

"You're making investments for the future, not looking at where we are right now but where we're going to be in 20, 30 years," Geske said.

The proposal also discusses adding an additional MetroRail on existing tracks and more MetroRapid bus routes.

After presenting city council with the plans, CapMetro expects them to make a decision on what parts of Project Connect they will push forward by March 2020. The proposed plan is then expected to be placed on the November 2020 ballot.

City of Austin & Cap Metro start down road to 2020 transportation bond vote

by Fred Cartú | Wednesday, October 30th 2019



File image of I-35 traffic in Downtown Austin. (CBS Austin)

Just how much would you pay to fix Austin’s traffic woes? The City of Austin and Capital Metro say they have the solution, but it’s going to cost billions.

Mayor Steve Adler began a joint council work session with Cap Metro acknowledging the sticker shock hitting Austin today. Ahead of this afternoon’s meeting Cap Metro forecast that their [Project Connect transportation plan](#) could cost up to \$9.8 billion. But there are all kinds of variables that could affect the price.

Austin has gone down this road before trying to gather wide support for light rail. Wednesday we saw the latest Project Connect map showing which areas in this region they want to reach. Robert Spillar, Austin’s director of transportation says, “For sure the region has a role to play in achieving the project connect vision, but in the end it is Austin that’s choking on our traffic and it’s Austin that needs new mobility options.”

But previous attempts to finance light rail failed to connect with voters while the need continued to grow. And Spillar adds, “We know that every time we miss an opportunity it gets harder the next time we try and gets more expensive. So now’s our best chance to create a big city system for our emerging big city right here in Austin.”

Austin Mayor Pro Tem Delia Garza says she believes most Austinites already know about the need. She says, “They sit in traffic every single day. But it’s important to know today’s commute is the best commute you’re ever going to have because it only gets worse from here. And so we really need to make the investment.”

The months ahead will be spent determining the best way to move forward be it light rail or buses running on dedicated travelways. Bus lanes are cheaper but rail moves more people. And Garza notes that Austin traffic may already be bad enough here for voters to accept the cost of fixing it. She notes, "In Seattle for example they were finally successful because it just got so congested people were late picking up their children from school and having to pay the extra fees because of that."

Here in Austin there are still a lot of variables that need to be pinned down -- besides the price tag -- before it goes to the voters. They need to pick the right equipment, the right routes, the right stops and the right price.

And they've got a lot of people to convince. The plan right now is to put a transportation bond package before the voters in November 2020. It's a presidential election so voter turnout will be high.



TRANSIT

Thursday, October 31, 2019 by Ryan Thornton

City Council and Capital Metro talk Project Connect capacity and ridership projections

STORY MAP



The Capital Metropolitan Transportation Authority has put together some potential outcomes for a public transit overhaul in the coming decade based on months of technical analysis, but regional and city leaders aren't sure what to think with so many decisions riding on predictions of, well, ridership.

The transit agency released preliminary cost estimates for the entire Project Connect system this week, providing ranges of potential daily passengers for the high-capacity Orange and Blue lines that could be achieved with different investment choices.

For both lines, light rail could be expected to carry about 10,000 more daily passengers than bus rapid transit if done well, and for the Orange Line, would carry at least as many people as an excellent bus rapid transit line.

During the joint meeting with City Council and Capital Metro Wednesday, Dave Couch, program manager for the project, said light rail will generally do better than buses even if the systems are comparable due to "rail bias," or the fact that people typically prefer to ride rail.

But light rail vehicles also have more space, enough for 172 people per vehicle compared to 115 on a bus, according to the agency's data. While you can add capacity to buses with articulated (accordion) or even bi-articulated buses, light rail cars can be connected and disconnected as desired and each added car will have a higher capacity.

But capacity is different from ridership, and the agency is trying to strike the right balance between what the system can carry and what it needs to carry.

The agency's ridership analysis addressed that question using the Capital Area Metropolitan Transportation Authority's population estimates model, which indicates the city will grow by 32 percent to 1.3 million residents by 2040, a number that does not account for many significant developments such as the South Central Waterfront and Rainey Street. Because the numbers are based on population, the ridership estimates also don't consider the impact of the future expansion of the Austin-Bergstrom International Airport.

Along with its considerably lower price tag, a major advantage of bus rapid transit is the relatively short construction time. With bus rapid transit, Couch said the city could have the two high-capacity lines up and running as early as 2026, about two years sooner than light rail.

Given the difficulty of predicting ridership, however, Williamson County Commissioner Eric Stratton questioned the value of that short-term benefit if it comes at the expense of long-term performance. "We could be building now something that by the time we get to 2040 – oops! We've exceeded it and we need to start all over again."

With light rail, CEO Randy Clarke explained, "you get more because you spend more." On the other hand, we could build bus rapid transit cheaper and faster, but "you will run up to that theoretical capacity much earlier than you would with (light rail)."

The theoretical capacity is when the system is maxed out and demand is higher than capacity, which Clarke said means evening rush hour on the Orange Line route at Republic Square station. In that downtown environment, he said, bus rapid transit will be limited in ways that light rail is not.

Regardless of mode, the size of downtown blocks means transit vehicles will need to be under about 300 feet long, potentially undermining the benefit of being able to connect many rail cars together during peak hours.

That limit, however, could be loosened somewhat if the city chose to build an approximately \$2 billion downtown transit tunnel, roughly similar to that used in Seattle. The tunnel would allow the Orange or Blue line vehicles to avoid the tightest portions of downtown from Cesar Chavez Street to around 11th Street and would also provide a connection between the two lines along Fourth Street.

That \$2 billion would be on top of a system that could cost anywhere from \$4.7 billion to \$9.8 billion before an expected 40 percent match from the Federal Transit Administration. Those costs are only estimates, though, and based on the expected value of the dollar in 2025. The federal match, too, is only an estimate based on current averages.

Council Member Jimmy Flannigan also noted that some of the agency's cost assumptions, such as the prediction that any subsequent rail cars added to an initial car would cost just as much as the first in operations and maintenance, didn't make intuitive sense. Flannigan asked for a "deep dive" on those assumptions and expressed confusion over the blurred line between capacity and ridership estimates in the agency's data.

Following up on that latter point, Stratton asked for a separate deep dive specifically to discuss the ridership assumptions that are informing the city's decisions going forward.

The next joint work session on Jan. 9 will cover the variety of funding and finance mechanisms. The city has pushed back presentation of a recommendation on mode and alignment to February or March and now plans to be ready to make a decision and start preparing for a November transportation bond in May.

Image courtesy of CapMetroEngage.org.



'50 pounds of potatoes in a 10-pound sack' | Can Austin's roads keep up with its booming population?

In 2040, the population of the Austin metro is expected to double, but the number of roads those people travel on won't. We look at how people will get around.

Author: Ashley Goudeau

Published: 7:33 PM CST November 19, 2019

Updated: 10:36 PM CST November 19, 2019

AUSTIN, Texas — The number of things that draw people to Austin are countless – a thriving job market, a renowned live music scene, a "Keep Austin Weird" culture – but not everyone wanted the Capital City to be the boomtown it is today.

"I think there was a mindset here at one time that if we didn't make a whole bunch of improvements to the infrastructure, that a lot of folks would not come here or, if they did, they wouldn't stay," said Ashby Johnson, executive director of [Capital Area Metropolitan Planning Organization](#) (CAMPO). "And that proved to be wrong."

CAMPO is required by the federal government to produce transportation plans for the region and distribute state and federal money for road projects.

"Some of the information that was provided, say in the '80s, early '90s, was ignored. And so a lot of infrastructure was not built that should have been built, that was recommended," said Johnson.

Fast forward to 2019 and it doesn't matter if it's morning, noon, night, weekday or weekend – if you're on a highway in Austin, chances are you're going to sit in traffic.

"We're trying to pack 50 pounds of potatoes in a 10-pound sack," Johnson said.

Twenty years from now, there will be even more potatoes. The population in the Austin region, which, according to the City demographer, is made up of Travis, Williamson, Bastrop, Hays and Caldwell counties, will nearly double to almost four million people.

"When we do something in Oak Hill, or we improve I-35 or Loop 360, we want to make sure that it's not only improving the roadway when it's completed, but 20 years down the road," said Texas Department of Transportation (TxDOT) Spokesman Brad Wheelis.

In the Austin district, TxDOT has [more than 760 projects planned](#), including work on nearly all of the highways in and around Austin.

Perhaps the largest undertaking will be Interstate 35. TxDOT reports it is the 10th most congested highway in the nation and the second most congested in Texas.

TxDOT is planning to complete [more than 40 projects along I-35 in Austin](#) and add lanes to the highway itself.

"We're planning to add one to two managed lanes from SH 45 North to SH 45 Southeast," Wheelis said.

RELATED: [TxDOT approves millions to build managed lanes on I-35](#)

The managed lanes won't be tolls but HOV lanes, reserved for vehicles carrying more than one person. Construction on the north and south portions of the project will start in 2022.

TxDOT still needs funding for the central section through downtown and, until it's funded, staff can't say what it will look like. But lowering the freeway is an option that's getting a lot of attention.

"The decks that are out here would come down. And where the frontage roads are now, they would be cantilevered over. They wouldn't completely cover it up, there'd be an open space. And those two, those four lanes that would be managed, would be in the tunnel," Johnson explained. "And then the City of Austin is talking about potentially putting in park decks on sections of the roadway through downtown."

Getting from I-35 to Highway 183 will be easier because TxDOT is adding flyovers. And 183 itself is getting toll lanes in each direction, constructed and operated by the [Central Texas Regional Mobility Authority](#)(CTRMA).

CTRMA is the same company that built toll lanes on MoPac. Johnson explained the MoPac lanes north of downtown are as good as they're going to get, but there are plans to add two toll lanes in each direction to the southern half of Mopac.

In South Austin, drivers can kiss the "Y" goodbye!

"That 'Y' in Oak Hill is just a congestion nightmare," said Wheelis. "So we're getting rid of that stoplight on the main lanes."

TxDOT plans to [transform the Oak Hill Parkway](#) with three main lanes in each direction and two- to three-lane frontage roads. There will also be new lanes on 290 West of Oak Hill.

And traffic will really get moving on SH 71 when crews add overpasses east of the airport all the way to Bastrop.

"Whenever those projects are completed, you won't have a stop sign or stoplight from Austin to Houston," said Wheelis.

Similar construction will happen on [Loop 360](#) with construction starting in 2022.

"Loop 360 is going to have a whole new look," Wheelis said.

TxDOT crews will build a series of over and underpasses so drivers can bypass stoplights. But the Austin view will remain the same.

"Nothing's changing on the Pennybacker Bridge," Wheelis explained. "We know that everybody associates that with Austin. We wouldn't dare change that bridge."

Even the toll roads are getting some attention. A third lane is being added to SH 130 in each direction from SH 45 to 71.

But all that construction alone won't be enough to ease your commute.

RELATED:

[What the Beep: Big changes planned for dangerous Austin intersection](#)

RELATED:

[What the Beep: Update on 183 project to help traffic coming from north to Austin](#)

[Audit shows why Austin's 'Vision Zero' plan won't work](#)

"Based on the 2040 plan that we have in place, we expect to see, if everything was built out – and we know that probably will not happen – we would see about a 28% increase in roads, but 121% increase in population," said Johnson. "The plain way to explain that is, you're going to see much worse congestion on a whole lot more roads in the region over much longer periods of time."

There simply isn't enough infrastructure to handle the growth, and highways in Austin were never fully built out. For instance, Highway 290 isn't connected through Austin and Loop 360 isn't a loop at all. So to combat congestion, transportation leaders say they have to get people off the highways.

"If you hate your commute this morning, I'm sorry to break it to you, but that might be the best commute you ever have," said Randy Clarke, president & CEO of [Capital Metro](#).

Clarke joined the Capital Metro team 18 months ago and is all about taking bold, calculated risks to get more people to use mass transit.

"This isn't your grandfather's bus company anymore," Clarke said.

From implementing pickup zones to redesigning the bus network and testing electric vehicles, he wants to create a culture of trying within CapMetro, and it seems to be working.

CapMetro reports ridership has increased every month for 12 months straight. The agency's next bold plan is [Project Connect](#), creating an expanded transit system that connects the entire region.

It will take a big financial investment to make Project Connect a reality; the type of investment other cities have made but Austin hasn't.

"I'll give you an example," said Clarke. "In 2016, the City of Austin passed a mobility bond for \$720 million. So, at the time, the largest bond in the history of the city and that was a big deal ... that same night, Seattle did \$54 billion for transit and L.A. did \$120 billion for transit."

Project Connect is still in the planning phases, so there isn't a final price tag and leaders haven't decided if the transit system will be bus or rail.

"The key is not the type of wheel per se, it is the capacity of those vehicles and having their own dedicated right of way," said Clarke.

That dedicated right of way, lanes designated solely for buses, is part of a bigger plan. For the past two years, CAMPO staff have been building the [regional arterials plan](#), looking at how cities in the Austin region can get people off the highways by increasing capacity on the major roadways through the city. The plan could have a huge impact on your commute.

"So if we were able to realize the recommendations in that draft plan, what we would see is a doubling in our population by 2045, but our congestion would be no worse than it is today," Johnson explained. "And that's a considerable achievement if we can pull it off."

Pulling it off largely depends on the cities and whether today's leaders will listen to the recommendations, unlike what was done in the past, to make sure the people in this boomtown can get around and enjoy the things that made them decide to call Austin home.

Appendix D: Virtual Open House

Project Connect: Orange Line Virtual Open House #3

Provide your input

Survey Intro

After reviewing the information provided in the Orange Line Corridor Open House regarding the evaluation of alternatives, please provide your feedback on the survey questions. Your input will be used in the development of a Locally Preferred Alternative (LPA).

Context 1

Project Connect and Orange Line Corridor Project Connect is our community's plan for a complete regional system of reliable and frequent transit. It will include two major proposed routes, the Blue Line and Orange Line, that provide service within dedicated transitways and connect to the broader Capital Metro system.

About the Orange Line Corridor: The proposed Orange Line corridor runs north to south from Tech Ridge to Southpark Meadows.

Orange Line Corridor Purpose and Need: The Purpose of the Orange Line high capacity transit investment is to meet growing corridor travel demand with a reliable, safe, cost-effective, time-competitive, state-of-the-art high capacity transit option that is congestion proof. The Orange Line would address the following needs (or problems) within the corridor:

- - Sustainably support Central Texas' population and economic growth
- -Increase transportation network capacity to meet increasing travel demand
- -Improve transit access between affordable housing and jobs
- -Support growth of and connectivity to regional activity centers

* Note: Purpose and Need has evolved and will continue to evolve as the process progresses.

Evaluating Project Goals: Following the FTA process, the Detailed Evaluation phase (Step 2) analyzes how well different combinations of alignment, transitway type, and mode meet the project's goals. Focus areas discussed today:

- Customer Experience
 - What it means: Increase efficiency, attractiveness and utilization of high-capacity transit service within the corridor.
 - How it's done: Provide a travel experience that is competitive with the automobile.
- Reliability
 - What it means: Provide frequent, reliable high-capacity transit service along transitways within the corridor.
 - How it's done: Efficiently use the existing transportation network, provide dedicated transitways for transit to operate free from other traffic.
- Implementation and Operations
 - What it means: Develop and select a community-supported high-capacity transit investment for implementation.
 - How it's done: Develop a project with strong public, stakeholder and agency support. Develop a project that balances costs and benefits.
- Sustainability
 - What it means: Contribute to a socially-, economically- and environmentally-sustainable transit network.

- How it's done: Mitigate the rising cost of living by providing safe, affordable alternatives to car ownership, reduce energy usage and pollution while minimizing impacts to the natural, cultural, and built environment.
- Land Use and Policy
 - What it means: Support "compact and connected" land use and development patterns.
 - How it's done: Expand transit access to local and regional destinations, activity centers and employment centers.

Orange Line Alternatives

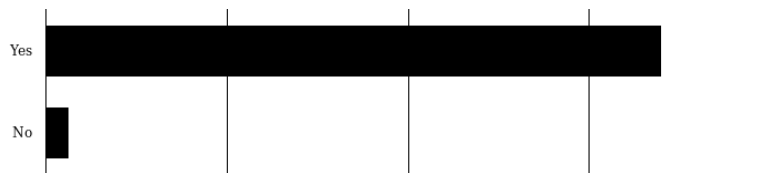
Capital Metro continues to analyze alternative transit modes, alignment, and design options for high-capacity transit in the Orange Line Corridor. This analysis is based on how well the alternative meets the Purpose, Need, Goals and Objectives of the Orange Line Corridor. Alternatives include:

- Build Alternatives:
 - Dedicated Transitways: Fully dedicated lanes or facilities set aside for public transportation vehicles that allow for traffic-free travel. These lanes could serve: Bus Rapid Transit (BRT) Light Rail Transit (LRT). Examples of dedicated transitways: MetroRapid 801 continued operation of MetroRapid 801 with transit speed and reliability improvements.

No Build/Do Nothing Alternative:

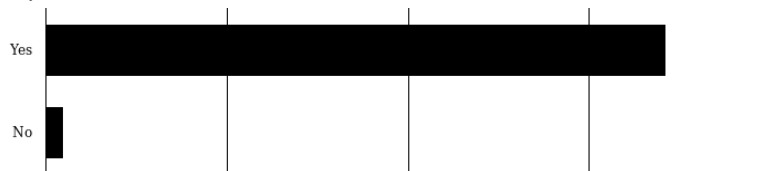
- As required by the FTA, we always carry forward a "No-Build" or "Do Nothing" alternative for comparison. For the Blue Line Corridor, this would include making no changes to the existing local bus services. What do you think?

I believe a dedicated transitway with either BRT or LRT (Build Alternative) better meets the project's Purpose and Need than the No Build/Do Nothing Alternative.



Yes	136
No	5

I believe a dedicated transitway with either BRT or LRT (Build Alternative) better meets the project's Purpose and Need than transit speed and reliability improvements to the existing MetroRapid 801 service (MetroRapid Alternative).



Yes	137
No	4

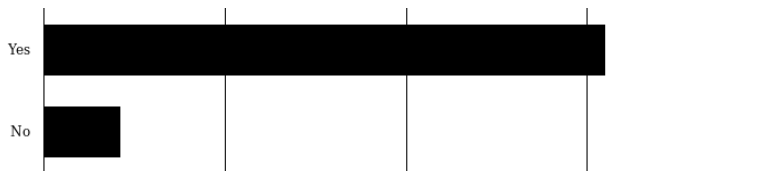
Why did you answer this way?

I am not confident that the City of Austin or Capital Metro are capable of developing or operating any major transportation infrastructure in an affordable or cost effective manner.
Subway needs to be a real option. Austin should make a hard investment that meets and exceeds everyone's need. With new zoning density will increase further and neither proposed options seems highly attractive.
The 1 cent Capital Metro sales tax was approved in 1985 to build LRT in Austin.
The one existing rail line operates at a huge loss and causes substantial traffic congestion.
The buses are over-sized, EMPTY and contribute to traffic congestion and dangerous driving conditions.
Please use the 1 cent sales tax for LRT, as originally promised, instead of requesting billions of bond dollars.
Please do not remove any existing traffic lanes on the major arteries like Lamar Blvd. and Guadalupe.
No confidence in capital metro leadership or staff too successfully implement a 'new' mode of transportation. Funding seems to be an exercise in make believe.

Context 2

Downtown Transit Tunnel Results: Conflict-Free transitway Improved frequency Improved reliability Generational investment Portal location conflicts Option 1: Trinity Street from Lady Bird Lake to 11th Street, 4th Street from Trinity Street to Guadalupe Street, and Guadalupe Street from Cesar Chavez Street to 9th Street Order of Magnitude cost: \$2.3-\$2.5B Option 2: Exclude tunnel on Trinity Street from 4th to 11th Streets Order of Magnitude cost: \$1.9-\$2.0B What do you think?

Would you be interested in a tunnel in downtown that provides a conflict-free transitway with improved frequency and reliability for Orange Line and/or Blue Lines for an additional project cost of approximately \$1.9 billion to \$2.5 billion dollars?

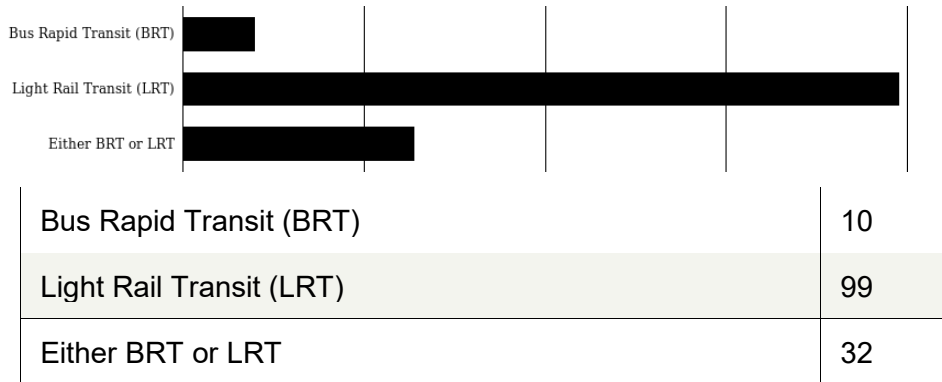


Yes	124
No	17

Context 3

Orange Line Preliminary Results TRAVEL TIMEPOTENTIAL RIDERSHIPCOST TO BUILD COST TO OPERATE What do you think?

Vehicle types (modes) are evaluated in terms of response to the Purpose and Need, social, economic, and environmental impacts, capital and operational costs, and technical viability, as well as community preference. Based on the information provided, which vehicle type do you prefer?



Please use the space below to share any additional feedback you have regarding the Orange Line Corridor alternatives.

I don't know if CaptialMetro has researched methods for reducing capital costs and construction time. This video shows that in China they can build transportation infrastructure quickly:
<https://www.scmp.com/video/china/2130500/1500-chinese-workers-build-trai...>
 It might be in the city's interest to investigate further.

The cost of real BRT is significantly lower, the implementation time is significantly less, and it can spur development and density! And maybe I can actually ride it in my lifetime. The inflation over a possible long light rail build will not eat it alive. I would prefer to implement ASAP so that I can use this today. Consider what other cities have done and actually give dedicated space to transit don't give in at all when it comes to BRT... the results could be Fake BRT... that is a scary thought for all of this work to be done so that we may still wait in traffic.

My concern with BRT is that we may outgrow its capacity quickly. Our ridership projects are looking SO GOOD even knowing that the CAMPO model certainly undercounts infill growth in Austin. We need to future-proof our system.

If existing right of way is dedicated to brt or light rail, a tunnel option seems unnecessary and those funds could be used to further build out the network. However, am not opposed to tunnels if deemed absolutely necessary.

Dedicated transit ways are essential to making these routes successful. Taking away lanes from auto traffic should also be a part of this plan as that will help make the pedestrian experience safer and more comfortable, which supports transit growth.

Don't screw this up by going with Bus Rapid Transit.

I think grade separation is more important than if it's BRT or LRT.

We should not shy away from making the larger investment in LRT given that this is likely a generational investment opportunity. It would be a huge waste if we only adopt BRT to realize that we will have hit the maximum capacity for that mode only a few years down the line. Our region continues to explode in population and is expected to double in size by 2040, and that is without even considering the possible inland migration of coastal residents due to climate change. We need to plan for the highest capacity transit possible with this election. I would also expect LRT O&M costs to become more competitive over the long term as CapMetro develops its expertise with the mode.

Your light rail operating numbers are intended to mislead people; and you should be ashamed of yourselves for doing this. In any common-sense implementation, LRT vehicles cost less to operate than BRT vehicles do, and carry more people, so operating costs per passenger are even lower.

Light Rail is desperately needed within this corridor for it will give more mobility options for those within downtown especially within corridors that were not built to have that much concentration of cars.

Either at grade or below grade only - No above grade please!!!

As long as both have a dedicated ROW, please just pick one and let's build it!

I think for our central, highest ridership rail corridor it's imperative we grade-separate it as much as possible. Elevated rail would be cheaper outside of the core downtown tunnel.

I far prefer light rail transit as it's quicker and more efficient in my experience. However, I often opt for the bus given the elevated price point of rail transit (\$7/day as opposed to \$2.50/day). The rail is not a cost-effective option for me and for many folks.

Given Cap Metro's poor performance getting the Red Line started they should stick to buses. Buses also provide some flexibility for festivals or other occasional closures.

Rail is more appealing to riders and has more capacity. Use BRT in other corridors and then implement LRT if extremely popular

Austin needs dedicated transit that is not competing with growing auto traffic! We need to do everything we can to eliminate as many cars on the roads as possible and as soon as possible!

I would prefer BRT because the tunnel

Could more easily be used for other services than if LRT tracks installed. If orange line only runs 10 min frequency at peak, 3 other bus lines could use the tunnel and provide shorter headways.

We need to invest in the future and provide a high capacity system

Don't miss this opportunity to go BIG. Austin needs dedicated RAIL. Our peer cities (Denver, Portland, Minneapolis, Houston) went for rail and have not

looked back. Don't take a half step with BRT that we will regret again for the next decade.

The operating cost should be shown in dollars/passenger-mile, which is lower for LRT than BRT systems in the U.S. above certain ridership levels.

LRT all the way. Yes it'll be significantly higher cost, however I feel the benefits far make up for it. I would honestly prefer the entire line be a subway route, allowing for maximum speed & capacity. Coming from D.C. & New York, an underground rail transit system would vastly benefit Austin

With the rezoning that's being shoved down our throats, we need to think of higher capacity transit across this city through the neighborhoods that will become intolerably congested.

Would be nice to know more about the frequency of stops. It will be hard to get most folks to walk very far to a stop. They do in cities with historical experience with transit but in Austin folks are not used to that.

I believe that the bus option will be an expensive boondoggle, but a smaller and less costly boondoggle than light rail.

High priority should be given to design of light rail cars and connectivity with the Blue Line to allow users of the Orange Line to carry luggage to and from the airport.

I'm super excited by this. We need alternatives to get people out of their cars!

I can't see buses providing the level of throughput you'd need on a project like this. Honestly, something like a high-capacity high-ish-speed elevated monorail seems better suited to the enormity of Austin's public transit deficit; but of course that's even more expensive.

I agree and support this. It needs to be able to scale.

What about non light rail? Why was it excluded?

This would be a good first step toward addressing transit difficulty in Austin. Given the lower operating cost, I don't mind the BRT option as long as it can be scaled up to address additional demand in the future. For long term growth, LRT would be the best approach. I am also very interested in the connectivity of this plan to East-West transit. My current commute is from Braker and Parkfield to UT, and the current choices for transit require catching the Braker bus, which runs only every 45 minutes or walking for approximately one mile. I support this plan, but would also like to emphasize the importance of having reliable and frequent service connecting to rapid transit.

Use the 1 cent sales tax to fund mass transit, as originally promised in 1985.

Light Rail Transit (LRT) would be a faster mode of transport compared to buses that are also on the road with cars. Time is the very limited resource that residents cannot get back, I have taken the MetroRapid 801 from Southpark Meadows to the Traingle but the time it takes to get to my destination is longer than idling in I-35 traffic. An LRT also allows for a more reliable commute time

as road accidents will not affect much of the commute that others stuck in traffic might just Park & Ride the LRT to get to their destinations on time.

I think more people will be attracted to rail rather than bus, especially at first. The reduced capacity of BRT is concerning long-term.

It is *long overdue* for Austin to join Dallas and Houston by providing RAIL to its citizens. The potential ridership ranges are incredible, up to 74,000 daily boardings! As Austin continues to grow (particularly along the land surrounding the Orange Line), we need to invest in transit that has the capacity to expand and grow just as the city does. That cannot happen with BRT; several cities that have implemented BRT have already maxed out their ridership capacity. Choosing LRT ensures that we are being proactive in how the city handles the population increase.

As for the downtown tunnel, I am in favor of a tunnel (assuming a shared crossing with the Blue Line LRT), but the price-tag does seem high. I am also comfortable with having downtown be street-level or elevated (where the Capitol corridor allows).

Your operating costs for BRT are 25% below national averages. Please correct that issue and please also address the fact that BRT, even at gold standard, would not be able to handle demand at Republic Square this making your projections INCORRECT. Please be honest and transparent as you present this to the public, otherwise you will get a big backlash and get a repeat of 2014 because it looks like you have a predetermined preference.

Sounds good, if the funding can be found for it!

Although the ridership numbers look similar between BRT and LRT in the projections, I believe LRT would be better suited if there is ridership growth in the future and it would better handle the peak boardings in downtown/UT area during events.

Light rail transit is far more comfortable, reliable and scaleable than any bus rapid transit system. Further, it is more environmentally sustainable than buses as vehicles typically last far longer and do not require large amounts of batteries to be manufactured. It would require lower driver costs to run 2-3 car trains than to run 4-6 buses to reach the same number of riders. We need to go big in order to work towards a lower climate impact! Including the downtown tunnel at least on the orange line would be critical to ensuring reliability and scaleability.

The projected BRT vs LRT operational costs presented are not in line with comparable cities. The orange line must have LRT to be successful.
<https://informatx.org/2019/11/13/project-connect-o-and-m/>

I believe some form of medium capacity metro like the Skytrain Expo line in Vancouver would be ideal. It's frequent, quick, and has dedicated pathways. Additionally, I hope the lines serve more of South Austin, because as far as LRT/BRT plans go, it is fairly negligent of South Austin.

Efficiency, speed, capacity and avoiding as much congestion are the ideals and what we need. We can't build more roads downtown, but we can put more trains on the tracks. Not only that, but it takes you out of the Texas heat.

I live in northwest Austin - off Ranch Road 620 and Ranch Road 2222. A station in northwest Austin is DESPERATELY needed. We are bottlenecked in traffic on the 620/2222 corridor with no way out.

The ridership projections for BRT are higher than any comparable North American BRT line. In order to achieve those ridership numbers you would effectively need two bus lanes in each direction, which will have negative impacts on the pedestrian and cycling experience. If you don't have those additional bus lanes, the ridership will be much lower and will quickly reach capacity.

Light rail would have a much higher capacity, provide a smoother riding experience, and have a lower operating cost than what's projected here. Rail is what we need, please get it done!

Please please please don't make the vehicle a bus. Buses have been failing Austin for years. Our one train runs on the literal railroad. That is embarrassing. We cannot expect to compete with other modern cities if we don't have a train system. I don't think just two lines will suffice, but for now I guess it'll have to do. We should have eight, nine, ten lines. Underground or raised. So, my input is: make the vehicle a train. And don't run it on a street. Run it above or below. Make it legit. Austin needs this, or else we're no better than San Antonio or Houston or other cities with terrible public transportation.

BRT = This proposal has been executed well in other cities and could work for us IF we prioritize the BRT to single car traffic. There will be push back to removing lanes for single car use but the roads will need to be reworked to provide exclusive BRT lanes next to bike lanes. It doesn't seem the plans are currently contemplating separating the BRT lanes from other traffic - I think the BRT lane will need to be separated like an HOA lane to work properly.
LRT = This proposal is much sexier but I urge caution in getting the cost too high with tunnels. Austin is a modern looking city and a raised LRT line could become an iconic part of the cityscape. Designing a sleek, shiny, raised line will help sell the public and could also offer some wonderful unintended benefits for the community ... i.e. - shaded pathway beneath for walking on sunny days and could provide shelter from rain on rainy days.

Build Light Rail in the locations shown and people will ride it!

trains are cool

Concerned that BRT will leave folks at the curb and we'll outgrow the capacity.

High quality buses with good ventilation and adequate seating is a better & quicker investment.

Bus isn't going to get people out of their cars. Rail will. I don't care how much it costs, this is an investment in our children being able to still live in the city of Austin

Light Rail for BOTH lines (Orange and Blue). Shared bridge on S 1st Street. In favor of a downtown tunnel, however, am also enthusiastic with street-level for downtown to save costs.

Compared with a tunnel, I would rather have LRT -it's not just a BRT/LRT decision. Additionally, more cars (BRT or otherwise) is not a great long term solution

Rather than building tunnels or elevated transitways to achieve dedicated transitways downtown, how about using existing streets such as Colorado, Brazos, and/or 4th by closing them to vehicular traffic and instead using them exclusively as dedicated transitways?

Must have dedicated transit way in order to make it faster for people to take transit than to drive. Currently with the 801 it's way faster to drive which is why people with that option aren't choosing transit.

I support the tunnels if they make the most sense for the light rail system, but not if they're only put in in order to (continue to) accommodate more car traffic. I think there is some great additional value in above ground light rail: the fact that there's day light and you can see out the window, watch people, discover stores and restaurants, etc. This shouldn't be underestimated.

Stop trying to fix the game by inflating the value of BRT. This is a system that is too easy to compromise away a little bit at a time and we will end up with nothing more than another 801 or 803. We NEED LRT to run the length of the city along Guadalupe/Lamar. We NEED to transition away from single occupancy vehicles and that will mean taking away car lanes. Good, let's get on with it and build light rail now!

Please bring Light Rail Transit to the Orange Line Corridor. I live near the Tech Ridge and Braker stations and I work in the Capitol area. I would take the light rail every single day. I have tried to utilize the BRT existing transportation option along the Lamar corridor but it does not meet my daily commuting needs the way Light Rail Transit would. The people of Austin want more Light Rail Transit. With the number of new residents (and all of their cars) moving to Austin daily and clogging our roadways further, more buses are not the answer. It is long past time for the City of Austin to invest in Light Rail Transit. The people of Austin want Light Rail Transit if only Capitol Metro can put together some proposed routes that actually make sense and are inclusive (for example go to the airport). The Orange Corridor is a well-thought out proposal and I know Light Rail Transit would not only see high use from those of us living in North Austin and North Central Austin but it would also spur to further redevelop our area of town and make it more attractive to folks looking to live more centrally and affordably. A functioning, inclusive and comprehensive, timely Light Rail Transit system is the biggest missing link to make Austin a more connected and affordable place to live and work not to mention a truly great city in the US and around the world.

From what I have been reading, LRT is much more scalable for future growth in ridership than BRT. The worst thing that could happen would be to invest a lot of money in BRT and we hit a hard upper limit on ridership service. Also, BRT has higher maintenance costs than LRT, so that over time, the higher up-front cost for LRT can be justified. I have also read that there is a potentially large amount of toxic material (when measured over time) coming from tires, which of course washes into the sewer system. I have also read that LRT has greater "attraction" potential to bring in new riders who might not ride a bus. These issues need to be explored in depth (I suppose you already have done

so). Finally, I would like to thank you for all the good work you're doing! I'm a big supporter.

It seems that very similar service could be provided by having a station at Congress/Riverside, then tunneling under the Statesman site to the Blue Line bridge in its Trinity crossing alignment. If this could save cost by eliminating the extra river crossing, those funds could be used to extend the downtown tunnel farther north on Guadalupe or extend phase 1 service north to Rundberg, which has a high density of low income households, who could benefit greatly from the service. I think that a tunnel under the drag is by far the best way to get through that area. It seems like it would be difficult to have dedicated at-grade transitway, travel lanes, and safe, high quality bike lanes in the available surface space on the drag.

Light Rail for both Orange and Blue Lines! Shared crossing on S 1st Street. Street level is fine for entire route (downtown tunnel is cool, but could it be done for cheaper? Why \$1 Billion?). Build the FULL line (work with TxDOT!), don't wait for "future planned expansion" to serve the community!

Tunnel needs to be much longer - south of the river (no space for tunnel portal north of the river without killing the downtown street grid's walkability) to north of the Drag. Yes, it's more expensive, so get the money by not building any of the separate Blue Line alignment north of the river (Blue Line should just go from ABIA down Riverside and then share the same alignment as the Orange Line the whole length north on Guadalupe and Lamar...that's where people want to go, not the dead eastern half of UT and boring Highland that voter already rejected). This would also double frequency on the most important half of the Orange Line.

I believe that LRT, although it costs more, would be more appealing to the general public. The capacity is higher and it seems like a more modern and future-proof option over BRT. I think an optimal system would utilize smaller vehicles that run at a much higher frequency.

LRT please! If possible, build the whole line in one go. Folks in the north and south areas are already relying on the 801, so it doesn't make sense to exclude them from the rail line, and make them wait for a vague future expansion.

We must plan for our extended future, not just the next 10 years. Buses will not, in my opinion, provide the necessary capacity that this will need as we continue to grow. Let's do this right from the start so we're not having to reevaluate/rebuild in the future.

I believe the extension to Southpark Meadows is crucial. It would serve as a hub, greatly increasing access. North Austin would have 4 rail lines, South Austin needs at least 1 that goes all the way.

No confidence in capital metro leadership or staff too successfully implement a 'new' mode of transportation. Funding seems to be an exercise in make believe.

The southern end upto Slaughter Lane should not be a dotted line. This stretch should be part of regular line. The area near south park meadows is highly

populated and will use the orange line regularly. Please consider that section as part of regular line and not an optional extension.

This is a test comment from Ryan O'Keefe at HDR. Please disregard.

Go BIG. Build the entire line as light rail from Tech Ridge to Slaughter. Build a downtown tunnel to ease congestion (particularly Republic Square). Maybe build elevated line near UT Campus and other tight street spots. After that, build either street-level or elevated, as long as it's financially sound and able to expand with Austin's population!

8000 more potential riders does not justify the \$2B higher price tag.

I prefer the LRT option over the BRT option because it has/is:

- * Higher expected ridership
- * Higher maximum ridership capacity
- * Less likely to be re-routed, either on a given day or as a semi-permanent route change in the future
- * Less likely to be compromised with other non-transit vehicle usage
- * Easier and more likely to accommodate smooth rides, e.g. for individuals to do work while riding
- * More likely to inspire voters in Nov. 2020 general election

As a current car commuter, I am unlikely to buy into a bus-focused transit solution. I lived in Center City Philadelphia three years ago and commuted exclusively by heavy rail and bike and sold my vehicle due to the ease of use. The bus routes there were unreliable and when I needed to go east to west from where I lived, there was a bus route that would take me exactly where I needed to go in a very straight line. I took that bus a handful of times and resorted more frequently to taking one subway line and transferring to the other as a result of frustrations with the bus's reliability. That was at a time when the City had an app showing bus locations that should have made it easy for me to depart my home and get to the bus stop without having to wait 20 minutes. It too was unreliable. Dedicated pathways are one thing, but rail lines, even when sharing space with traffic, attract more riders if the rail lines travel through the right locations.

Appendix E: Comments

Date	Zip Code	Question 1: I believe a dedicated transitway with either BRT or LRT (build alternative) better meets the projects Purpose and Need than the No Build/Do Nothing Alternative.	Question 2: I believe a dedicated transitway with either BRT or LRT (build alternative) better meets the projects Purpose and Need than transit speed and reliability improvements to the existing MetroRapid 801 service (MetroRapid Alternative).	Question 4: Vehicle types (modes) are evaluated in terms of response to the Purpose and Need, social, economic, and environmental impacts, capital and operations costs, and technical viability, as well as community preference. Based on the information provided, which vehicle type do you prefer?	Question 5: Would you be interested in a tunnel in downtown that provides a conflict-free transitway with improved frequency and reliability for the Orange Line and/or Blue Lines for an additional project cost of approximately \$1.9 billion to 2.5 billion dollars?	Please use the space below to share any additional feedback you have regarding the Orange Line Corridor alternatives.
7-Nov-19		yes	yes			
7-Nov-19	78723	yes	yes	Light Rail Transit (LRT)	yes	BRT- not a proven tech in US- Albq.Yikes LAO in old rail corridor. Pittsburg- old rail corridor. We don't have old rail corridors. Minimize elevated- It's ugly , more for awful place, see I-35 and 183. YUCK! Thanks!
7-Nov-19	78753	yes	yes	Bus Rapid Transit (BRT)	yes	Cost is key for the populations I work with in the N. Lamar/Rundberg area. While riders who need it will ride regardless more families (opposed to single riders) use passes when available than don't. I realize tunneling would create conflict free transitway but what would it cost us in building it and driving around the construction (length of the project). Thank you for letting AISD students ride free!!
7-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	
7-Nov-19	78748	yes	yes	Light Rail Transit (LRT)	yes	Very hopeful and excited for this. Not only will it make Austin at the same level of other cities, but it will also have ripple effects in other sectors- affordable transportation which makes affordable housing, etc.
7-Nov-19	78702	yes	yes	Light Rail Transit (LRT)	yes	I personally take the opinion that if we're going to do this, let's go all-in on the plan. While not entirely valid, I think there's value in light rail vs. BRT because of the perception. I know that I'm more likely to take LRT over BRT. I'm also hopeful that this initial framework builds out the beginning of a transit system that more lines can branch off of to hopefully look like DC or Chicago. Hopefully.
7-Nov-19	78756	yes	yes	Either BRT or LRT	yes	
7-Nov-19	78751	yes	yes	Either BRT or LRT	yes	Please get us some mobility options FAST!!
7-Nov-19	77449	yes	yes	Either BRT or LRT		
7-Nov-19	78723	yes	yes	Bus Rapid Transit (BRT)	yes	Further detail in downtown alternative options would be great to see. There are great concepts and plenty of detailed options that would be good to dive into regarding operations.
7-Nov-19	78753	yes	yes	Either BRT or LRT		My neighborhood at Braker and N.Lamar seems to prefer dedicated-ROW-BRT. However, due to the peculiar nature of my neighborhood, a dedicated-ROW could cut us off from most of the neighborhood-serving amenities available to my neighborhood. Please consider this.

6-Nov-19	78745	yes	yes	Light Rail Transit (LRT)	yes	Please contact me re: session@athenahealth.com
6-Nov-19	78736	yes	yes	Light Rail Transit (LRT)	no	LRT provides the capacity we need for 2040 and beyond. There is little point in building BRT and having it hit capacity in less than a decade. I would be interested in a better breakdown of O+M costs between LRT and BRT. Is there any way to get the LRT O+M cost lower? I think at grade guideways should be done wherever possible. This would be much cheaper than tunnel or elevated options. I think taking vehicle lower needs to be on the table. LRT is so much more efficient than single occupancy vehicles anyway. It should be easy to justify. Guadalupe, North Lamar and South Congress should not be vehicle dominated environments anyway. At some point, traffic will grind to a stand still and the vehicle lanes will be useless anyway. Consider a shared project to save up front money- maybe Rundberg to Stassney to capture the decent part of the project- it can always be extended later.
6-Nov-19	78749	yes	yes	Either BRT or LRT	no	I appreciated the walk through presentation. I do feel we need to improve our traffic situation now. I think the <u>reductions in travel times you showed are impressive.</u>
6-Nov-19	78745	yes	yes	Either BRT or LRT	yes	But is that really viable? There are already so many factors that influence the traffic there (I'm thinking of NB on Lavaca): The slight uphill climb that slows the traffic down, "mobility devices", valet parking at the hotel, and just regular rush hour. What would downtown look like with a project like that going on? Getting people to take public transportation is a huge challenge. Have you thought about trying to get feedback from riders at bus stops? Some people might be willing to participate. The low number of people who have provided feedback thus far is discouraging.
4-Nov-19	78748	yes	yes	Light Rail Transit (LRT)	Yes	I sincerely hope I can see this project to completion. It's success can only happen if the will of the people are fully behind it. More importantly, the feeder routes and park & ride options would need to be optimized. One word: <u>Tunnels!! (It's the only way to go).</u>
4-Nov-19	78705	yes	yes	Either BRT or LRT	yes	
4-Nov-19	78741	yes	yes	Light Rail Transit (LRT)	Yes	If we can prioritize all signals BRT is ok. If not, tunnel and LRT seem preferable.
4-Nov-19	78704	yes	yes	Either BRT or LRT	yes	
4-Nov-19	78723	yes	yes	Either BRT or LRT	Yes	
4-Nov-19	78704	yes	yes	Either BRT or LRT	Yes	
4-Nov-19	78752	yes	yes	Light Rail Transit (LRT)	yes	Re: Question 5, I would prefer a tunnel going through downtown, but I understand the cost can scare people. I would also be fine with downtown being street-level or elevated, in order to save cost.

4-Nov-19	78704	yes	yes	Light Rail Transit (LRT)	yes	I feel that a system that can move 100,000+ people needs to be proposed. Need to show how it can scale up and right now future to sell the project to residents. I will not support a system that does not use dedicated right-of-way for the BRT or LRT. Meaning elevated or underground, track or roadway. Thank you!
4-Nov-19	78723	yes	yes	Light Rail Transit (LRT)	yes	I think the orange line looks great and should definitely be LRT.
4-Nov-19	78723	yes	yes	Light Rail Transit (LRT)	yes	Important to have sufficient bike storage on whatever mode (LRT or BRT) is chosen to accommodate riders who use bicycles to complete first/last mile of their trips. Would accommodate larger area of service.
4-Nov-19	78702	yes	yes	Light Rail Transit (LRT)	Yes	Way over due, Austin has one of the worse-possibly the worst transit I have seen, around the world. We are vastly behind most cities our size in the developing world. We need more comparisons between the cost of improving our transit and maintaining and expanding the present car system.
4-Nov-19	78705	yes	yes	Light Rail Transit (LRT)	yes	The tunnel is important because then it will increase reliability of the system.
4-Nov-19	78705	yes	yes	Bus Rapid Transit (BRT)	Yes	
4-Nov-19	78702	yes	yes	Bus Rapid Transit (BRT)	Yes	
4-Nov-19	78704	yes	yes	Either BRT or LRT	Yes	
4-Nov-19	78757	yes	yes	Either BRT or LRT	Yes	Before arriving tonight, tunneling was a remote thought. Now I am excited about it! First it is doable here, second it preserves the street look and third it lowers bus (transit traffic) while I'm walking the street (thinking about the Chelsea neighborhood in Manhattan or other neighborhoods too). Another thought is tax cost proposed for each of the options (say half loaded and fully loaded) then should compare that cost with cav cost. I also want to see bicycle infrastructure fully incorporated into transit. I (along with my wife) use bicycle transit a lot. Austin is good and getting better but the new transit needs to integrate bikes more.
4-Nov-19	78705	yes	yes	Light Rail Transit (LRT)	yes	I like the idea of light rail and tunnels but my only concern is the time it would take to construct over BRT.
4-Nov-19	78705	Yes	Yes	Either BRT or LRT	no	Personally, I think that anything is better than nothing. Austin is a fast growing city with one interstate. We can either rise up to the challenge and be pioneers in pro-transit living, or let a bad traffic situation rapidly become unsustainable. I favor a LRT for the Orange Line. I think there's a real prejudice against bus transit currently this route gets so much use that I believe the high capacity will be a solid investment. Thanks for the presentation. Y'all are fighting the good fight out here.
4-Nov-19	78752	yes	yes	Either BRT or LRT	Yes	Very excited about getting real transit in Austin.
4-Nov-19	78746	yes	yes	Bus Rapid Transit (BRT)		

4-Nov-19	78756	yes	yes	Either BRT or LRT	yes	I think both options are a vast improvement over the current state of things. My choice would be to build a BRT system. Ideally with potential for infrastructure to be converted to LRT at some point if capacity demands it. I know it is not that simple though. The honest truth is some people just think LRT is sexier and to the it would be work the extra \$2 billion.
4-Nov-19	78746	yes	yes	Bus Rapid Transit (BRT)	no	
6-Nov-19	78745	yes	yes	Light Rail Transit (LRT)	yes	
4-Nov-19	78751	yes	yes	Either BRT or LRT	yes	I'm concerned that transferring from the 801 to the Orange Line, or vice versa, at N or S. Lamar Transit Centers could be a pain for people and negatively impact travel time and reliability. I encourage you to closely consider timing and rider comfort during these transfers.
4-Nov-19	78702	yes	yes	Either BRT or LRT	Yes	If people are leaning towards LRT that I say we go that route. However, I would definitely ride BRT. My preference would be to build BRT that would not preclude future LRT conversion. Also, segment 1 should be a priority expansion over segment 7. Has projectconnect or CapMetro considered the timing of the future I-35 Capital Express projects?
4-Nov-19	78702	yes	yes	Either BRT or LRT	yes	Would like to see current demand (traffic counts, etc) at different points along route. CapMetro needs to reach out to business and residents close to each proposed station. BRT or LRT one both lines, but people will not ride BRT, then we need to pay the premium for LRT. Need estimates of cars moving from people switching from cars to transit.
4-Nov-19	78660	yes	yes	Light Rail Transit (LRT)	Yes	I think the long term investment of having the LRT will outweigh any upfront costs of building it out and would definitely use it to its full capacity.
4-Nov-19	78722	yes	yes	Light Rail Transit (LRT)	Yes	
4-Nov-19	78729	yes	yes	Light Rail Transit (LRT)	Yes	I have trouble imagining a tunnel will be feasible, but I don't know enough about what is under Austin streets. I am a regular 801 rider and am sold on the need for improvements that will last.
4-Nov-19	78701	yes	yes	Either BRT or LRT	Yes	Prefer alignment of Orange and Blue lines at Republic square rather than just a connector at 4th street. Opinions only evolve with details, etc. Strong supporter of rapid transit.
4-Nov-19	78701	yes	yes	Light Rail Transit (LRT)	Yes	
4-Nov-19	78759	yes	yes	Light Rail Transit (LRT)	yes	This is a needed plan for Austin. I wish we had started this 10 years ago.

4-Nov-19	78759	yes	yes	Light Rail Transit (LRT)	yes	I think the best way to get federal funding or community support for advanced public transit is to somehow come up with a way to quantify the cost of doing nothing; the cost to the public in terms of quality of life by spending ever-increasing amounts of time in transit. Not sure how you do that in an easy to understand and convincing way but that's what it's going to take
4-Nov-19	78735	yes	yes	Light Rail Transit (LRT)	no	Detail to be added: When showing the cost to operate, it would be beneficial to show the "cost lost" which would represent the Hours, and salary of a person. Example: LRT cost \$35 million to operate per year saving "X" which would have been a loss due ot a worker sitting in traffic. Also adding wifi to BRT as LRT will increase workers productivity this could also be factored into a comparison to show benefits.
4-Nov-19	78758	yes	yes	Light Rail Transit (LRT)	yes	
4-Nov-19	78758	yes	yes	Light Rail Transit (LRT)	Yes	I think the Orange Line project is a great initiative, and I love the idea of an LRT system and underground downtown station. I understand that the costs for some of these stations may be a bit high, but in the long term they are worth it.
4-Nov-19	78249	yes	yes	Light Rail Transit (LRT)	yes	
4-Dec-19		yes	yes	Light Rail Transit (LRT)	yes	
2-Dec-19		yes	yes	Light Rail Transit (LRT)	yes	
25-Nov-19		yes	yes	Light Rail Transit (LRT)	no	I support the tunnels if they make the most sense for the light rail system, but not if they're only put in in order to (continue to) accommodate more car traffic. I think there is some great additional value in above ground light rail: the fact that there's day light and you can see out the window, watch people, discover stores and restaurants, etc. This shouldn't be underestimated
25-Nov-19	78704	yes	yes	Either LRT or BRT	yes	Rather than building tunnels or elevated transitways to achieve dedicated transitways downtown, how about using existing streets such as Colorado, Brazos, and/or 4th by closing them to vehicular traffic and instead using them exclusively as dedicated transitways?
25-Nov-19	78702	yes	yes	Light Rail Transit (LRT)	yes	
20-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	
19-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	trains are cool
19-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	Build Light Rail in the locations shown and people will ride it!

19-Nov-19		yes	yes	Either LRT or BRT	yes	<p>BRT = This proposal has been executed well in other cities and could work for us IF we prioritize the BRT to single car traffic. There will be push back to removing lanes for single car use but the roads will need to be reworked to provide exclusive BRT lanes next to bike lanes. It doesn't seem the plans are currently contemplating separating the BRT lanes from other traffic - I think the BRT lane will need to be separated like an HOA lane to work properly.</p> <p>LRT = This proposal is much sexier but I urge caution in getting the cost too high with tunnels. Austin is a modern looking city and a raised LRT line could become an iconic part of the cityscape. Designing a sleek, shiny, raised line will help sell the public and could also offer some wonderful unintended benefits for the community ... i.e. - shaded pathway beneath for walking on sunny days and could provide shelter from rain on rainy days.</p>
19-Nov-19	78702	yes	yes	Light Rail Transit (LRT)	yes	<p>Please please please don't make the vehicle a bus. Buses have been failing Austin for years. Our one train runs on the literal railroad. That is embarrassing. We cannot expect to compete with other modern cities if we don't have a train system. I don't think just two lines will suffice, but for now I guess it'll have to do. We should have eight, nine, ten lines.</p> <p>Underground or raised. So, my input is: make the vehicle a train. And don't run it on a street. Run it above or below. Make it legit. Austin needs this, or else we're no better than San Antonio or Houston or other cities with terrible public</p>
18-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	
18-Nov-19	78750	yes	yes	Light Rail Transit (LRT)	yes	<p>I live in northwest Austin - off Ranch Road 620 and Ranch Road 2222. A station in northwest Austin is DESPERATELY needed. We are bottlenecked in traffic on the 620/2222 corridor with no way out.</p>
18-Nov-19		yes	yes	Either LRT or BRT	yes	
16-Nov-19		yes	yes	Either LRT or BRT	yes	
12-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	<p>Light Rail Transit (LRT) would be a faster mode of transport compared to buses that are also on the road with cars. Time is the very limited resource that residents cannot get back, I have taken the MetroRapid 801 from Southpark Meadows to the Traingle but the time it takes to get to my destination is longer than idling in I-35 traffic. An LRT also allows for a more reliable commute time as road accidents will not affect much of the commute that others stuck in traffic might just Park & Ride the LRT to get to their destinations on time.</p>

11-Nov-19	78758	yes	yes	Either LRT or BRT	yes	This would be a good first step toward addressing transit difficulty in Austin. Given the lower operating cost, I don't mind the BRT option as long as it can be scaled up to address additional demand in the future. For long term growth, LRT would be the best approach. I am also very interested in the connectivity of this plan to East-West transit. My current commute is from Braker and Parkfield to UT, and the current choices for transit require catching the Braker bus, which runs only every 45 minutes or walking for approximately one mile. I support this plan, but would also like to emphasize the importance of having reliable and frequent service connecting to rapid transit.
10-Nov-19	78758	yes	yes	Either LRT or BRT	yes	
9-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	I agree and support this. It needs to be able to scale.
8-Nov-19		yes	yes	Either LRT or BRT	yes	
7-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	
6-Nov-19	78756	yes	yes	Light Rail Transit (LRT)	yes	
6-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	
6-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	Light Rail is desperately needed within this corridor for it will give more mobility options for those within downtown especially within corridors that were not built to have that much concentration of cars.
5-Nov-19	78727	yes	yes	Either LRT or BRT	yes	
6-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	
18-Nov-19	78741	yes	yes	Light Rail Transit (LRT)	yes	Efficiency, speed, capacity and avoiding as much congestion are the ideals and what we need. We can't build more roads downtown, but we can put more trains on the tracks. Not only that, but it takes you out of the Texas heat.
6-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	
15-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	Although the ridership numbers look similar between BRT and LRT in the projections, I believe LRT would be better suited if there is ridership growth in the future and it would better handle the peak boardings in downtown/UT area during events
22-Nov-19	78705	yes	yes	Light Rail Transit (LRT)	yes	
12-Nov-19	78758	yes	yes	Light Rail Transit (LRT)	yes	I think more people will be attracted to rail rather than bus, especially at first. The reduced capacity of BRT is concerning long-term.
5-Dec-19	78681	yes	yes	Either LRT or BRT	yes	

18-Nov-19	78704	yes	yes	Light Rail Transit (LRT)	yes	The ridership projections for BRT are higher than any comparable North American BRT line. In order to achieve those ridership numbers you would effectively need two bus lanes in each direction, which will have negative impacts on the pedestrian and cycling experience. If you don't have those additional bus lanes, the ridership will be much lower and will quickly reach capacity. Light rail would have a much higher capacity, provide a smoother riding experience, and have a lower operating cost than what's projected here. Rail is what we need, please get it
6-Nov-19	78724	yes	yes	Either LRT or BRT	yes	I think grade separation is more important than if it's BRT or LRT.
8-Nov-19	78734	yes	yes	Light Rail Transit (LRT)	yes	I can't see buses providing the level of throughput you'd need on a project like this. Honestly, something like a high-capacity high-ish-speed elevated monorail seems better suited to the enormity of Austin's public transit deficit; but of course that's even more expensive.
25-Nov-19	78660	yes	yes	Light Rail Transit (LRT)	yes	Must have dedicated transit way in order to make it faster for people to take transit than to drive. Currently with the 801 it's way faster to drive which is why people with that option aren't choosing transit.
6-Nov-19	78721	yes	yes	Light Rail Transit (LRT)	yes	Don't miss this opportunity to go BIG. Austin needs dedicated RAIL. Our peer cities (Denver, Portland, Minneapolis, Houston) went for rail and have not looked back. Don't take a half step with BRT that we will regret again for the next decade
6-Nov-19	78704	yes	yes	Light Rail Transit (LRT)	yes	As long as both have a dedicated ROW, please just pick one and let's build it!
15-Nov-19	78757	yes	yes	Light Rail Transit (LRT)	yes	
27-Nov-19	78705	yes	yes	Light Rail Transit (LRT)	yes	From what I have been reading, LRT is much more scalable for future growth in ridership than BRT. The worst thing that could happen would be to invest a lot of money in BRT and we hit a hard upper limit on ridership service. Also, BRT has higher maintenance costs than LRT, so that over time, the higher up-front cost for LRT can be justified. I have also read that there is a potentially large amount of toxic material (when measured over time) coming from tires, which of course washes into the sewer system. I have also read that LRT has greater "attraction" potential to bring in new riders who might not ride a bus. These issues need to be explored in depth (I suppose you already have done so). Finally, I would like to thank you for all the good work you're doing! I'm a big supporter.
6-Nov-19	78745	yes	yes	Light Rail Transit (LRT)	yes	

6-Nov-19	78752	yes	yes	Either LRT or BRT	yes	Austin needs dedicated transit that is not competing with growing auto traffic! We need to do everything we can to eliminate as many cars on the roads as possible and as soon as possible!
19-Nov-19	78757	yes	yes	Light Rail Transit (LRT)	yes	
6-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	
20-Nov-19	78758	yes	yes	Light Rail Transit (LRT)	yes	Concerned that BRT will leave folks at the curb and we'll outgrow the capacity.
7-Nov-19	78752	yes	yes	Light Rail Transit (LRT)	yes	The operating cost should be shown in dollars/passenger-mile, which is lower for LRT than BRT systems in the U.S. above certain ridership levels.
15-Nov-19	78757	yes	yes	Light Rail Transit (LRT)	yes	Sounds good, if the funding can be found for it!
15-Nov-19	78701	yes	yes	Light Rail Transit (LRT)	yes	
6-Nov-19	78757	yes	yes	Light Rail Transit (LRT)	yes	We should not shy away from making the larger investment in LRT given that this is likely a generational investment opportunity. It would be a huge waste if we only adopt BRT to realize that we will have hit the maximum capacity for that mode only a few years down the line. Our region continues to explode in population and is expected to double in size by 2040, and that is without even considering the possible inland migration of coastal residents due to climate change. We need to plan for the highest capacity transit possible with this election. I would also expect LRT O&M costs to become more competitive over the long term as CapMetro develops its expertise with the mode.
6-Nov-19	78722	yes	yes	Light Rail Transit (LRT)	yes	
6-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	Rail is more appealing to riders and has more capacity. Use BRT in other corridors and then implement LRT if extremely popular
14-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	
6-Nov-19		yes	yes	Either LRT or BRT	yes	
6-Nov-19		yes	yes	Bus Rapid Transit (BRT)	yes	
15-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	Your operating costs for BRT are 25% below national averages. Please correct that issue and please also address the fact that BRT, even at gold standard, would not be able to handle demand at Republic Square this making your projections INCORRECT. Please be honest and transparent as you present this to the public, otherwise you will get a big backlash and get a repeat of 2014 because it looks like you have a predetermined preference.
15-Nov-19		yes	yes	Light Rail Transit (LRT)	no	

4-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	I don't know if CaptialMetro has researched methods for reducing capital costs and construction time. This video shows that in China they can build transportation infrastructure quickly: https://www.scmp.com/video/china/2130500/1500-chinese-workers-build-trai.... It might be in the city's interest to investigate further.
5-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	
6-Nov-19		yes	yes	Bus Rapid Transit (BRT)	yes	I would prefer BRT because the tunnel could more easily be used for other services than if LRT tracks installed. If orange line only runs 10 min frequency at peak, 3 other bus lines could use the tunnel and provide shorter headways.
6-Nov-19		yes	yes	Light Rail Transit (LRT)	no	We need to invest in the future and provide a high capacity system
5-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	
5-Nov-19		yes	yes	Bus Rapid Transit (BRT)	no	The cost of real BRT is significantly lower, the implementation time is significantly less, and it can spur development and density! And maybe I can actually ride it in my lifetime. The inflation over a possible long light rail build will not eat it alive. I would prefer to implement ASAP so that I can use this today. Consider what other cities have done and actually give dedicated space to transit don't give in at all when it comes to BRT... the results could be Fake BRT... that is a scary thought for all of this work to be done so that we may still wait in traffic.
6-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	My concern with BRT is that we may outgrow its capacity quickly. Our ridership projects are looking SO GOOD even knowing that the CAMPO model certainly undercounts infill growth in Austin. We need to future-proof our system.
7-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	
6-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	
8-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	LRT all the way. Yes it'll be significantly higher cost, however I feel the benefits far make up for it. I would honestly prefer the entire line be a subway route, allowing for maximum speed & capacity. Coming from D.C. & New York, an underground rail transit system would vastly benefit Austin
6-Nov-19		yes	yes	Either LRT or BRT	no	If existing right of way is dedicated to brt or light rail, a tunnel option seems unnecessary and those funds could be used to further build out the network. However, am not opposed to tunnels if deemed absolutely necessary.

6-Nov-19		yes	yes	Either LRT or BRT	no	Dedicated transit ways are essential to making these routes successful. Taking away lanes from auto traffic should also be a part of this plan as that will help make the pedestrian experience safer and more comfortable, which supports transit growth.
8-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	
8-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	
6-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	Don't screw this up by going with Bus Rapid Transit.
8-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	With the rezoning that's being shoved down our throats, we need to think of higher capacity transit across this city through the neighborhoods that will become intolerably congested.
8-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	Would be nice to know more about the frequency of stops. It will be hard to get most folks to walk very far to a stop. They do in cities with historical experience with transit but in Austin folks are not used to that.
8-Nov-19		no	yes	Bus Rapid Transit (BRT)	no	I believe that the bus option will be an expensive boondoggle, but a smaller and less costly boondoggle than light rail. I am not confident that the City of Austin or Capital Metro are capable of developing or operating any major transportation infrastructure in an affordable or cost effective manner.
6-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	Your light rail operating numbers are intended to mislead people; and you should be ashamed of yourselves for doing this. In any common-sense implementation, LRT vehicles cost less to operate than BRT vehicles do, and carry more people, so operating costs per passenger are even lower.
8-Nov-19		yes	yes	Either LRT or BRT	yes	
6-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	
8-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	High priority should be given to design of light rail cars and connectivity with the Blue Line to allows users of the Orange Line to carry luggage to and from the airport.
8-Nov-19		yes	yes	Either LRT or BRT	yes	I'm super excited by this. We need alternatives to get people out of their cars!
6-Nov-19		yes	yes	Either LRT or BRT	no	Either at grade or below grade only - No above grade please!!!
9-Nov-19		yes	yes	Either LRT or BRT	yes	
6-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	I think for our central, highest ridership rail corridor it's imperative we grade-separate it as much as possible. Elevated rail would be cheaper outside of the core downtown tunnel.
9-Nov-19		no	no	Either LRT or BRT	yes	What about non light rail? Why was it excluded? Subway needs to be a real option. Austin should make a hard investment that meets and exceeds everyone's need. With new zoning density will increase further and neither proposed options seems highly attractive.
6-Nov-19		yes	yes	Bus Rapid Transit (BRT)	yes	

6-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	I far prefer light rail transit as it's quicker and more efficient in my experience. However, I often opt for the bus given the elevated price point of rail transit (\$7/day as opposed to \$2.50/day). The rail is not a cost-effective option for me and for many folks.
6-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	
11-Nov-19		no	no	Either LRT or BRT	yes	Use the 1 cent sales tax to fund mass transit, as originally promised in 1985. The 1 cent Capital Metro sales tax was approved in 1985 to build LRT in Austin. The one existing rail line operates at a huge loss and causes substantial traffic congestion. The buses are over-sized, EMPTY and contribute to traffic congestion and dangerous driving conditions. Please use the 1 cent sales tax for LRT, as originally promised, instead of requesting billions of bond dollars. Please do not remove any existing traffic lanes on the major
6-Nov-19		yes	yes	Bus Rapid Transit (BRT)	no	Given Cap Metro's poor performance getting the Red Line started they should stick to buses. Buses also provide some flexibility for festivals or other occasional closures.
14-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	It is *long overdue* for Austin to join Dallas and Houston by providing RAIL to its citizens. The potential ridership ranges are incredible, up to 74,000 daily boardings! As Austin continues to grow (particularly along the land surrounding the Orange Line), we need to invest in transit that has the capacity to expand and grow just as the city does. That cannot happen with BRT; several cities that have implemented BRT have already maxed out their ridership capacity. Choosing LRT ensures that we are being proactive in how the city handles the population increase. As for the downtown tunnel, I am in favor of a tunnel (assuming a shared crossing with the Blue Line LRT), but the price-tag does seem high. I am also comfortable with having downtown be street-level or elevated (where the Capitol corridor allows).
20-Nov-19		yes	yes	Either LRT or BRT	no	
3-Dec-19		yes	yes	Light Rail Transit (LRT)	yes	We must plan for our extended future, not just the next 10 years. Bus's will not, in my opinion, provide the necessary capacity that this will need as we continue to grow. Let's do this right from the start so we're not having to reevaluate/rebuild in the future.
21-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	
21-Nov-19		no	no	Light Rail Transit (LRT)	yes	

4-Dec-19		yes	yes	Light Rail Transit (LRT)	yes	I believe the extension to Southpark Meadows is crucial. It would serve as a hub, greatly increasing access. North Austin would have 4 rail lines, South Austin needs at least 1 that goes all the way.
22-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	
15-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	
22-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	Bus isnt going to get people out of their cars. Rail will. I don't care how much it costs, this is an investment in our children being able to still live in the city of austin
15-Nov-19		yes	yes	Bus Rapid Transit (BRT)	no	
22-Nov-19		yes	yes	Either LRT or BRT	yes	
22-Nov-19		yes	yes	Either LRT or BRT	yes	
22-Nov-19		yes	yes	Light Rail Transit (LRT)	no	
23-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	Light Rail for BOTH lines (Orange and Blue). Shared bridge on S 1st Street. In favor of a downtown tunnel, however, am also enthusiastic with street-level for downtown to save costs.
16-Nov-19		yes	yes	Either LRT or BRT	yes	
25-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	
17-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	
17-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	Light rail transit is far more comfortable, reliable and scaleable than any bus rapid transit system. Further, it is more environmentally sustainable than buses as vehicles typically last far longer and do not require large amounts of batteries to be manufactured. It would require lower driver costs to run 2-3 car trains than to run 4-6 buses to reach the same number of riders. We need to go big in order to work towards a lower climate impact! Including the downtown tunnel at least on the orange line would be critical to ensuring reliability and scaleability.
25-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	Compared with a tunnel, I would rather have LRT -it's not just a BRT/LRT decision. Additionally, more cars (BRT or otherwise) is not a great long term solution
17-Nov-19		yes	yes	Light Rail Transit (LRT)	no	The projected BRT vs LRT operational costs presented are not in line with comparable cities. The orange line must have LRT to be successful. https://informatx.org/2019/11/13/project-connect-o-and-m/
18-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	
18-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	
26-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	
18-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	I believe some form of medium capacity metro like the Skytrain Expo line in Vancouver would be ideal. It's frequent, quick, and has dedicated pathways. Additionally, I hope the lines serve more of South Austin, because as far as LRT/BRT plans go, it is fairly negligent of South Austin.
26-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	

26-Nov-19		yes	yes	Either LRT or BRT	yes	
26-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	Stop trying to fix the game by inflating the value of BRT. This is a system that is too easy to compromise away a little bit at a time and we will end up with nothing more than another 801 or 803. We NEED LRT to run the length of the city along Guadalupe/Lamar. We NEED to transition away from single occupancy vehicles and that will mean taking away car lanes. Good, let's get on with it and build light rail now!
26-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	Please bring Light Rail Transit to the Orange Line Corridor. I live near the Tech Ridge and Braker stations and I work in the Capitol area. I would take the light rail every single day. I have tried to utilize the BRT existing transportation option along the Lamar corridor but it does not meet my daily commuting needs the way Light Rail Transit would. The people of Austin want more Light Rail Transit. With the number of new residents (and all of their cars) moving to Austin daily and clogging our roadways further, more buses are not the answer. It is long past time for the City of Austin to invest in Light Rail Transit. The people of Austin want Light Rail Transit if only Capitol Metro can put together some proposed routes that actually make sense and are inclusive (for example go to the airport). The Orange Corridor is a well-thought out proposal and I know Light Rail Transit would not only see high use from those of us living in North Austin and North Central Austin but it would also spur to further redevelop our area of town and make it more attractive to folks looking to live more centrally and affordably. A functioning, inclusive and comprehensive, timely Light Rail Transit system is the biggest missing link to make Austin a more connected and affordable place to live and work not to mention a truly great city in the US and around the world.
18-Nov-19		yes	yes	Either LRT or BRT	yes	
26-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	
18-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	

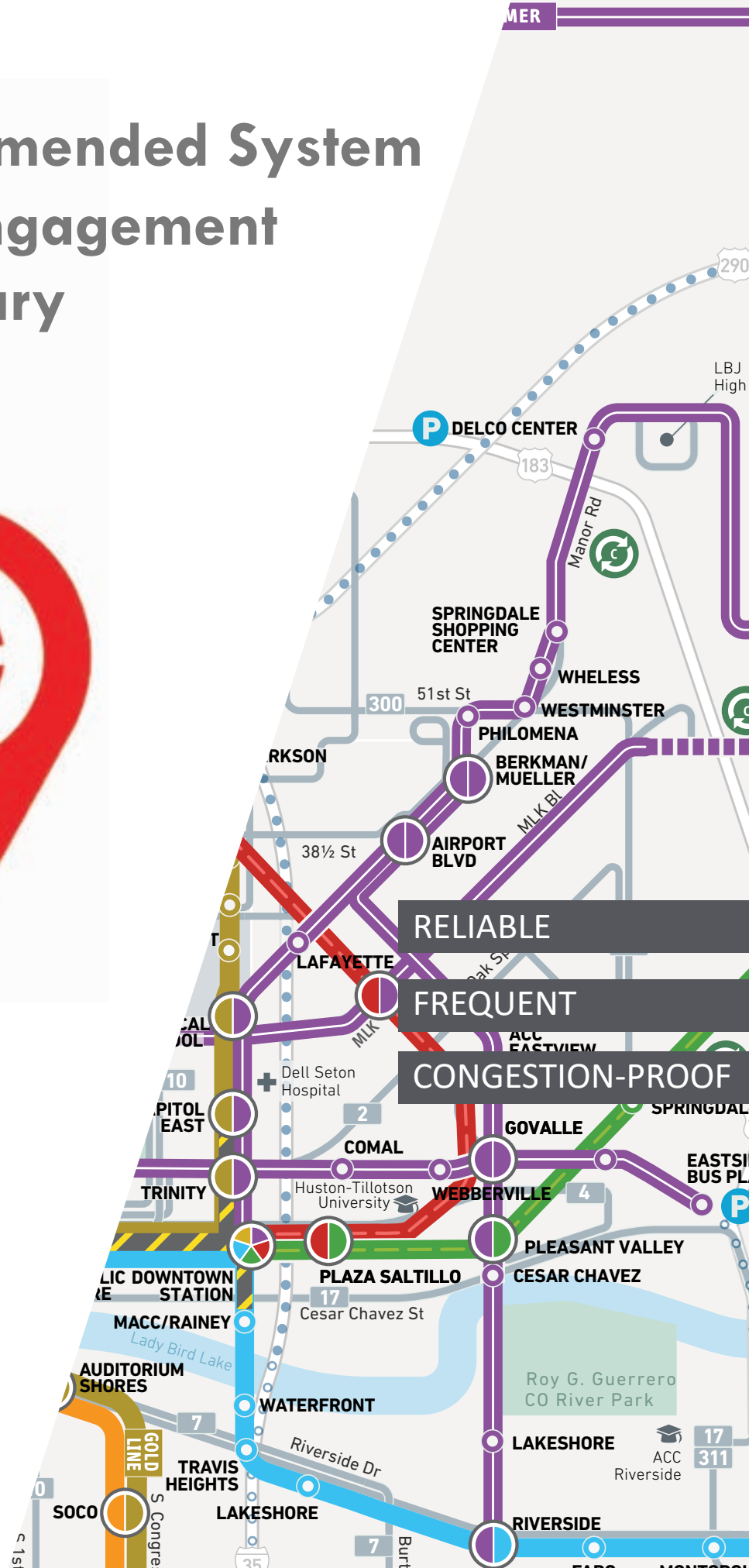
28-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	It seems that very similar service could be provided by having a station at Congress/Riverside, then tunneling under the Statesman site to the Blue Line bridge in its Trinity crossing alignment. If this could save cost by eliminating the extra river crossing, those funds could be used to extend the downtown tunnel farther north on Guadalupe or extend phase 1 service north to Rundberg, which has a high density of low income households, who could benefit greatly from the service. I think that a tunnel under the drag is by far the best way to get through that area. It seems like it would be difficult to have dedicated at-grade transitway, travel lanes, and safe, high quality bike lanes in the available surface space on the drag.
29-Nov-19		yes	yes	Light Rail Transit (LRT)	no	Light Rail for both Orange and Blue Lines! Shared crossing on S 1st Street. Street level is fine for entire route (downtown tunnel is cool, but could it be done for cheaper? Why \$1 Billion?). Build the FULL line (work with TxDOT!), don't wait for "future planned expansion" to serve the community!
29-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	Tunnel needs to be much longer - south of the river (no space for tunnel portal north of the river without killing the downtown street grid's walkability) to north of the Drag. Yes, it's more expensive, so get the money by not building any of the separate Blue Line alignment north of the river (Blue Line should just go from ABIA down Riverside and then share the same alignment as the Orange Line the whole length north on Guadalupe and Lamar...that's where people want to go, not the dead eastern half of UT and boring Highland that voter already rejected). This would also double frequency on the most important half of the Orange Line.
29-Nov-19		yes	yes	Light Rail Transit (LRT)	yes	I believe that LRT, although it costs more, would be more appealing to the general public. The capacity is higher and it seems like a more modern and future-proof option over BRT. I think an optimal system would utilize smaller vehicles that run at a much higher fre
3-Dec-19		yes	yes	Light Rail Transit (LRT)	no	LRT please! If possible, build the whole line in one go. Folks in the north and south areas are already relying on the 801, so it doesn't make sense to exclude them from the rail line, and make them wait for a vague future expansion.
3-Dec-19		yes	yes	Either LRT or BRT	yes	
20-Nov-19		yes	yes	Bus Rapid Transit (BRT)	yes	High quality buses with good ventilation and adequate seating is a better & quicker investment.
3-Dec-19		yes	yes	Light Rail Transit (LRT)	yes	
3-Dec-19		yes	yes	Either LRT or BRT	yes	
4-Dec-19		yes	yes	Light Rail Transit (LRT)	yes	

4-Dec-19		no	no	Bus Rapid Transit (BRT)	no	No confidence in capital metro leadership or staff too successfully implement a 'new' mode of transportation. Funding seems to be an exercise in make believe.
4-Dec-19		yes	yes	Either LRT or BRT	no	
4-Dec-19		yes	yes	Light Rail Transit (LRT)	yes	
4-Dec-19		yes	yes	Either LRT or BRT	yes	The southern end upto Slaughter Lane should not be a dotted line. This stretch should be part of regular line. The area near south park meadows is highly populated and will use the ornage line regularly. Please consider that section as part of regular line and not an optional extension.
4-Dec-19		yes	yes	Either LRT or BRT	yes	
5-Dec-19		yes	yes	Either LRT or BRT	yes	
5-Dec-19		yes	yes	Light Rail Transit (LRT)	yes	
5-Dec-19		yes	yes	Light Rail Transit (LRT)	no	
5-Dec-19		yes	yes	Light Rail Transit (LRT)	yes	
5-Dec-19		yes	yes	Light Rail Transit (LRT)	yes	Go BIG. Build the entire line as light rail from Tech Ridge to Slaughter. Build a downtown tunnel to ease congestion (particularly Republic Square). Maybe build elevated line near UT Campus and other tight street spots. After that, build either street-level or elevated, as long as it's financially sound and able to expand with Austin's population!
6-Dec-19		yes	yes	Bus Rapid Transit (BRT)	yes	8000 more potential riders does not justify the \$2B higher price tag.
6-Dec-19		yes	yes	Light Rail Transit (LRT)	yes	I prefer the LRT option over the BRT option because it has/is: * Higher expected ridership * Higher maximum ridership capacity * Less likely to be re-routed, either on a given day or as a semi-permanent route change in the future * Less likely to be compromised with other non-transit vehicle usage * Easier and more likely to accommodate smooth rides, e.g. for individuals to do work while riding * More likely to inspire voters in Nov. 2020 general election

6-Dec-19		yes	yes	Light Rail Transit (LRT)	yes	<p>As a current car commuter, I am unlikely to buy into a bus-focused transit solution. I lived in Center City Philadelphia three years ago and commuted exclusively by heavy rail and bike and sold my vehicle due to the ease of use. The bus routes there were unreliable and when I needed to go east to west from where I lived, there was a bus route that would take me exactly where I needed to go in a very straight line. I took that bus a handful of times and resorted more frequently to taking one subway line and transferring to the other as a result of frustrations with the bus's reliability. That was at a time when the City had an app showing bus locations that should have made it easy for me to depart my home and get to the bus stop without having to wait 20 minutes. It too was unreliable. Dedicated pathways are one thing, but rail lines, even when sharing space with traffic, attract more riders if the rail lines travel through the right locations.</p>
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Recommended System Plan Engagement Summary



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1.0 Engagement Approach

The Capital Area Metropolitan Transit Agency (CapMetro) is working with the community to develop a new, comprehensive transit vision to improve existing transit services and develop new, high-capacity public transportation projects that provide efficient travel options into, out of and around Central Texas. In preparation of the adoption of Project Connect Recommended System Plan, CapMetro developed a series of traditional outreach approaches, including stakeholder meetings and open houses.

In March 2020, the City of Austin issued a Stay Home - Work Safe Order ordering residents to stay at home and prohibited gatherings of any number of people occurring outside a single household or residence unless deemed essential. In response to public health guidelines, Project Connect outreach scheduled for the months of March and April was postponed. It was imperative that CapMetro concentrated their efforts to serve and ensure the safety of Austin residents and its essential workers during the crisis.

To make up for the postponed Project Connect Community Open Houses, CapMetro planned and conducted a series of remote virtual community meetings (VCM), launched a nearly month-long virtual open house (VOH) designed to let community members see the latest information on Project Connect and to provide feedback from the comfort of their own homes throughout May 2020, and carried out additional remote stakeholder meetings through FM radio, Youtube live stream and Zoom.

The VOH opened on May 7 and closed May 31. The primary source of information was housed online as part of the VOH in both English and Spanish. Included in the VOH was general information, information on the different elements proposed in the Recommended System Plan, feedback opportunities including a comment form and survey and details of what to expect moving forward.

A condensed presentation of this information and the opportunity for live questions and answers in both English and Spanish were made available as part of the VCMs on both Zoom and Facebook Live. The meetings included information on the response to COVID-19, an overview of Project Connect, partnership opportunities between the City of Austin and CapMetro and funding possibilities. The meetings also included an approximate 30-minute live question and answer session with CapMetro Board Members and City of Austin leadership, including the Mayor and City Council Members. Staff from both agencies participated to provide technical information.

These meetings were available to view live on both Zoom and Facebook Live. For those unable to attend live, the meetings were archived and made available on CapMetro's Facebook page and on YouTube via ProjectConnect.com. A meeting conducted in Spanish was also available live on Univision62's Facebook page, and the Citywide meeting was available on ATXN. Questions not answered during the live meetings were answered in writing and made available in both English and Spanish on ProjectConnect.com. Comments provided online were also recorded. Outreach prior to the meetings included a variety of methods including print ads, radio, direct online and social media. The meetings were held May 15, 18, 19, 20, 21, 26, 28 and 29.

2.0 Engagement Goals

The goal of this round of community engagement was to connect the community to information on the draft Project Connect Recommended System Plan for their comment and feedback prior to its adoption. Outreach tools were selected and designed to be responsive to Austin's Stay Home – Work Safe Order and engage stakeholders of different gender, ethnicity, income level and interest in transit.

3.0 Virtual Open House and Virtual Community Meetings Overview

Through the month of May, CapMetro hosted a series of virtual engagement opportunities for Austin and the Central Texas region.

This engagement included a Virtual Open House, a self-guided online experience, to walk visitors through Project Connect's recommended system plan and provided an opportunity to give feedback. This Virtual Open House was live and open to the public from May 7 through May 31.

Additionally, CapMetro continued its engagement through a series of one-hour Virtual Community Meetings. These provided an update on the COVID-19 response, shared information on the Project Connect recommended system plan and concluded with a public question and answer session with Austin City Council members and CapMetro's board and staff. This series ran from May 15 to May 29 for a total of nine meetings, including one Spanish language meeting hosted by Univision. A full list of events and corresponding information is included in Table 1 below.

Table 1. Event Information

Name	Platform	Event Date/Time
Project Connect Virtual Open House	Project Connect website: https://www.capmetroengage.org/en/engage/ment-initiatives/project-connect-virtual-open-house	Thursday, May 7 – Sunday, May 31
Virtual Community Meeting: District 4 & 7	Zoom Webinar & Capital Metro’s Facebook Live	Friday, May 15, 2020, 2 PM
Virtual Community Meeting: District 1	Zoom Webinar & Capital Metro’s Facebook Live	Monday, May 18, 2020, 1 PM
Virtual Community Meeting: District 9	Zoom Webinar & Capital Metro’s Facebook Live	Tuesday, May 19, 2020, 5 PM
Virtual Community Meeting: District 6	Zoom Webinar & Capital Metro’s Facebook Live	Wednesday, May 20, 2020, 11 AM
Virtual Community Meeting: District 10	Zoom Webinar & Capital Metro’s Facebook Live	Wednesday, May 20, 2020, 5 PM
Spanish Language Virtual Community Meeting	Univision 62’s Facebook Live	Thursday, May 21, 2020, 6 PM
Citywide Virtual Community Meeting	Zoom Webinar, Capital Metro’s Facebook Live & ATXN	Tuesday, May 26, 2020, 11 AM
Virtual Community Meeting: District 5 & 8	Zoom Webinar & Capital Metro’s Facebook Live	Thursday, May 28, 2020, 6 PM
Virtual Community Meeting: District 2 & 3	Zoom Webinar & Capital Metro’s Facebook Live	Thursday, May 29, 2020, 2 PM
COMTO Austin Project Connect Lunch & Learn	Zoom Meeting	Tuesday, June 2, 2020
Dialogue Austin	Zoom Meeting & Youtube Live Stream	Wednesday, June 3, 2020
Radio Virtual Community Meeting: KAZI “The Forum”	88.7 FM Radio	Wednesday, June 3, 2020, 5PM

4.0 Event Notifications, Media Coverage and Outreach

CapMetro utilized email notifications, e-newsletters, social media posts, virtual flyers and paid advertising in local newspapers and radio stations to increase participation in the Virtual Open House (VOH) and Virtual Community Meetings (VCMs). Several of the materials were translated into Spanish. Broad outreach for Project Connect was also conducted across the community to raise awareness about Project Connect. Clips of media coverage, radio ad scripts, social media posts, e-newsletters and other outreach materials related to the VOH and VCMs are included in Appendix 4.

Table 2. Event Notification and Media Coverage

Notification	Dates	Approximate Number of Recipients
Newspaper Advertisements	<ul style="list-style-type: none"> Community Impact Central Austin: April 2020 Community Impact Central Austin: May 2020 Community Impact NW Austin: April 2020 Community Impact NW Austin: May 2020 Community Impact SW Austin: April 2020 Community Impact SW Austin: May 2020 Austin American–Statesman Austin Chronicle: May 8, 2020 Austin Villager: May 8, 2020 El Mundo: May 7, 2020 La Prensa: May 7, 2020 	1,430,000+
Press Release	<ul style="list-style-type: none"> Virtual Open House: May 7, 2020 Virtual Community Meetings: May 13, 2020 	N/A
Earned Media Interviews	<ul style="list-style-type: none"> Austin Chronicle: May 15, 2020 Austin Chronicle: May 21, 2020 CBS Austin: May 26, 2020 Community Impact NW Austin: May 2020 Fox 7 Austin: May 7, 2020 KUT: May 15, 2020 Statesman: May 15, 2020 	1,430,000+
Newsletter	<ul style="list-style-type: none"> May 7, 2020 	4,094
E-Blast	<ul style="list-style-type: none"> May 14, 2020 May 20, 2020 	4,055 4,099
Radio Advertisements	<ul style="list-style-type: none"> KUT/KUTX: May 7 to May 21,2020 KOOP: May 7 to May 21,2020 KAZI May 7 to May 21,2020 	650,000+
Social Media Posts	Posts between May 7, 2020 and May 29, 2020	250,000+

5.0 Engagement Results: Attendance and Statistics

The results of the Virtual Open House, Virtual Community Meeting series, and additional stakeholder events have been incorporated into the Project Connect Community Engagement Dashboard, which tracks community events hosted and attended, and shows comments received and feedback sources.

The results are shown in the graphs and tables below.

Table 3. Overall Engagement Results

Event	Date	Total Engaged	Total Submissions	Number of Unique Zip Codes	Zip Codes Represented
Virtual Open House	May 7 – May 31, 2020	3,574	1,346	49 ³	Appendix 3
Virtual Community Meetings	May 15 – May 29, 2020	13,769 ¹	280 ¹	62 ⁴	Appendix 3
Additional Stakeholder Outreach	June 2 – June 3, 2020	354 ²	-	-	-
TOTAL	N/A	17,697	1,626		

¹Indicates totals questions and comments as of June 1, 2020 at 10:00AM

²Total engaged included for KAZI is the average listener sessions at 5PM in April

³Representative of unique zip codes provided from survey submissions

⁴Representative of unique Zoom participants' zip codes

Table 4. Virtual Open House Engagement Results

Event	Date	Total Views	Total Unique Views	Average Time Engaged	Total Survey Responses
Virtual Open House	May 7 – May 31 2020	4,681	3,574	3 minutes	1,346

Table 5. Virtual Community Meeting Engagement Results

Virtual Community Meeting	Date	Zoom Attendees	Facebook Live Views	YouTube Views	Total
Virtual Community Meeting: District 4 & 7	Friday, May 15, 2020, 2 PM	86	893 ¹	54 ¹	1,033
Virtual Community Meeting: District 1	Monday, May 18, 2020, 1 PM	71	1,060 ¹	40 ¹	1,171
Virtual Community Meeting: District 9	Tuesday, May 19, 2020, 5 PM	108	703 ¹	50 ¹	861
Virtual Community Meeting: District 6	Wednesday, May 20, 2020, 11 AM	33	1,800 ¹	22 ¹	1,855
Virtual Community Meeting: District 10	Wednesday, May 20, 2020, 5 PM	35	1,100 ¹	N/A	1,135
Spanish Language Virtual Community Meeting	Thursday, May 21, 2020, 6 PM	N/A	3,300 ¹	63 ¹	3,363
Citywide Virtual Community Meeting	Tuesday, May 26, 2020, 11 AM	113	2,600 ¹	16*	2,729
Virtual Community Meeting: District 5 & 8	Thursday, May 28, 2020, 6 PM	72	668 ¹	2 ¹	742
Virtual Community Meeting: District 2 & 3	Thursday, May 29, 2020, 2 PM	55	820 ¹	5*	880
TOTAL	N/A	573	12,944 ¹	252 ¹	13,769

¹Indicates total views as of June 1, 2020 at 10:00AM

Table 6. Additional Stakeholder Outreach Engagement Results

Event	Date	Zoom Attendees	YouTube Views	Radio Listener Sessions	Total
COMTO Austin Project Connect Lunch & Learn	Tuesday, June 2, 2020	32	-	-	32
Dialogue Austin	Wednesday, June 3, 2020	-	168	-	168
Radio Virtual Community Meeting: KAZI “The Forum”	Wednesday, June 3, 2020, 5PM	-	-	154 ¹	154
TOTAL	N/A	32	168	154	354

¹ Indicates the average listener sessions at 5PM in April

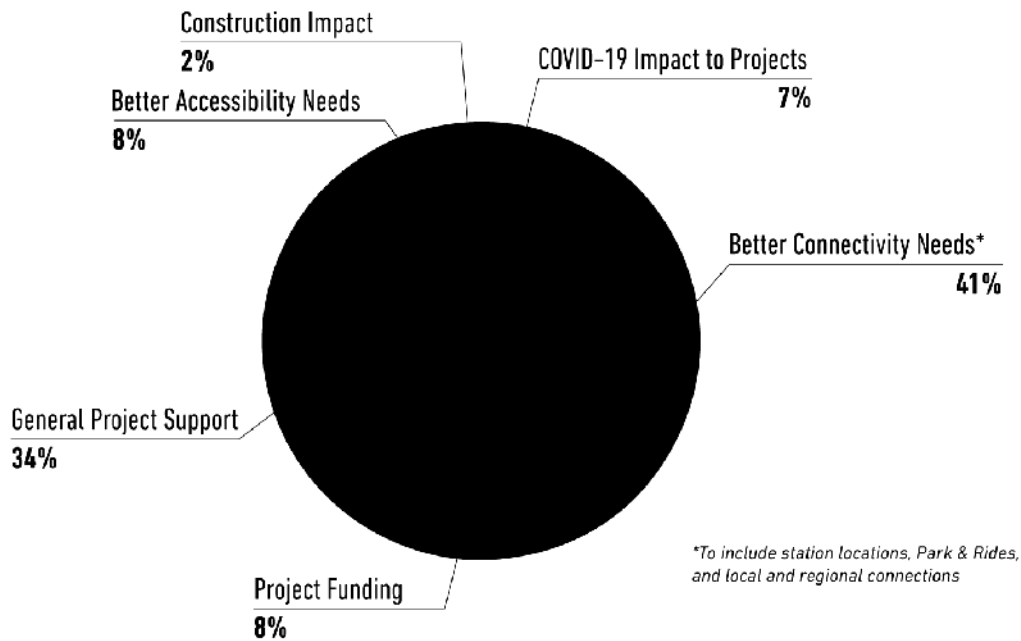
6.0 What We Heard

CapMetro offered participants the opportunity to comment and ask questions through two channels throughout the month of May 2020. These included a Virtual Open House and a series of Virtual Community Meetings.

6.1 Virtual Open House

The Virtual Open House offered participant surveys and an opportunity to share comments on the Project Connect system plan and to learn more about each of the project elements to include the Orange, Blue and Gold Line light rail corridors, MetroRapid, the local and regional connections, the downtown tunnel and Red and Green Line commuter rail. The following sections include more detail on survey results and comments received, and comments are available in their entirety in Appendix 5.

Figure 1. Virtual Open House Areas of Interest



• Recommended System Plan

Survey Question

1. The Recommended System Plan connects neighborhoods to activity and employment centers with a better more accessible transit service.

Figure 2. Recommended System Plan Survey Results

Overall, 90% agree that the Recommended System Plan connects neighborhoods to activity and employment centers with a better more accessible transit service.



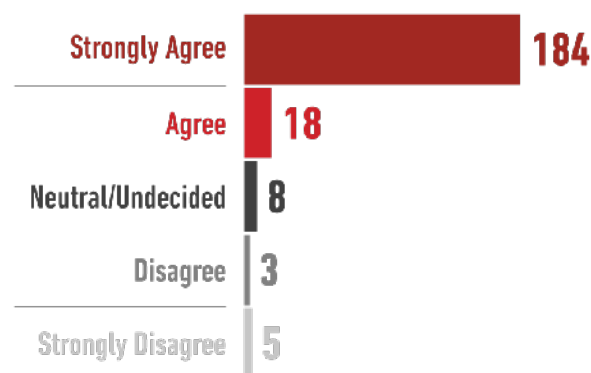
• Orange Line

Survey Question

1. Austin should build the Orange Line Light Rail that would operate in a 21-mile dedicated transitway and include 22 stations from Tech Ridge on the northern end of the corridor to the South Park Meadows on the southern end of the corridor.

Figure 3. Orange Line Survey Results

Overall, 92% agree the Orange Line should be built.



Written Feedback Summary

Stakeholders expressed general enthusiasm for the Orange Line. Commenters shared thoughts on project phasing at the programmatic level between Orange, Blue and Gold Lines and voiced support for infrastructure that would enhance the use of the Orange Line through bus and bicycle/pedestrian connections as well as parking for vehicles at major hubs.

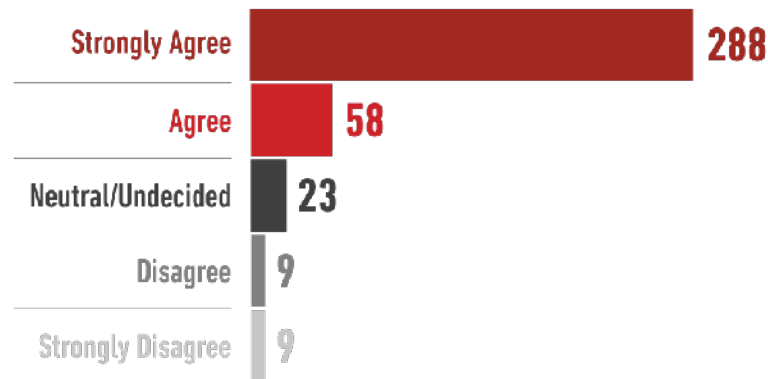
• Blue and Gold Line

Survey Questions

1. Austin should build the Blue Line Light Rail that would operate in a 8.2-mile dedicated transitway and include 11 stations from Republic Square on the northern end of the corridor to Austin Bergstrom International Airport (AUS) on the southern end of the corridor using Trinity Street to cross Lady Bird Lake on a new bridge.
2. Austin should build the Gold Line Light Rail that would operate in a 6.4-mile dedicated transitway and include 10 stations from ACC Highland on the north end of the corridor to Republic Square on the southern end of the corridor that provides connections to the Orange and Blue Lines.

Figure 4. Blue and Gold Line Summed Survey Results

Overall, 90% agree the Blue Line and Gold Line should be built.



Written Feedback Summary

Based on comments received during the Virtual Open House (VOH), commenters expressed support for the Blue Line. Commenters also expressed both support for, and concerns regarding, the Gold Line. Questions and concerns regarding the Gold Line included issues related to costs, ridership, and project phasing. Other comments regarding the Blue Line and Gold Line included suggestions for adding station locations and increased bicycle and pedestrian improvements to increase connectivity, access to amenities and safety.

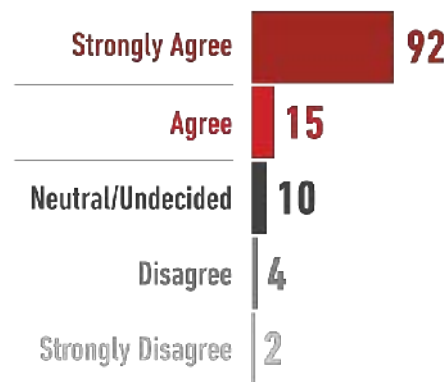
• MetroRapid

Survey Question

1. Austin should create seven new MetroRapid bus routes, providing service every ten to fifteen minutes on major streets like Martin Luther King Boulevard, Pleasant Valley Road, Menchaca Road, 7th Street, Manor Road, Parmer Road, and Dessau Road.

Figure 5. MetroRapid Survey Results

Overall, 87% agree 7 new MetroRapid routes should be created.



Written Feedback Summary

Based on comments received during the Virtual Open House (VOH), commenters were generally in support of the proposed MetroRapid routes. Several of the comments pertaining to MetroRapid were related to the need for better system-wide connectivity, station location and improved MetroRapid Station amenities including shelters, accessibility, walkability, and fare collection/vending. The need for connectivity included connections to and from the proposed Light Rail Transit (LRT) service, as well between individual MetroRapid routes. There were also comments pertaining to improved service throughout South Austin and the growing need for improved cross-town (east-west) service.

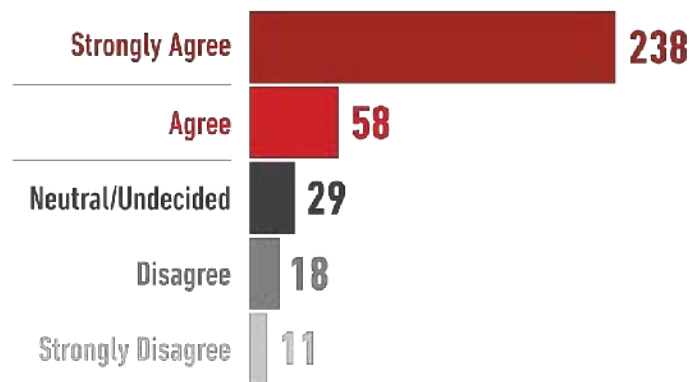
• Commuter Rail

Survey Questions

1. Austin should improve the frequency and capacity of the Red Line Commuter Rail and build additional stations, including one at the new major league soccer (MLS) stadium and another at the Domain.
2. Austin should build the Green Line, a new commuter rail service using existing CapMetro right of way moving east from downtown to Springdale Road, Loyola Lane, and out to Colony Park with potential extension to Manor and Elgin.

Figure 6. Commuter Rail Summed Survey Results

Overall, 84% agree the Red Line should be improved and the Green Line should be built.



Written Feedback Summary

Many people mentioned their satisfaction with the expansion of routes, stops and overall connectivity. Others mentioned concerns about ridership projections in relation to the cost of the Red and Green Lines. Some suggestions included adding more stations within walking distance of neighborhoods and housing developments, adding a grade-separated monorail and expediting construction.

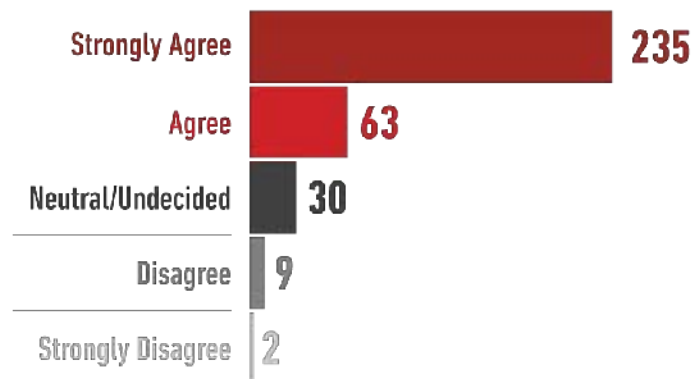
• Regional Connections

Survey Questions

1. Austin should expand MetroExpress to include 8 new routes into new areas such as West to FM 2222 and Loop 360, southwest to Circle C running in new express lanes on South MoPac, out US 290 to Manor, and North to Howard Lane.
2. Austin should build 24 new Park & Rides in areas such as Four Points, Expo Center, Circle C, Oak Hill, McKinney Falls, Lake Austin Boulevard, Slaughter Lane, and Tech Ridge, that provide placemaking opportunities and have improved amenities, allowing commuters to leave their cars and connect to the entire system including downtown.
3. Austin should construct hubs and stations that will provide connections to Commuter Rail, Light Rail, buses, and other mobility services apart and outside of CapMetro services (e.g. city-to-city buses, rideshare, bikeshare and other services).

Figure 7. Regional Connections Summed Survey Results

Overall, 88% agree MetroExpress should be expanded to include 8 new routes, 24 new Park & Rides should be built, and hubs and stations that connect various transit services should be constructed.



Written Feedback Summary

Many of the comments related to Regional Connections were suggestions to add more Park & Rides, transit stations and transit routes. Participants requested expansion of rail and transit service to Oak Hill, Manor, Elgin, Georgetown, Leander, San Antonio and several other areas in the region.

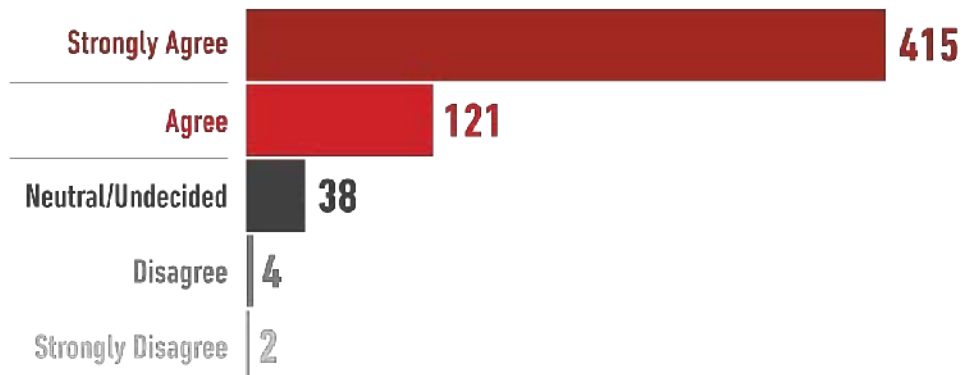
• Local Connections

Survey Questions

1. Austin should continue to move toward a zero-emission, all-electric fleet to address climate change.
2. Austin should improve crosswalks, sidewalks and bike lanes around transit stops and stations.
3. Austin should upgrade bus stops across the city to include improved stop amenities such as shelters.
4. Austin should create a regional reloadable smart card and a mobile application for all mobility payments including transit, bike share, tolls and parking.
5. Austin should invest in neighborhood circulator shuttles, a service that supports connections to the nearest transit hubs and stations without driving, to access the transit system from where people live.

Figure 8. Local Connections Summed Survey Results

Overall, 92% agree the transit vehicle fleet should continue becoming a zero-emission all-electric fleet, bicycle and pedestrian infrastructure should be improved, bus stops should be upgraded, a regional reloadable smart card and mobile application for all mobility payments should be created, and neighborhood circulators should be invested in.



Written Feedback Summary

Many suggestions were given, including increased sidewalk connectivity, credit card/cash payment options for transit, additional bike lanes and paths, stations/hubs within walking and/or parking distance, increased safety at the North Lamar Transit Center and increased east-west connectivity. Participants were excited about expanded transit service, and wanted to ensure increased accessibility for bicyclists and pedestrians.

• Downtown Tunnel

Survey Questions

1. A downtown tunnel benefits the entire network by providing connections that improve the speed and reliability of the entire CapMetro transit system. By allowing these transit lines to operate separate from street traffic, it improves safety for everyone, and allows for futureproofing.
2. As part of Project Connect, the downtown tunnel is a great opportunity for placemaking that will encompass social features including climate control, retail shops, restaurants, public art installations, free Wi-Fi access, and restrooms across multiple stations at Republic Square and other downtown locations.
3. Austin should construct the downtown transit tunnel.

Figure 9. Downtown Tunnel Summed Survey Results

Overall, 89% agree we should construct a Downtown Tunnel that benefits the entire by improving speed, reliability and safety, and should include various social features.



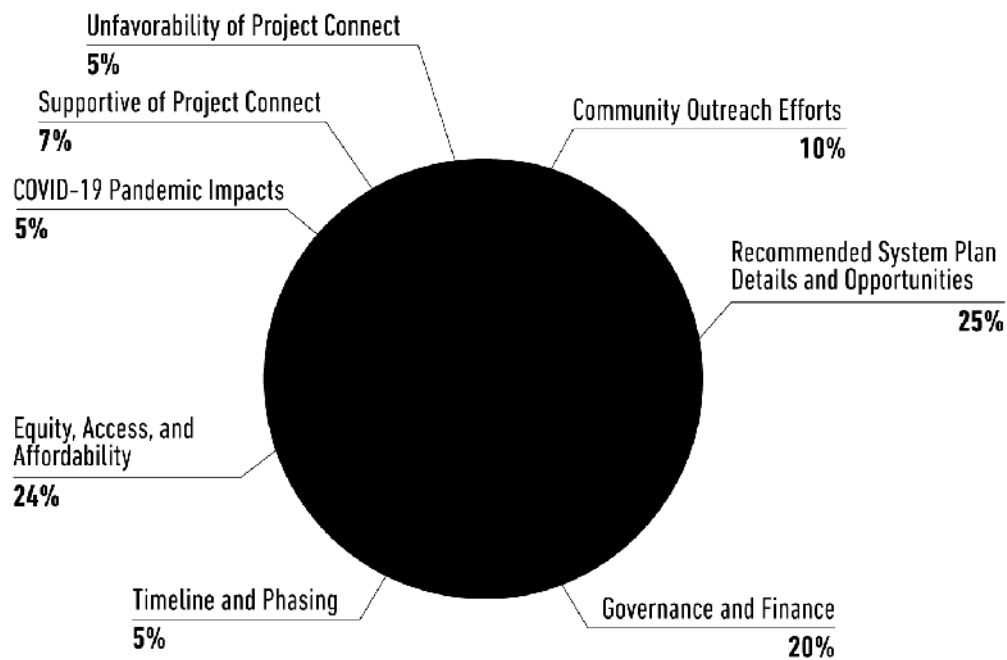
Written Feedback Summary

Several people stated that the tunnel should be considered an essential part of Project Connect. Some participants suggested that the tunnel and its amenities be simplified to reduce cost, whereas others were excited about the planned amenities.

6.2 Virtual Community Meetings

A series of Virtual Community Meetings offered attendees the opportunity to ask questions and share their comments during each meeting. Overall areas of interest are included in Figure 2 and all comments and questions are available for review in Appendix 5.

Figure 10. Virtual Community Meeting Areas of Interest



• **Community Outreach Efforts**

Based on the comments and questions submitted, many individuals were curious to know how CapMetro has previously, is currently and will in the future engage with individuals. On that same note, commenters were also curious about what different ways CapMetro is now engaging with the community that makes this round of transit improvements different from those considered in the last bond referendum. In addition, much of the feedback also pertained to wanting to know more about how they can help promote Project Connect in their communities to ensure the planned improvements become reality.

• **Recommended System Plan Details and Opportunities**

Commenters were generally well-informed on the Project Connect Recommended System Plan. Many inquired about plan details such as Light Rail alignment and connections, Gold Line mode change, Park & Ride locations and the location and features of the Downtown Tunnel. Individuals also had questions and comments regarding the benefits Project Connect provides specifically, job creation, environmental sustainability and congestion reduction.

• **Governance and Finance**

Commenters expressed great interest in wanting to understand funding. Understanding of what would be on a potential bond referendum and how it would impact individuals appeared to be a bit unclear. Individuals had questions regarding what a transit referendum meant, the specific individual cost, who would be affected and the tax's permanence. In regards to federal funding, there was interest in understanding the outcome if more or less than the predicted funding was secured. There was minimal feedback regarding the governance scenario other than the need for greater detail later on.

• **Timeline and Phasing**

Several commenters wanted to gain an understanding of the build timeline and how the build of elements is prioritized. Several commenters also expressed a particular interest in the Green Line and Gold Line plan.

• **Equity, Access, and Affordability**

Individuals expressed great interest in transit access, pedestrian safety, future fare price and affordable housing concerns. Many of the comments related to transit access were specific to East Austin, South Austin and Rainey Street. Pedestrian safety comments and questions were concerning the need for sidewalk improvements. Comments related to affordability were inquiries about future increases in fares, the possibility of free fares for certain individuals and efforts planned to maintain affordable housing throughout Austin but specifically near new transit alignments.

• COVID-19 Pandemic Impacts

Many commenters had questions regarding Project Connect continuing despite the global changes the COVID-19 Pandemic has caused. Several individuals expressed concern regarding local and federal funding, future willingness to use transit and the possibility of less traffic due to individuals working from home. Commenters were divided between the need for the project to continue, need to push the timeline back and no opinion.

• Supportive of Project Connect

Individuals expressed approval of the Project Connect Recommended System Plan, commenting on its necessity, the benefits it will provide and gratitude to all those involved in the process.

• Unfavourability towards Project Connect

Commentators stated frustration with the view of needing transit. Some individuals expressed that increasing roadway capacity would be a better option for Austin while others felt the build timeline was too long.

7.0 What We Heard

Lessons Learned

There were several lessons learned from the Project Connect Virtual Community Meetings. The virtual nature of the meetings had different factors to consider from an in-person event. Questions from the public came in through several different mediums, and CapMetro agreed having a moderator allowed for a more streamlined approach.

CapMetro also noted that it would be beneficial to allow for simultaneous front-facing coordination and technical support hosting to allow for more efficiency during meetings within the platform. Having additional hosts would ensure smoother coordination for guest and presentation management, meeting recording, Facebook connection and closed captioning features.

When it comes to preparing for future meetings, especially those with multiple presenters, CapMetro determined having trial runs in advance is key in order to ensure everyone is familiar with the materials, usage of the virtual platform and meeting logistics.

One feature that CapMetro determined is crucial to ensuring participation is including dynamic content like video and animation to make meetings and presentations more engaging. Also, pre-recorded slides are helpful to have in addition to the static slides so that both can be shared at different points throughout the meeting.

CapMetro also made a note to explore the “upvoting” feature for future meetings. Lastly, establishing a dress code for the team ahead of time ensures that there is consistency in the presentation.

The Virtual Open House (VOH) component has been used to share information and collect feedback throughout different phases of the project. Among the lessons learned for this engagement, it was noted that the Frequently Asked Questions (FAQ) located on the Project Connect website could have been linked as a helpful resource on the VOH. Additionally, a survey question designed to gauge community priorities would have been beneficial.

Next Steps

The next steps in the Project Connect timeline include the adoption of the recommended system plan during a Joint Session of the CapMetro Board and the City of Austin in June of 2020, followed by the establishment of a project oversight committee. A potential transit referendum will be decided in August and may be added to the ballot in November. Project Connect planning and engineering is expected to move forward in early 2021.

Appendix 1: Virtual Open House Materials and Survey

[Home](#) | [Learn More About the Projects](#) | [Share Your Feedback](#) | [What's Next?](#)


Project Connect

[Home](#) | [Learn More About the Projects](#) | [Share Your Feedback](#) | [What's Next?](#)

Project Connect: Virtual Open House

Project Context Overview

Metro is a rapidly changing, fast-growing city with a diverse population. As the population grows, so do the needs for transportation. Metro is committed to providing the community with a modern, efficient, and reliable transit system that meets the needs of all Metro-area residents.



- 1. Accessibility
- 2. A single transportation design
- 3. Operability and safety
- 4. Support for transit
- 5. Customer experience
- 6. Support for agencies
- 7. Intermodality
- 8. Support for transit
- 9. Support for transit
- 10. Support for transit
- 11. Support for transit
- 12. Support for transit

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Learn More About the Projects

Orange Line



Blue Line & Gold Line



MetroLink



Customer Rail



Regional Connections



Local Connections



Orange Line



Orange Line

The Orange Line is a new transit line that will provide a direct connection between the downtown core and the airport. It will be a 10.5-mile line with 10 stations.




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14 MONTHS TO COMPLETION

1.37 TOWERS to be added to DOWNTOWN AUSTIN

1 MILLION FT² of new space to be added



...with a total of 1.37 towers to be added to downtown Austin, and a total of 1 million square feet of new space to be added.

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Blue Line & Gold Line

Learn more about the development of the Blue Line & Gold Line Light Rail System.



What is the proposed Blue Line LRT?

What is the proposed Gold Line LRT?

How do we get there?



...with a total of 1.37 towers to be added to downtown Austin, and a total of 1 million square feet of new space to be added.

Mode Light Rail

BLUE LINE at a glance

- 1.37 miles of track
- 14 stations
- 1.37 towers to be added to downtown Austin
- 1 million square feet of new space to be added

Mode Light Rail

GOLD LINE at a glance

- 1.37 miles of track
- 14 stations
- 1.37 towers to be added to downtown Austin
- 1 million square feet of new space to be added

Blue Line & Gold Line

Learn more about the development of the Blue Line & Gold Line Light Rail System.

What is the proposed Blue Line LRT?

What is the proposed Gold Line LRT?

How do we get there?



...with a total of 1.37 towers to be added to downtown Austin, and a total of 1 million square feet of new space to be added.

Metrolink

Proposed Metrolink

Metrolink



Travel Time

- 1.37 miles of track
- 14 stations
- 1.37 towers to be added to downtown Austin
- 1 million square feet of new space to be added

Metrolink

...with a total of 1.37 towers to be added to downtown Austin, and a total of 1 million square feet of new space to be added.

Metrolink

Proposed Metrolink

Metrolink

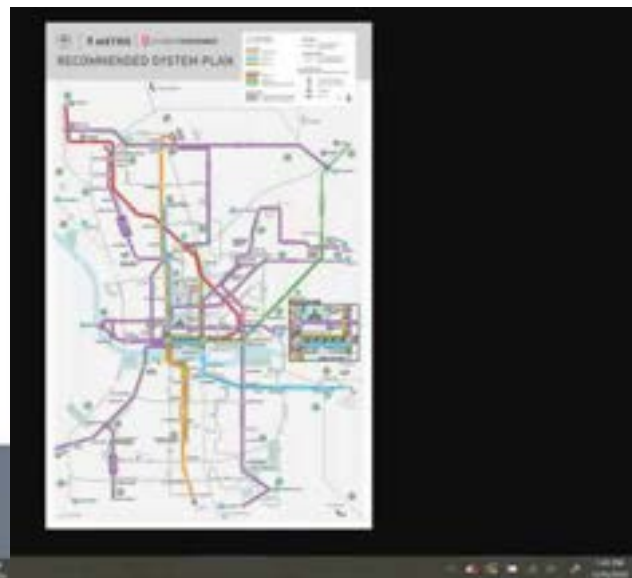


How Do the Metrolink Corridors Fit into the System?

...with a total of 1.37 towers to be added to downtown Austin, and a total of 1 million square feet of new space to be added.

Recommended System Plan

Item	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
1. ...	✓	✓	✓	✓	✓
2. ...	✓	✓	✓	✓	✓
3. ...	✓	✓	✓	✓	✓
4. ...	✓	✓	✓	✓	✓
5. ...	✓	✓	✓	✓	✓
6. ...	✓	✓	✓	✓	✓
7. ...	✓	✓	✓	✓	✓
8. ...	✓	✓	✓	✓	✓
9. ...	✓	✓	✓	✓	✓
10. ...	✓	✓	✓	✓	✓



Downtown Tunnel

The Downtown Tunnel is a key component of the system, providing a direct route through the city center. It will be a 1.5-mile-long, two-lane transit tunnel with a station at each end.




- 1.5 miles long
- Two lanes
- Two stations

Recommended System Plan

Item	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
1. ...	✓	✓	✓	✓	✓
2. ...	✓	✓	✓	✓	✓
3. ...	✓	✓	✓	✓	✓
4. ...	✓	✓	✓	✓	✓
5. ...	✓	✓	✓	✓	✓
6. ...	✓	✓	✓	✓	✓
7. ...	✓	✓	✓	✓	✓
8. ...	✓	✓	✓	✓	✓
9. ...	✓	✓	✓	✓	✓
10. ...	✓	✓	✓	✓	✓



Share Your Feedback

We value your input and encourage you to share your thoughts on the project. Your feedback will help us improve the system and address your concerns.

Name: _____

Address: _____

City: _____

State: _____

Zip: _____

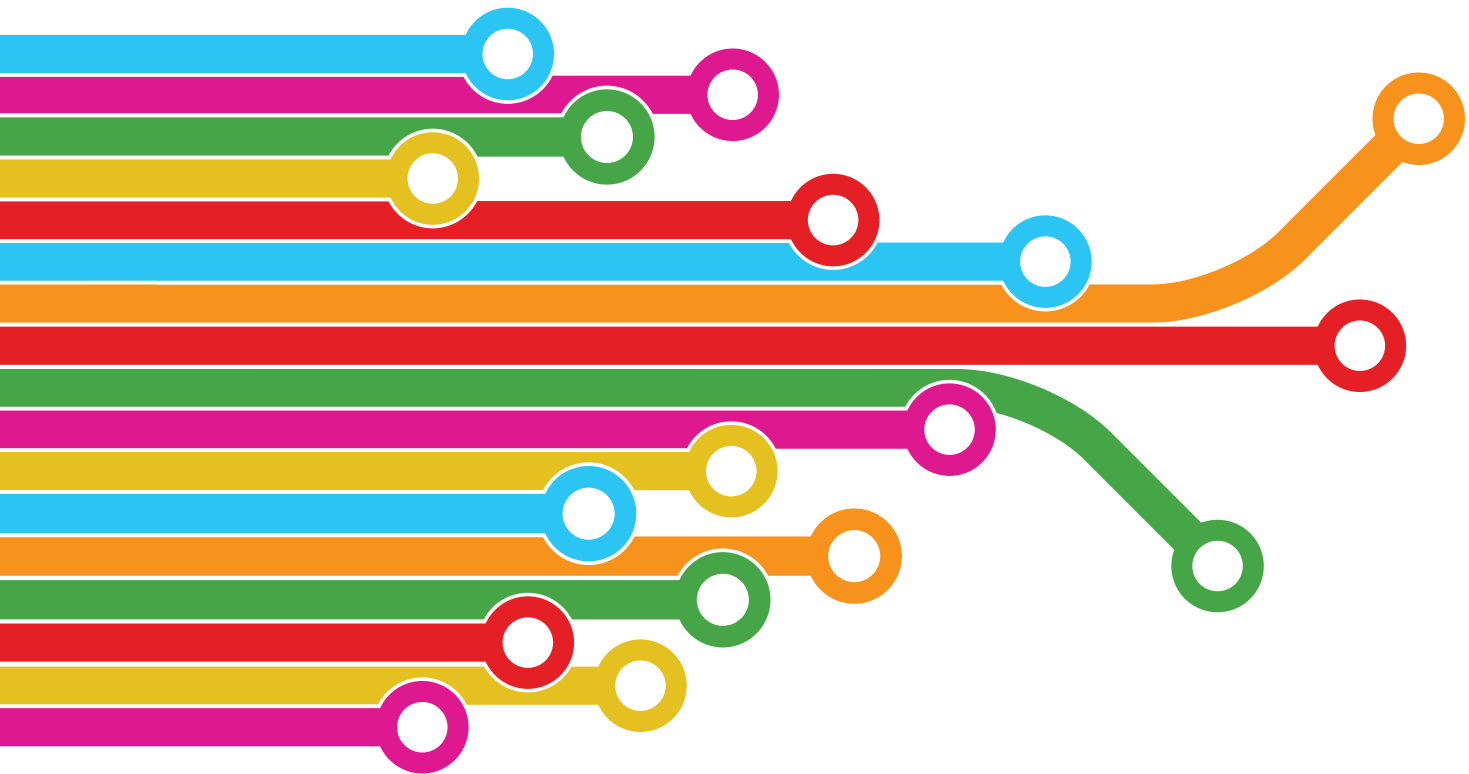
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Email: _____

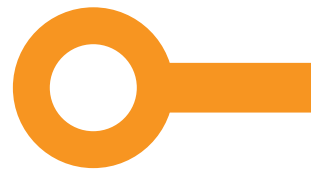
Comments: _____







Your Plan, Your
Orange Line



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METRO



projectconnect

WHY PLAN THE ORANGE LINE

»» THE NEED AND THE VISION

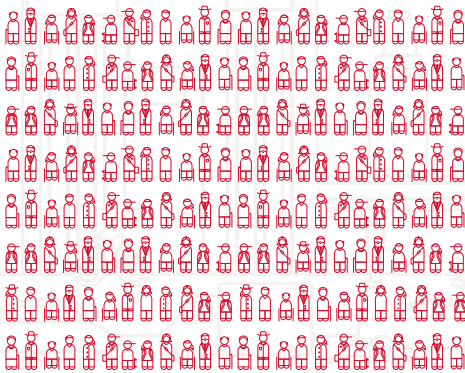
Capital Metro began developing the Project Connect Vision Plan in 2016. The need for the Project Connect vision is the result of Central Texas' booming population which is projected to double by 2040. This growth will cause additional strain on the roadway network, result in increased travel times and travel costs, decrease our mobility, hinder our region's economic health, and threaten our air quality.

In December 2018, the Capital Metro Board of Directors approved the **Project Connect Vision Plan**, which identified corridors for potential investment in High Capacity Transit (HCT), in addition to other improvements like new MetroRapid routes, Red Line improvements, development of the Green Line, additional MetroExpress routes with park-and-rides, and Neighborhood Circulators.

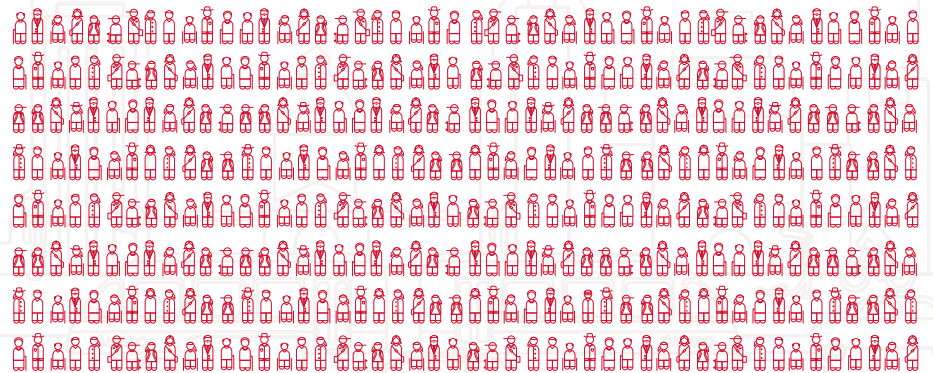
In 2019, the Austin City Council approved the **Austin Strategic Mobility Plan**, which establishes a policy goal to quadruple the share of commuters who use transit by 2039. The Project Connect Vision Plan is included as an integral part of the ASMP, and both initiatives provide a way forward for solving future mobility challenges the region faces.

Constructing and operating HCT is an effective tool to address the region's growth pressures, improve mobility, and connect Central Texans to their travel destinations. HCT will make peak transit travel times faster than peak automobile travel times and create transit service that is reliable. Project Connect is a multi-generational investment and will be planned to accommodate the latest vehicle technology when it comes to market.

2019
Population: **2M+**



2040
Population: **4M+**



»» HOW THE ORANGE LINE FITS INTO THE SYSTEM

The Project Connect Vision Plan identified two HCT corridors - the Blue Line Corridor and the Orange Line Corridor - as the backbone of the future system. Capital Metro initiated the Orange Line Corridor Study in 2019 to better define Orange Line HCT, and to explore how it could advance as an individual investment (to attract federal funds) and as a part of the Capital Metro system (as part of the local and regional planning process). The **Project Connect System Plan** will be significantly advanced following the adoption of the Orange Line Locally Preferred Alternative (LPA).

This document provides an overview of the process used to evaluate HCT in Austin and the path to develop a proposed LPA, including how public and agency input was used to craft the proposed LPA. Key features and benefits of the LPA are illustrated, and future actions on the path toward implementation are outlined.

FUTURE-PROOFING THE SYSTEM

- »» Identifying how the Orange, Blue, and Gold Lines will intersect (serve the same station) or interline (operate on the same portion of tracks)
- »» Considering the costs and benefits associated with building a transit tunnel for the Orange, Blue, and Gold Line
- »» Coordinating with MetroRapid, Red and Green Lines, MetroExpress, and Neighborhood Circulator planning to facilitate connections across the system

CORRIDOR PLANNING & ROUTE EVOLUTION

»» ORANGE LINE CONCEPT DEVELOPMENT

In April 2019, Capital Metro initiated a formal study to investigate the viability of high-capacity transit (HCT) from Tech Ridge in North Austin to Slaughter in South Austin. Based on previous system planning exercises, Capital Metro identified the Orange Line as an approximately 21-mile corridor with 21 stations. Technical evaluation and community feedback determined that Light Rail Transit (LRT) is the preferred mode to serve travel demand on the Orange Line Corridor and to maximize compatibility with the Blue Line & Gold Line.



PROJECT CONNECT ROUTES

The configuration of the LRT system allows for multiple routes to operate in the same corridor – creating many route combinations. The overlap of routes can provide riders more frequent service, or shorter times waiting for a bus or train. The segments that would have overlapping service include:

»» Gold Line/Blue Line overlap on 4th Street between the Downtown MetroRail Station and Republic Square

»» Orange Line/Blue Line overlap between Republic Square and North Lamar Transit Center

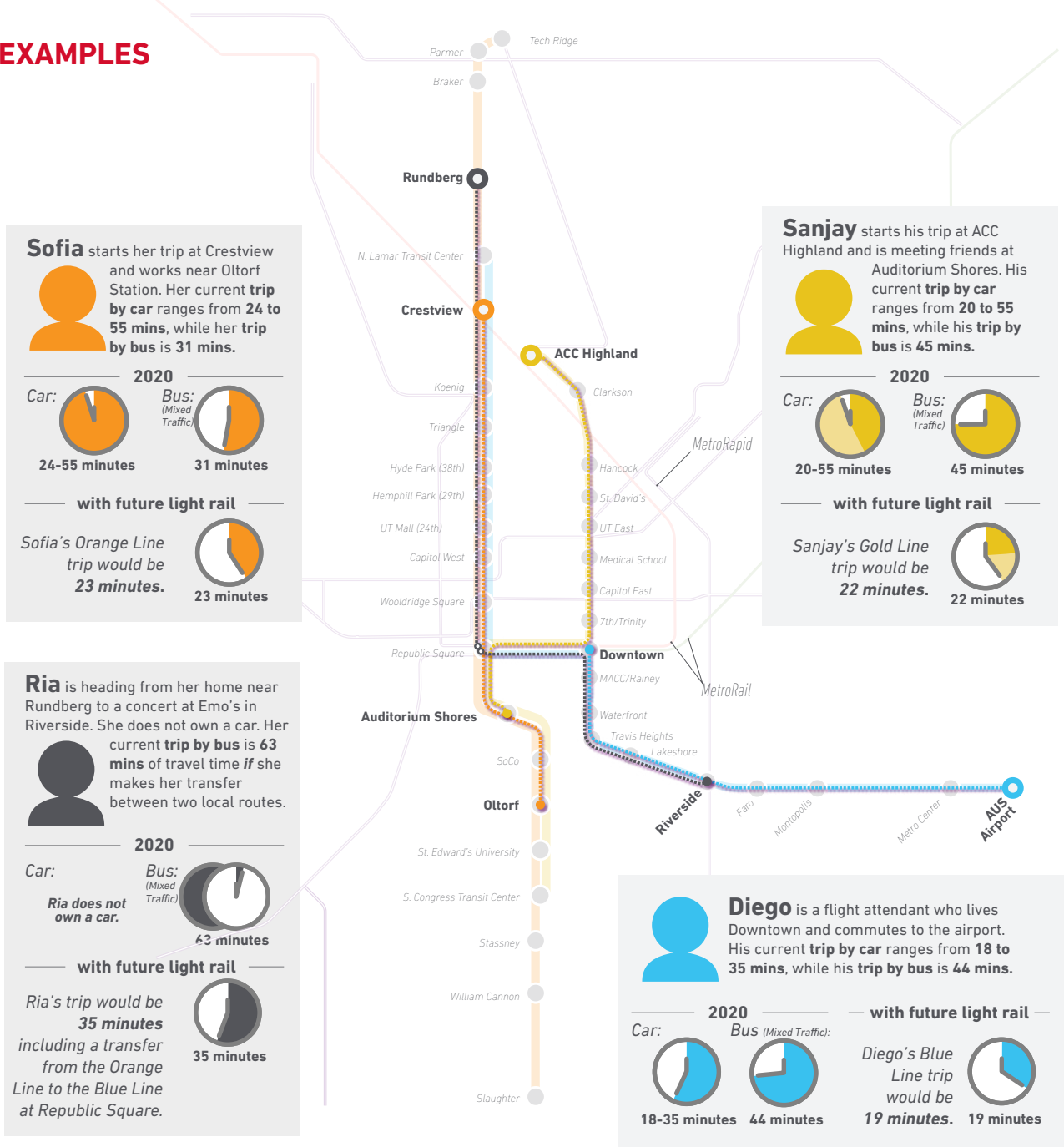
»» Orange Line/Gold Line overlap between Republic Square and South Congress Transit Center

»» BETTER TRANSFERS AT KEY POINTS

The Project Connect program includes a plan to enhance some of Capital Metro's existing transit centers to become inviting places that function as multimodal mobility hubs. Mobility hubs are more than just typical transit stations or park & rides. They are programmed, well-designed places with ample amenities and opportunities to access transportation needs. Successful mobility hubs can help make transit service more welcoming to both daily and occasional riders. The Orange Line is planned to stop at existing transit centers that can evolve to mobility hubs to facilitate ease of system use and route transfers.



»» TRIP EXAMPLES



Note: Car travel time does not include time spent finding a parking space.

EXPLORING OUR OPTIONS FOR A TUNNEL

Depending on the frequency of service and how the LRT system interlines, a downtown tunnel could provide operational benefits. When operating at the street level, the number of trains per hour through a specific intersection (e.g., 4th Street and Guadalupe or Cesar Chavez and Trinity), could adversely affect the transportation network, as other modes wait for the train to pass. Frequency of the trains could be adjusted with longer time between trains to mitigate these effects, but this would limit the capacity of

the system. A tunnel not only avoids street-level conflicts, it also eliminates capacity constraints.

The Project Connect team will continue to study the viability of a transit tunnel during the environmental phase. The estimated cost of the tunnel is \$2-\$2.5 billion dollars. This cost would be shared along with other system-wide costs of the Orange, Blue, and Gold corridors.

» SAFER OPERATION WITH COMPLETE SEPARATION:



A downtown tunnel will provide a safer environment for all mobility modes.

» PLACEMAKING OPPORTUNITIES:



These types of transit spaces could include:

- retail/food
- restrooms
- public art
- AC-controlled environments

» FUTURE-PROOFING:



Allows the system to increase capacity for future service demand.

» IMPROVEMENT IN TRANSIT OPERATIONAL RELIABILITY:

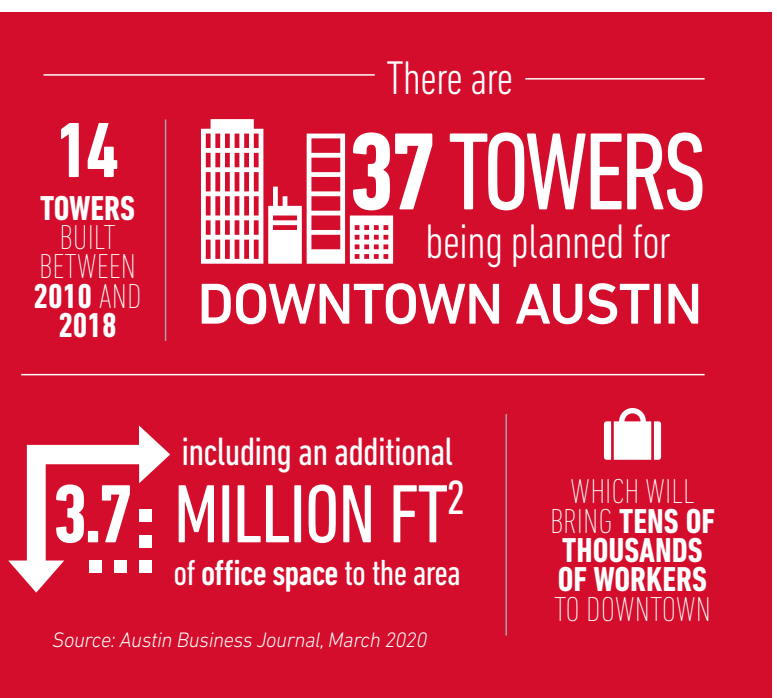


The benefits of grade separation and the elimination of surface conflicts improves travel time reliability and ultimately the quality of the customer's trip for everyone citywide.

» FASTER SERVICE UNDERGROUND:



The downtown tunnel would bypass approximately 20% of surface level traffic signals, which improves speed and reliability of the whole network.



» REDUCTION IN SURFACE CONFLICTS:



With the construction of a downtown tunnel, approximately twenty percent of the intersections could be made conflict free resulting in improved safety, reliability and travel time for all mobility modes, including emergency vehicles.

» EXPANDING TRANSIT FOOTPRINT:



By placing a light rail transit system in a tunnel and expanding the service options of the corridor, one can help maintain the mobility capacity of the corridor and react to the growth and the congestion that comes with it.

HOW IT ALL COMES TOGETHER

LEGEND

- LIGHT RAIL**
- Orange Line
 - Blue Line
 - Gold Line

- METRO RAIL**
- Red Line
 - Green Line
 - Potential Future Extension

- METRO RAPID**
- Enhanced MetroRapid Route
 - Potential Future Extension

METROBUS

- Current Frequent Local Routes

METRO EXPRESS

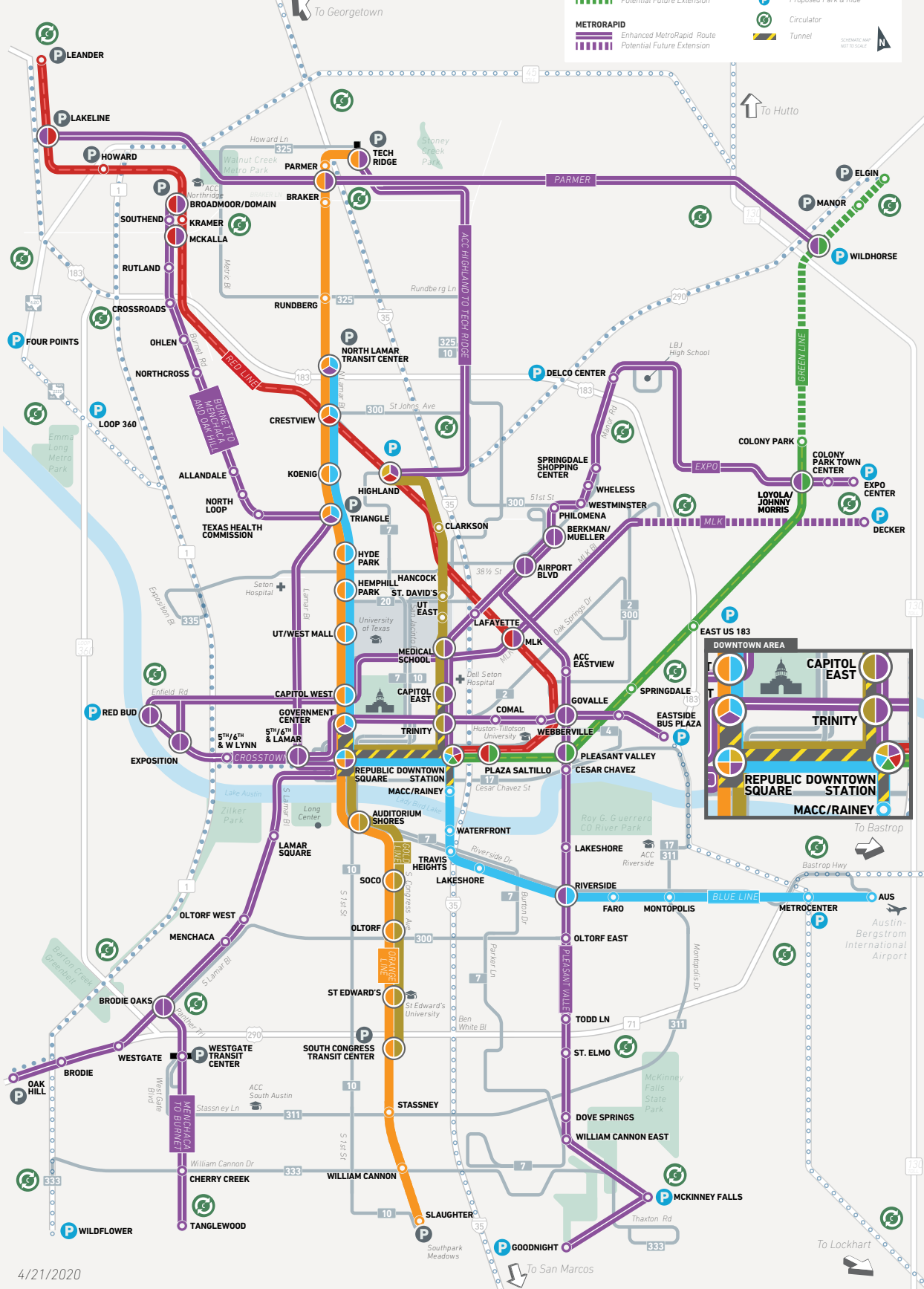
- Current MetroExpress
- Future MetroExpress

METRO ACCESS

- Available within CapMetro service area

- Current Park & Ride
- Proposed Park & Ride
- Circulator
- Tunnel

SHOWN AS NOT TO SCALE



4/21/2020

»» WHAT IS A LOCALLY PREFERRED ALTERNATIVE?

LPA is the technical term that the Federal Transit Administration (FTA) uses to describe a community-selected transit investment that is seeking federal capital funds. Project Connect will seek Federal funding in line with recent trends in Capital Investment Grant authorizations under the New Starts Program. The program will consider awarding up to 50 percent. An LPA, or project, is made up of a route, transitway, vehicle,

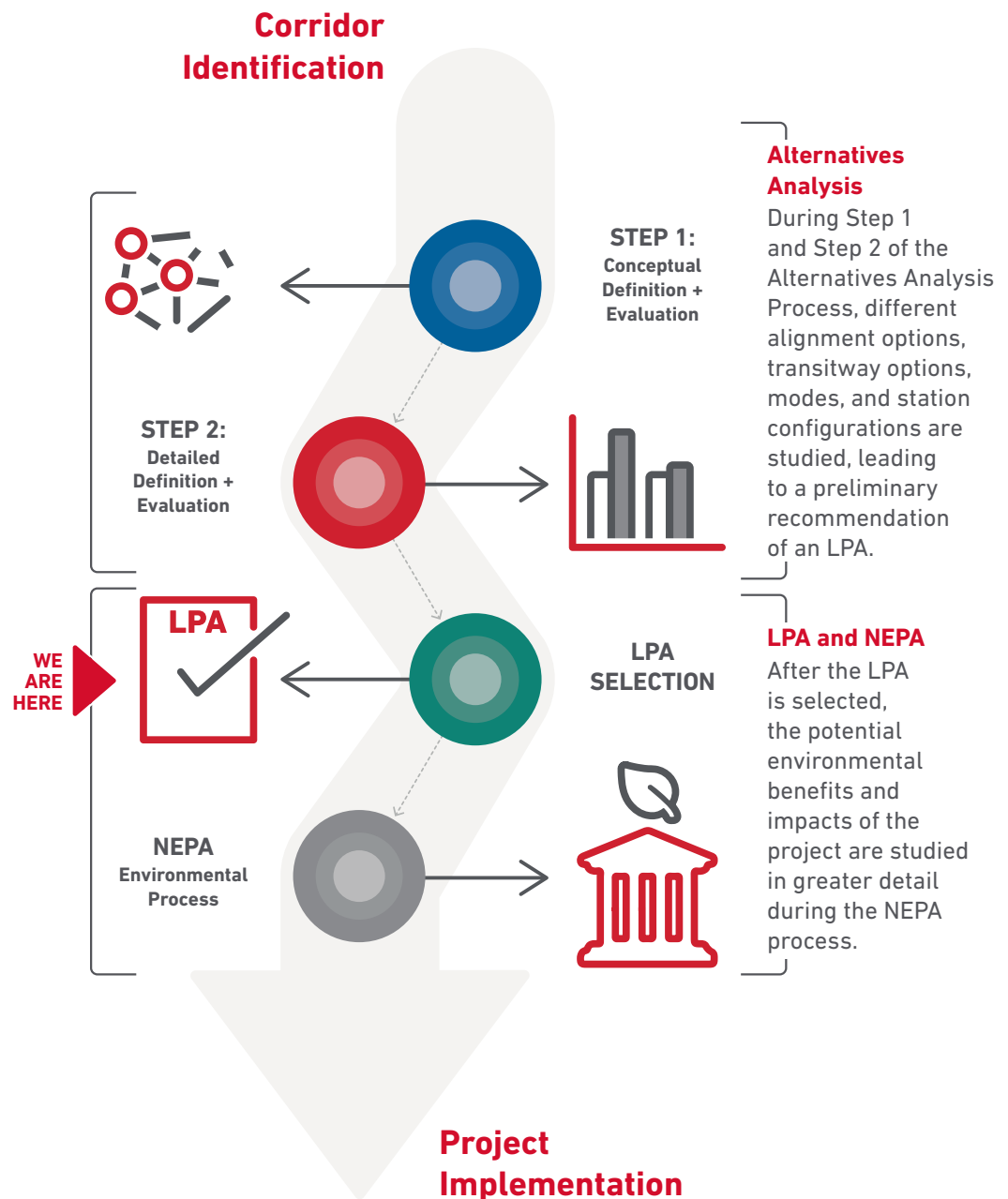
service plan, and any required support infrastructure (tracks, stations, and maintenance facilities). The LPA may be broken into phases for implementation.

Capital Metro is working with stakeholders across the region to identify individual LPAs for each of the Project Connect transit investments that are seeking capital funding from the FTA.

HOW WE GOT HERE

»» THE PROCESS

The Orange Line Corridor Study has used a phased approach, in conjunction with guidelines set by the FTA. The process is structured as a tiered screening, where alternatives are defined, evaluated, and refined or eliminated in each step of the process. The result is a proposed LPA that will be further refined in the National Environmental Policy Act (NEPA) process and future project phases.



WHO IS INVOLVED



COMMUNITY LEADERS

Public input has been essential to the development of the LPA. Capital Metro has worked with the Project Connect Ambassador Network (PCAN), made up of more than 150 community organizations and stakeholders to provide input through a community lens.



PARTNER AGENCIES

Throughout the process, Capital Metro regularly convened a Technical Advisory Committee (TAC) of public agency staff members from local cities, counties, transportation agencies and other entities to provide technical feedback related to the project. TAC members included:

- The City of Austin and the Austin Transportation Department
- Texas Department of Transportation (TxDOT)
- Capital Area Metropolitan Planning Organization (CAMPO)
- Travis County
- ...and many others



YOU, THE PUBLIC

To date, Capital Metro has conducted three rounds of formal public engagement to gather input at key points in the process. Capital Metro made a special effort to meet people in their communities: the Project Connect team tabled at community events, conducted outreach at transit stops, and implemented innovative strategies including online open houses for members of the community who could not attend public meetings in person.



STAKEHOLDERS

Capital Metro conducted extensive outreach to stakeholders, including neighborhood meetings, corridor working groups, and small-group presentations. Stakeholder working groups helped provide focused feedback on critical pinch points within the corridor.





» WHAT ALTERNATIVES WERE CONSIDERED?

Alignment

Alignment alternatives for the Orange Line Corridor were evaluated and eliminated during the Project Connect system planning phase.



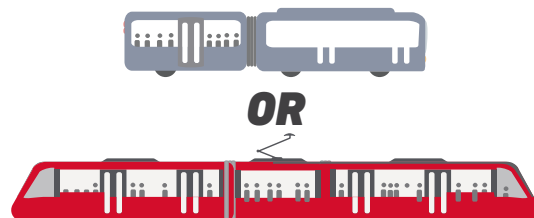
Transitway

The Project Connect Team studied whether the Orange Line Corridor would operate in a street level, elevated, or underground dedicated transitway depending on corridor constraints.



Mode

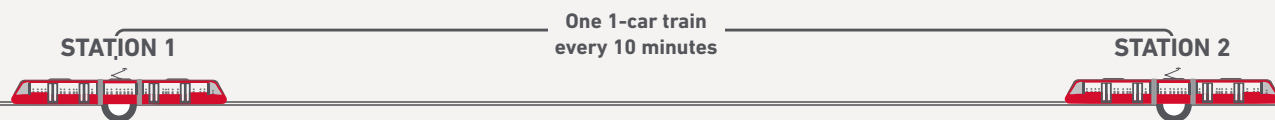
Two options were considered for the vehicle type that would operate on the transitway: **Bus Rapid Transit (BRT)** or **Light Rail Transit (LRT)**.



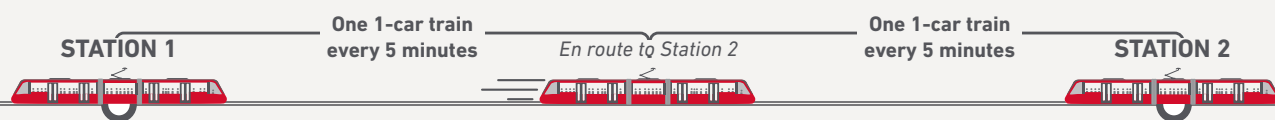
» HOW TO ENSURE THE MOST FLEXIBILITY

The technical recommendation for the Orange Line is Light Rail Transit (LRT). LRT allows for the most capacity and operational flexibility to handle the needs of existing and future estimated ridership.

To Carry 1,032 People Per Hour:



To Carry 2,064 People Per Hour:



To Carry 4,128 People Per Hour:



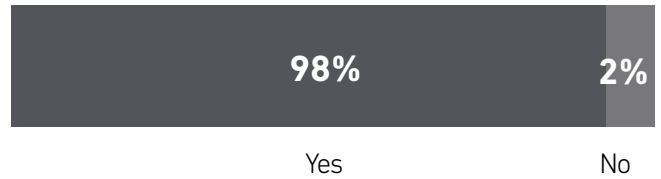
Note: Capacity illustrations are single-direction only. Downtown block lengths (272 feet) can accommodate up to three-car consists.

WHAT WE HEARD

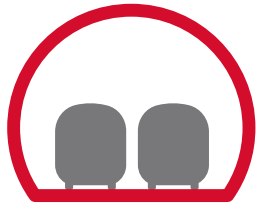
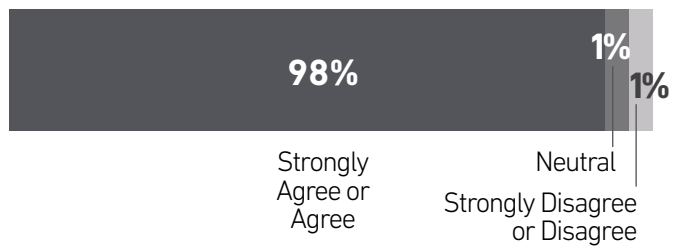


There is broad support for building dedicated transitways as part of the Orange Line corridor.

» BUILD ALTERNATIVE BETTER MEETS THE PROJECT PURPOSE AND NEED

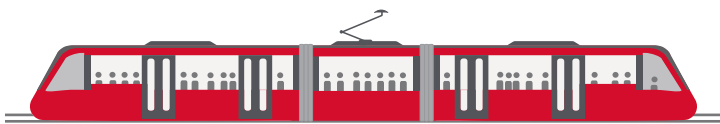
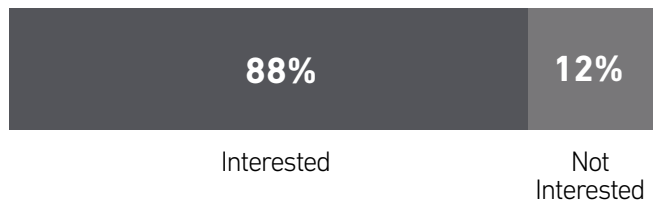


» DEDICATED TRANSITWAY IS IMPORTANT



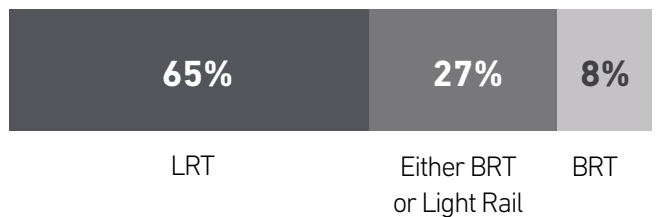
There is interest in further studying a Downtown tunnel.

» PUBLIC INTEREST IN TUNNEL



Light Rail is the mode preferred by most respondents.

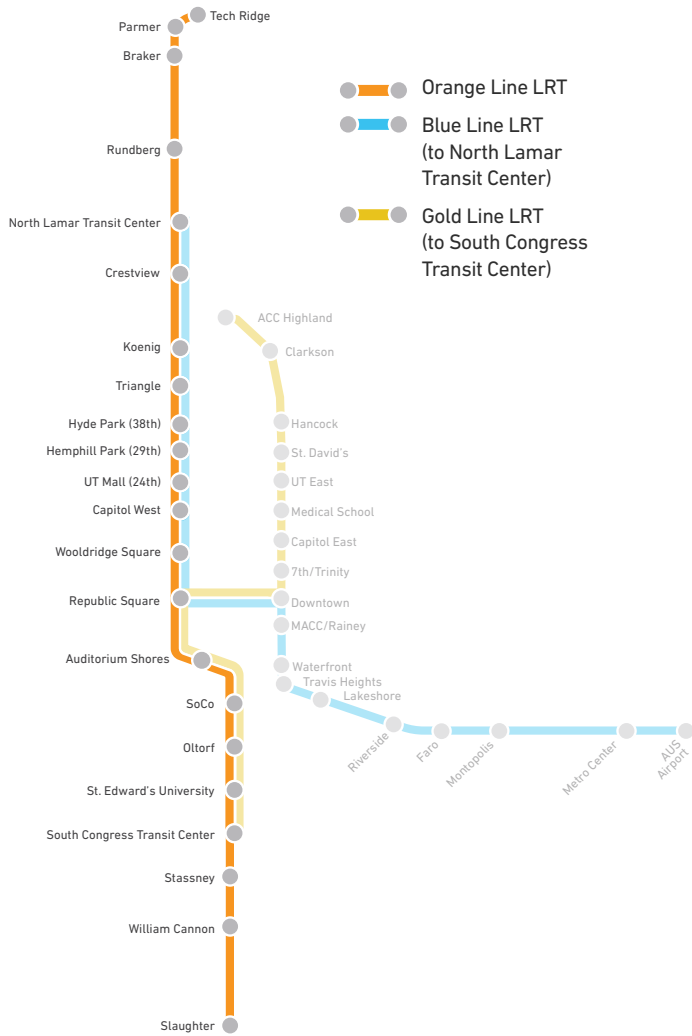
» MODE CHOICE



Note: Based on survey responses during July and November 2019 Engagement

HOW IT COULD BE IMPLEMENTED

»» ORANGE CORRIDOR LPA & LONG TERM VISION



The Blue Line, Gold Line, and Orange Line work together as a system of interconnected services. A funding and construction sequencing plan will outline how and when each part of the system is paid for, built, and operated.

»» PROJECT CONNECT CORRIDORS

As the Project Connect corridors proceed through the federal process, the following definitions will be used to categorize projects separately for engineering purposes. These definitions are most useful to the technical team but may be helpful in understanding how the Project Connect team will delineate projects within formal applications for federal funding. These corridor definitions are also used in this report to ensure that key performance metrics – such as capital cost and ridership – best reflect the projects that will be carried into the federal environmental process.

ORANGE CORRIDOR

Tech Ridge to Slaughter Lane



GOLD CORRIDOR

Republic Square to ACC Highland



BLUE CORRIDOR

Austin Airport (AUS) to Republic Square



ORANGE LINE *at a glance*

Mode *Light Rail*



21 Miles & 22 Station

- 2 connections to LRT routes
- 1 connection to MetroRail routes
- 8 connections to MetroRapid routes

Travel Time



Tech Ridge → Slaughter



Tech Ridge → Republic Square



South Congress Transit Center → UT



Slaughter → Republic Square



Note: Car trips are 2020 p.m. rush hour travel times. Source: Google.

Cost



Capital Cost
\$3.8 - \$5.1 billion

Operations & Maintenance
\$47 - \$57 million annually



Ridership
Weekday Ridership (2040)
54,000 - 74,400

Environmental



Vehicle Miles Traveled Reduction
107.8 million fewer miles annually

Greenhouse Gas Reduction
42,800 tons fewer annually



Demographics
Zero Car Households in Station Areas
3,400 | 8%

Individuals in Poverty in Station Areas
21,900 | 23%

Minorities in Station Areas
45,700 | 48%

» WHAT IS THE PROPOSED ORANGE LINE LPA?

The proposed Orange Line LPA is Light Rail operating in a 21-mile dedicated transitway from Tech Ridge on the northern end of the corridor to South Park Meadows on the southern end of the corridor.

The transitway is proposed to operate at street level (center running) throughout most of the corridor. The Orange Line transitway profile near Crestview Station and the Red Line crossing will be determined pending the outcome of a separate study. Through Downtown and UT, there are four potential transitway options: street level, partially elevated, short tunnel, and long tunnel. Selection of the preferred transitway option (or combination of transitway options) between Auditorium Shores and Hemphill Park Station (29th St) will be made during the next project phase (Preliminary Engineering).

Twenty-two stations are planned along the route. The placement of these facilities will be coordinated with the local community during the design phase. Service has been modeled to operate every 10 to 15 minutes, seven days a week, from 5:00 a.m. to 3:50 a.m. (12:50 a.m. on Sundays), the next day. The Orange Line will feature off-board fare collection, larger stations with level boarding, ADA accessibility, and intersection signal prioritization.

The Orange Line will connect with the Blue & Gold Line in downtown Austin; the location of that connection (including potential joint use of a tunnel) will be determined in Preliminary Engineering.

Note: the data presented in the “at a glance” section reflects only the Orange Line as an independent project.

WHAT'S IN IT FOR YOU

IMPROVED RELIABILITY

- The Orange Line will operate in dedicated transitways (separated from general traffic).
- This means fewer service interruptions and freedom from congestion.
- Dedicated transitways take the guesswork out of estimating transit travel times.

EXPANDED ACCESS TO JOBS

- 8%+ of Orange Line corridor households do not have access to a car.
- 23%+ of Orange Line corridor individuals live below the poverty line.
- 150,000+ jobs will be accessible from the Orange Line.
- The Orange Line will provide a frequent, reliable connection between jobs and the residents who need them.

EXPANDED SPAN OF SERVICE

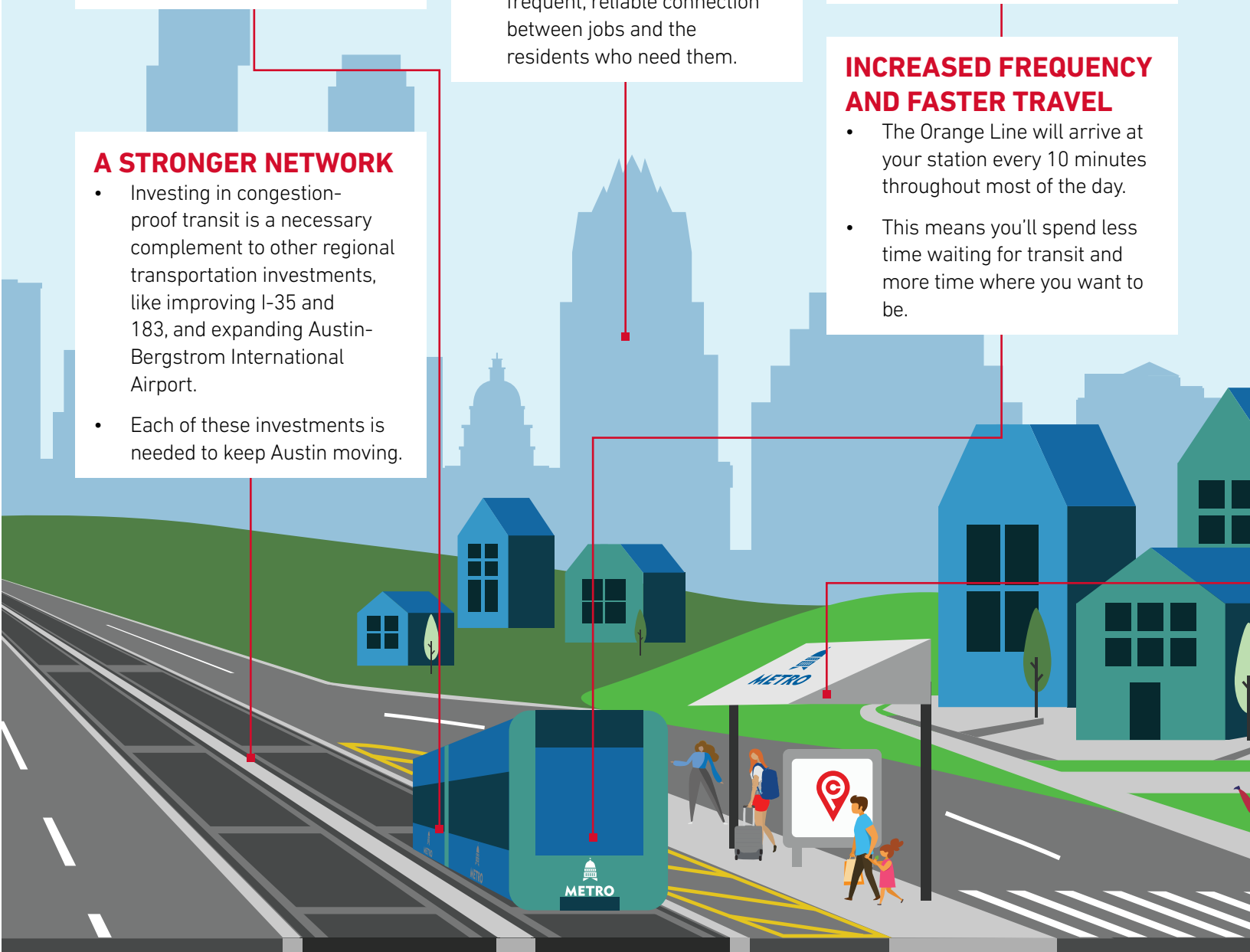
- Orange Line service planning model assumes a start at 5:00 a.m. and end at 3:50 a.m. the following day (except 12:50 a.m. on Sunday).
- This nearly 24-hour, 7-days-a-week modeled service means that the Orange Line will be ready when you are.

A STRONGER NETWORK

- Investing in congestion-proof transit is a necessary complement to other regional transportation investments, like improving I-35 and 183, and expanding Austin-Bergstrom International Airport.
- Each of these investments is needed to keep Austin moving.

INCREASED FREQUENCY AND FASTER TRAVEL

- The Orange Line will arrive at your station every 10 minutes throughout most of the day.
- This means you'll spend less time waiting for transit and more time where you want to be.



SUPPORT FOR REGIONAL PLANS

- The Austin Strategic Mobility Plan envisions that 16% of Austinites will use transit to get to work by 2039.
- Fast, reliable, frequent transit service (like the Orange Line) is necessary to make this happen.

MORE OPTIONS

- The Orange, Blue, and Gold Line corridors are being designed to maximize connections to where you want to go.
- Congestion-proof transit will get you there without the headache of traffic and parking.
- If you're a driver, there will be fewer cars in front of you.

THRIVING COMMUNITIES

- Central Texas' population is expected to nearly double over the next 20 years.
- Housing construction is not meeting this demand, which means housing costs will continue to increase.
- The Orange, Blue, and Gold Lines can be a tool to help preserve affordable housing and produce housing for Austinites of all income levels.

SUSTAINABILITY AND IMPROVED AIR QUALITY

- Transportation plays an important role in confronting environmental challenges.
- Investing in the Orange Line will help Austin meet national air quality standards by reducing overall vehicle emissions and pollutants.
- The Orange Line supports the greenhouse gas reduction goals of the City of Austin's Community Climate Plan.

INVESTMENT IN THE FUTURE

- The Orange Line corridor is the backbone of Austin and the region.
- Rethinking how we use this space to move people is key to a healthy Austin.
- The Orange Line is a major step toward a more sustainable future and has been future-proofed to evolve with technology.



WHAT'S NEXT

Once the Capital Metro Board of Directors adopts the Orange Line LPA and the Austin City Council endorses it, the project will be ready to advance through next steps in the implementation process. These next steps include: identifying an implementation plan including funding, completing the federal environmental review process, completing final design, and starting construction. Capital Metro will continue to engage with the community as the Orange Line project advances.

Orange Line

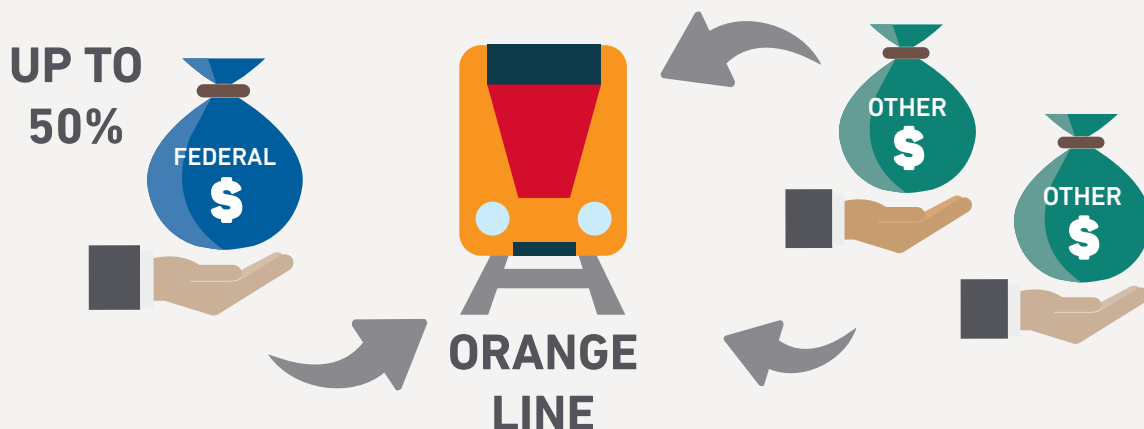
It's time for regional public transit we can rally behind.

It's Go Time!

»» HOW WILL IT BE FUNDED?

Once an LPA is adopted, the Orange Line would be eligible for Federal funding in line with recent trends in Capital Investment Grant (CIG) authorizations. The CIG program may award up to 50% of the capital

cost. Other funding will primarily come from local sources, and authorization of new local funding to be directed towards some or all of the Orange Line could be on the November 2020 ballot.



Capital Metro Board Action on LPA

- Capital Metro Board adopts independent corridor LPA
 - Necessary step for federal funding
- Capital Metro Board adopts System Plan



Local Partner Action on LPA

- Austin City Council endorses LPA
- CAMPO adopts LPA into Long Range Transportation Plan (LRTP) in June 2020



Implementation

- Develop implementation plan
- Define projects for construction/funding
- Finalize funding package



Investments Advanced

Environmental Work (NEPA)

Potential impacts to natural, social, and built environments

Engagement

Preliminary Engineering

Design advanced to support environmental work

Final Design

- Design is finalized for construction
- Costs are finalized
- Funding is finalized

FTA Approval & Construction

- FTA funds
- Construction begins

Orange Line Implementation

2020



2025



METRO



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QUESTIONS?



**Visit the Project Connect Community Office
located at 607 Congress Ave.**

Talk with project staff, ask questions and provide feedback between 9 a.m. and 4 p.m.



Visit ProjectConnect.com

We value your input! Sign up to receive updates or learn about upcoming meetings.



Follow us on Twitter @CapMetroATX!

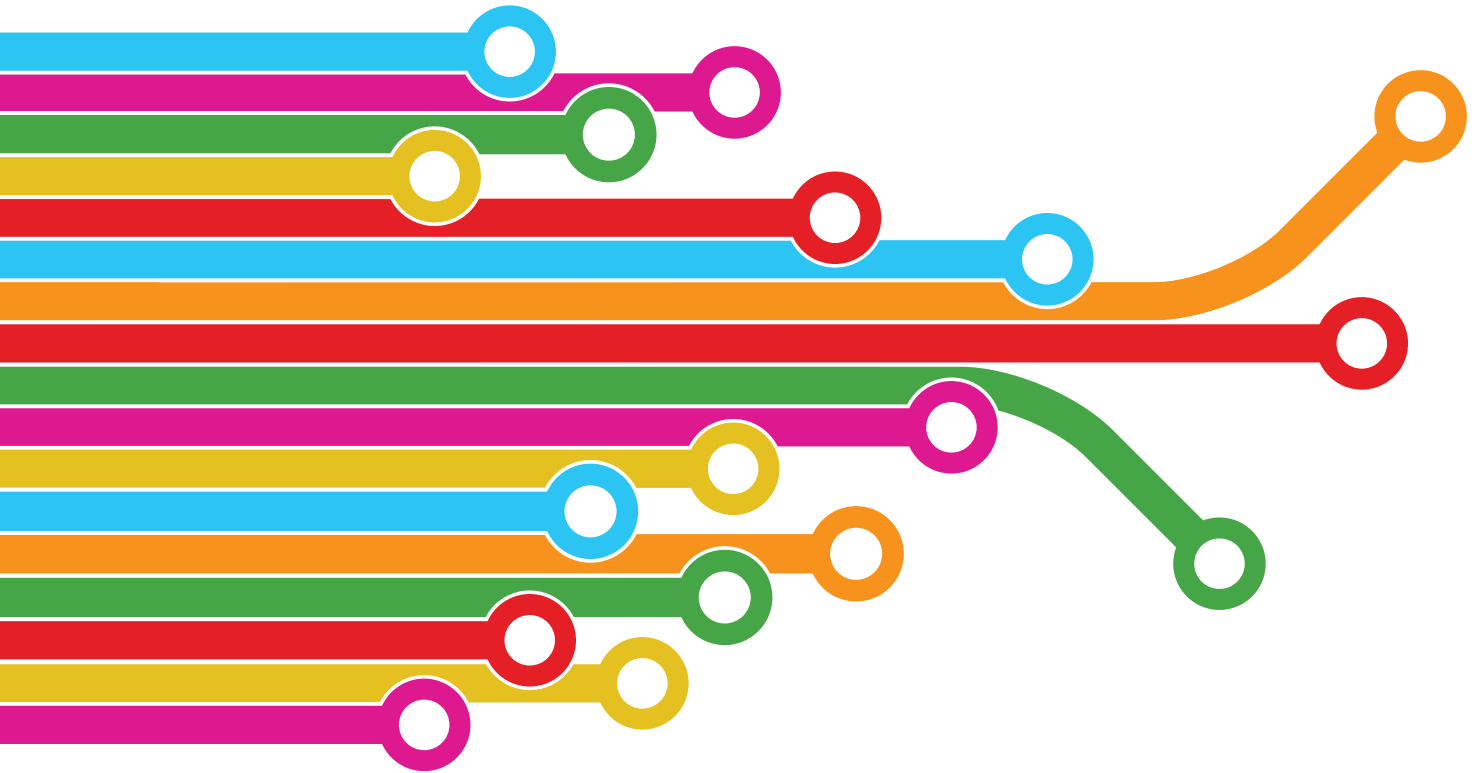


Join us on [Facebook.com/CapitalMetro!](https://www.facebook.com/CapitalMetro/)

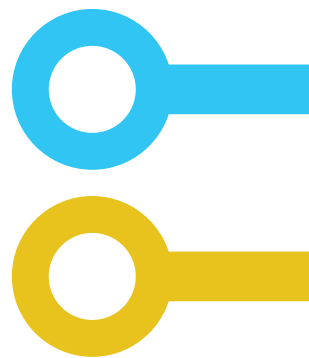
Led by Capital Metro with support from the City of Austin

AECOM **HR**

HNTB **N NELSON
NYGAARD**



Your Plan, Your
Blue Line &
Gold Line



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WHY PLAN THE BLUE LINE & GOLD LINE

»» THE NEED AND THE VISION

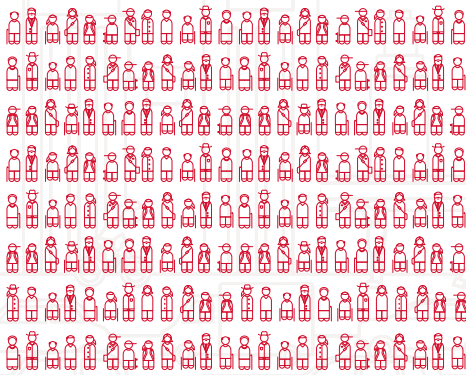
Capital Metro began developing the Project Connect Vision Plan in 2016. The need for the Project Connect vision is the result of Central Texas' booming population which is projected to double by 2040. This growth will cause additional strain on the roadway network, result in increased travel times and travel costs, decrease our mobility, hinder our region's economic health, and threaten our air quality.

In December 2018, the Capital Metro Board of Directors approved the **Project Connect Vision Plan**, which identified corridors for potential investment in High Capacity Transit (HCT), in addition to other improvements like new MetroRapid routes, Red Line improvements, development of the Green Line, additional MetroExpress routes with park-and-rides, and Neighborhood Circulators.

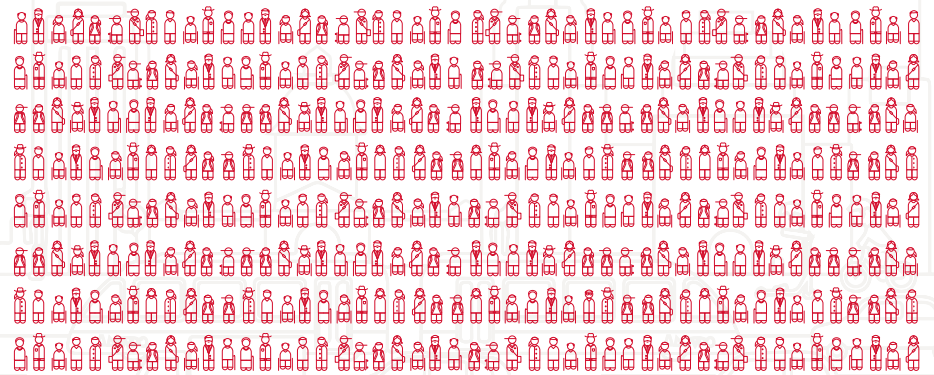
In 2019, the Austin City Council approved the **Austin Strategic Mobility Plan**, which establishes a policy goal to quadruple the share of commuters who use transit by 2039. The Project Connect Vision Plan is included as an integral part of the ASMP, and both initiatives provide a way forward for solving future mobility challenges the region faces.

Constructing and operating HCT is an effective tool to address the region's growth pressures, improve mobility, and connect Central Texans to their travel destinations. HCT will make peak transit travel times faster than peak automobile travel times and create transit service that is reliable. Project Connect is a multi-generational investment and will be planned to accommodate the latest vehicle technology when it comes to market.

2019
Population: **2M+**



2040
Population: **4M+**



»» HOW THE BLUE LINE & GOLD LINE FIT INTO THE SYSTEM

The Project Connect Vision Plan identified two HCT corridors - the Blue Line Corridor and the Orange Line Corridor - as the backbone of the future system. Capital Metro initiated the Blue Line Corridor Study in 2019 to better define Blue Line & Gold Line HCT, and to explore how they could advance as individual investments (to attract federal funds) and as a part of the Capital Metro system (as part of the local and regional planning process). The **Project Connect System Plan** will be significantly advanced following the adoption of the Blue Line & Gold Line Locally Preferred Alternative (LPA).

This document provides an overview of the process used to evaluate HCT in Austin and the path to develop a proposed LPA, including how public and agency input was used to craft the proposed LPA. Key features and benefits of the LPA are illustrated, and future actions on the path toward implementation are outlined.

FUTURE-PROOFING THE SYSTEM

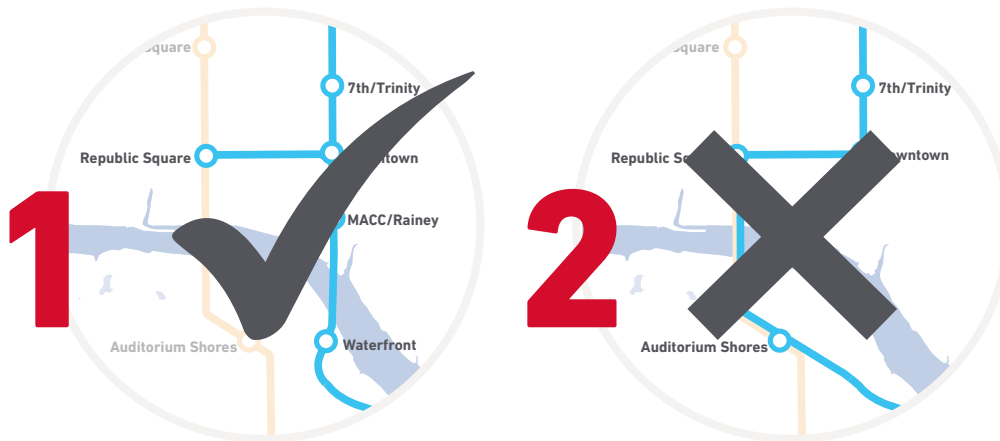
- »» Identifying how the Orange, Blue, and Gold Lines will intersect (serve the same station) or interline (operate on the same portion of tracks)
- »» Considering the costs and benefits associated with building a transit tunnel for the Orange, Blue, and Gold Line
- »» Coordinating with MetroRapid, Red and Green Lines, MetroExpress, and Neighborhood Circulator planning to facilitate connections across the system

CORRIDOR PLANNING & ROUTE EVOLUTION

BLUE LINE CONCEPT DEVELOPMENT

In April 2019, Capital Metro initiated a formal study to investigate the viability of high-capacity transit (HCT) from the Austin Airport (AUS), through downtown with a connection to another Project Connect corridor (the Orange Line) at Republic Square, and north to ACC Highland. This corridor was then-titled the “Blue Line” to distinguish it from other routes also under analysis as part of the Project Connect system.

ALIGNMENT SCENARIOS PRESENTED TO THE PUBLIC



ALTERNATIVE 1 ADVANTAGES

- » Provides service to the fast-growing Rainey neighborhood
- » Adds resilience to the system by providing an additional LRT lake crossing
- » Allows maximum flexibility for infrastructure maintenance

As Alternative 1 (Trinity Street Lady Bird Lake Crossing) emerged as the local preference (see survey results, page 9), the Project Connect team also considered the appropriate mode and transitway profile (discussed on page 8) for the Blue Line as an independent project, but also, as part of a larger, multi-generational system.

Ridership demand on the Blue Line corridor yielded a technical recommendation that light rail transit (LRT) was the mode best-suited to serve the long-term goals of Project Connect and Central Texas’ anticipated population growth. LRT was also the strong local preference, as shown in the survey results.

Thus, the Project Connect team considered different scenarios for how the Blue Line would operate as a route to meet this demand and optimize system-wide operations. In a January 2020 joint City Council/ Capital Metro board meeting, Capital Metro introduced a potential alternative operating scenario where this Blue Line route would originate at the Austin Airport (AUS), travel through downtown via 4th Street, then interline with the Orange Line.

This route option creates a more resilient transit system that is interconnected with efficient transfers between the corridors.

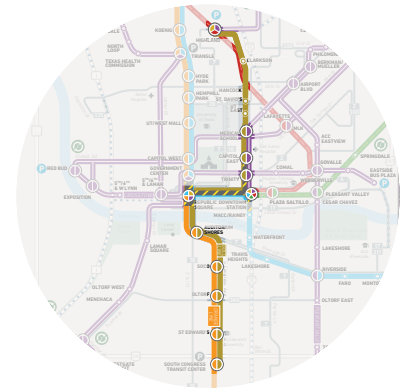


» THE GOLD LINE CORRIDOR EMERGES

The Project Connect team continued to analyze the ridership demand and the potential cost of a route from Republic Square to ACC Highland to fully understand the viability of high-capacity transit on this segment. In January 2020, Capital Metro presented another route option for this segment - the Gold Line. Originally introduced in the 2018 vision map as a route option connecting ACC Highland to Crestview via 4th Street downtown, this configuration became redundant given the proposed interlining of the Blue Line with the Orange Line north of Republic Square. The redefined Gold Line route (right) offers an additional layer of system flexibility that can serve the corridor from ACC Highland to Downtown Station, cross east-west through downtown on the Blue Line Corridor, and travel south on the Orange Line. This configuration offers optimal flexibility and connection to a greater number of destinations and Capital Metro transit centers and provides significantly more LRT service.



2018 GOLD ROUTE CONCEPT
Crestview to ACC Highland



2020 GOLD ROUTE
South Congress Transit Center to ACC Highland

The Project Connect team analyzed options that included how each segment would perform independently as well as together as a system. The Project Connect corridors have assigned color names, whereas route names can evolve based on origin and destination. In this document, corridors and routes are defined as:

Corridors:
the alignment name

Routes:
origin and destination lines

HOW THE LRT SYSTEM COMES TOGETHER

PROJECT CONNECT ROUTES

This configuration of the LRT system allows for multiple routes to operate in the same corridor – creating many route combinations. The overlap of routes can provide riders more frequent service, or shorter times waiting for a bus or train. The segments that would have overlapping service include:

- » Gold Line/Blue Line overlap on 4th Street between the Downtown MetroRail Station and Republic Square
- » Orange Line/Blue Line overlap between Republic Square and North Lamar Transit Center
- » Orange Line/Gold Line overlap between Republic Square and South Congress Transit Center

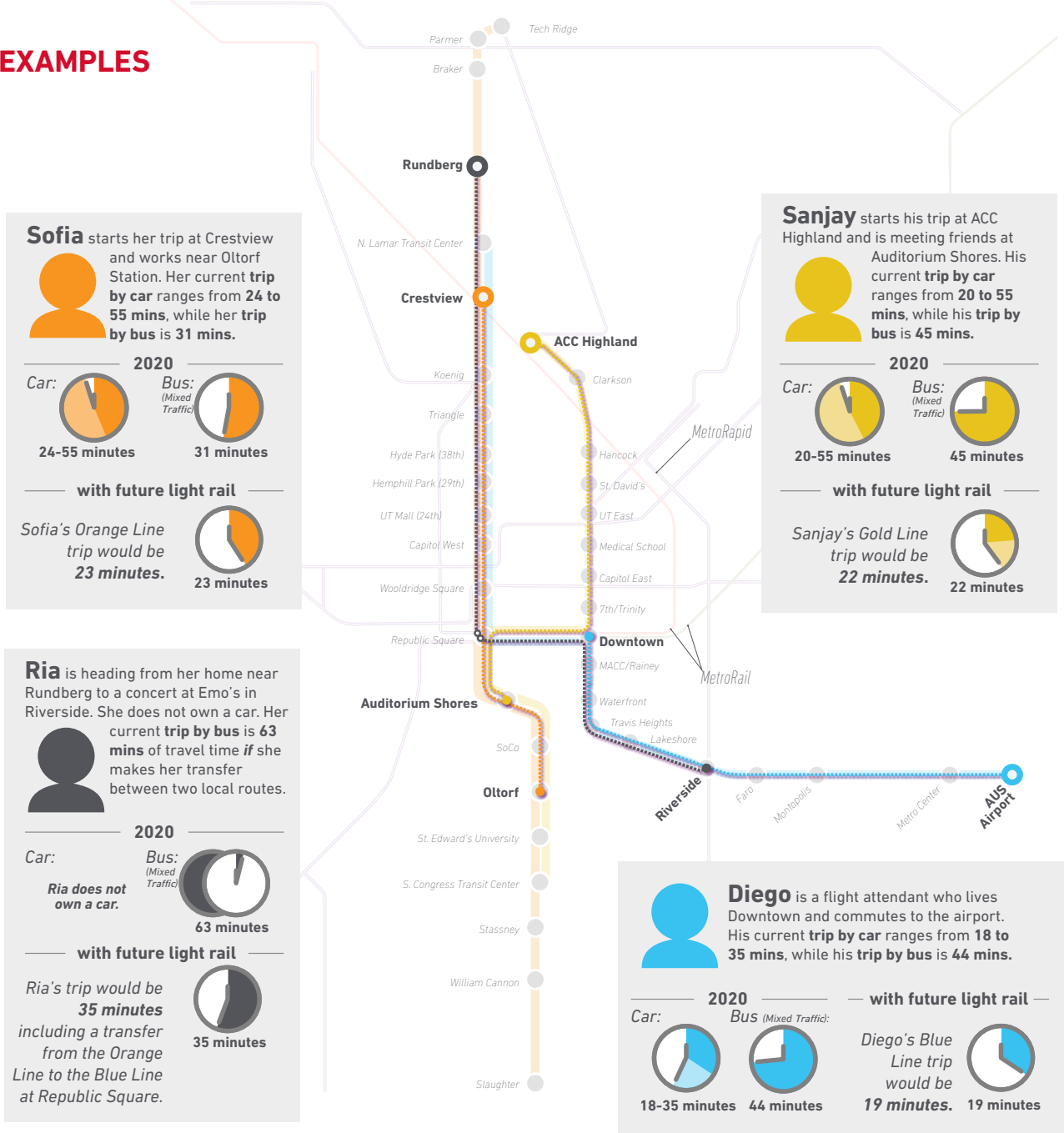


BETTER TRANSFERS AT KEY POINTS

The Project Connect program includes a plan to enhance some of Capital Metro's existing transit centers to become inviting places that function as multimodal mobility hubs. Mobility hubs are more than just typical transit stations or park & rides. They are programmed, well-designed places with ample amenities and opportunities to access transportation needs. Successful mobility hubs can help make transit service more welcoming to both daily and occasional riders. Both the Blue Line and the Gold Line are planned to stop at existing transit centers that can evolve to mobility hubs to facilitate ease of system use and route transfers.



TRIP EXAMPLES



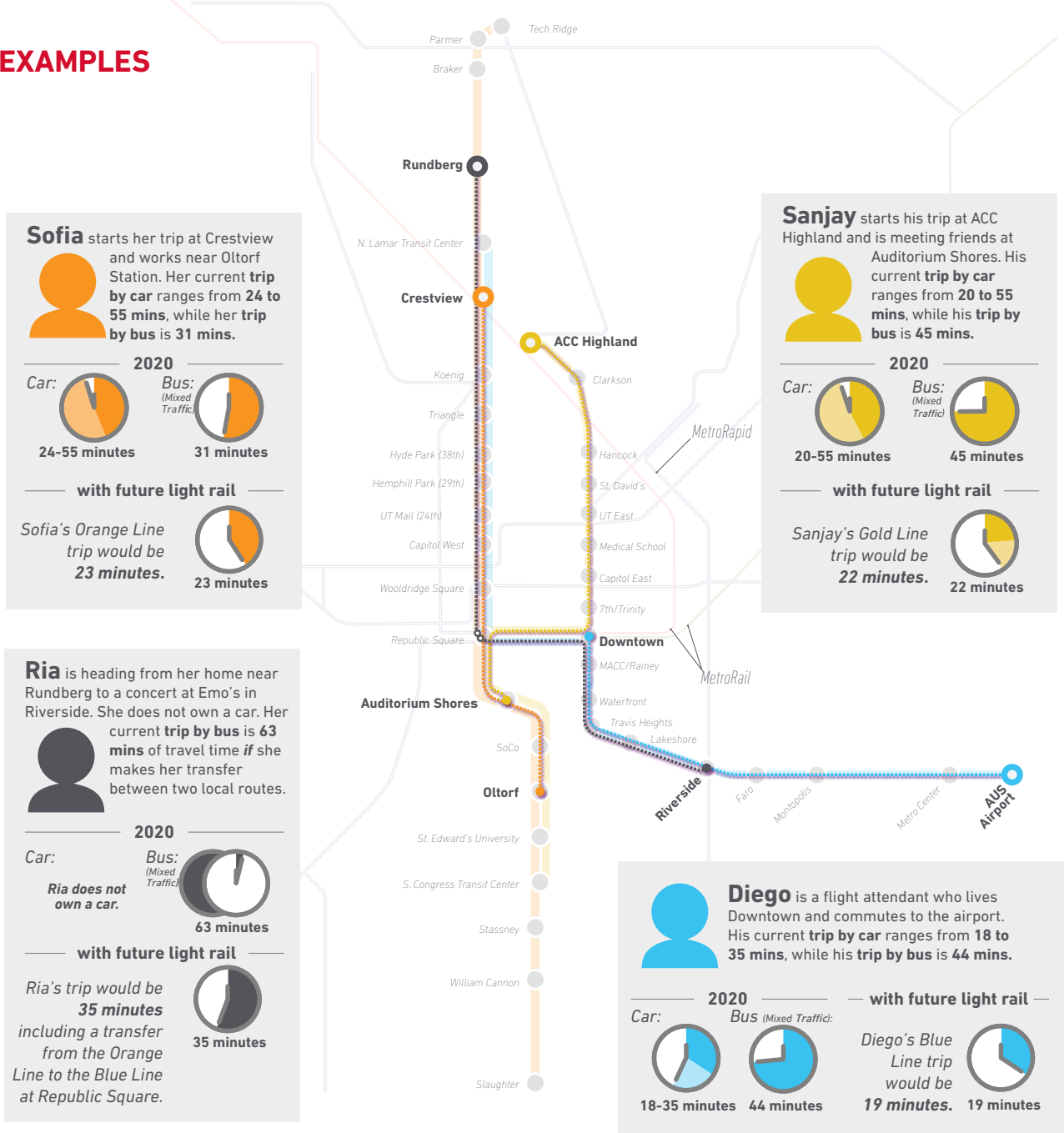
Note: Car travel time does not include time spent finding a parking space.

» BETTER TRANSFERS AT KEY POINTS

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» TRIP EXAMPLES



Note: Car travel time does not include time spent finding a parking space.

EXPLORING OUR OPTIONS FOR A TUNNEL

Depending on the frequency of service and how the LRT system interlines, a downtown tunnel could provide operational benefits. When operating at the street level, the number of trains per hour through a specific intersection (e.g., 4th Street and Guadalupe or Cesar Chavez and Trinity), could adversely affect the transportation network, as other modes wait for the train to pass. Frequency of the trains could be adjusted with longer time between trains to mitigate these effects, but this would limit the capacity of

the system. A tunnel not only avoids street-level conflicts, it also eliminates capacity constraints.

The Project Connect team will continue to study the viability of a transit tunnel during the environmental phase. The estimated cost of the tunnel is \$2-\$2.5 billion dollars. This cost would be shared along with other system-wide costs of the Orange, Blue, and Gold corridors.

» SAFER OPERATION WITH COMPLETE SEPARATION:



A downtown tunnel will provide a safer environment for all mobility modes.

» PLACEMAKING OPPORTUNITIES:



These types of transit spaces could include:

- retail/food
- restrooms
- public art
- AC-controlled environments

» FUTURE-PROOFING:



Allows the system to increase capacity for future service demand.

» IMPROVEMENT IN TRANSIT OPERATIONAL RELIABILITY:



The benefits of grade separation and the elimination of surface conflicts improves travel time reliability and ultimately the quality of the customer's trip for everyone citywide.

» FASTER SERVICE UNDERGROUND:



The downtown tunnel would bypass approximately 20% of surface level traffic signals, which improves speed and reliability of the whole network.

» REDUCTION IN SURFACE CONFLICTS:



With the construction of a downtown tunnel, approximately twenty percent of the intersections could be made conflict free resulting in improved safety, reliability and travel time for all mobility modes, including emergency vehicles.

» EXPANDING TRANSIT FOOTPRINT:



By placing a light rail transit system in a tunnel and expanding the service options of the corridor, one can help maintain the mobility capacity of the corridor and react to the growth and the congestion that comes with it.

There are

14 TOWERS BUILT BETWEEN 2010 AND 2018

37 TOWERS being planned for DOWNTOWN AUSTIN

3.7 MILLION FT² including an additional of office space to the area

WHICH WILL BRING TENS OF THOUSANDS OF WORKERS TO DOWNTOWN

Source: Austin Business Journal, March 2020

» WHAT IS A LOCALLY PREFERRED ALTERNATIVE?

LPA is the technical term that the Federal Transit Administration (FTA) uses to describe a community-selected transit investment that is seeking federal capital funds. Project Connect will seek Federal funding in line with recent trends in Capital Investment Grant authorizations under the New Starts Program. The program will consider awarding up to 50 percent. An LPA, or project, is made up of an alignment, transitway, vehicle, service

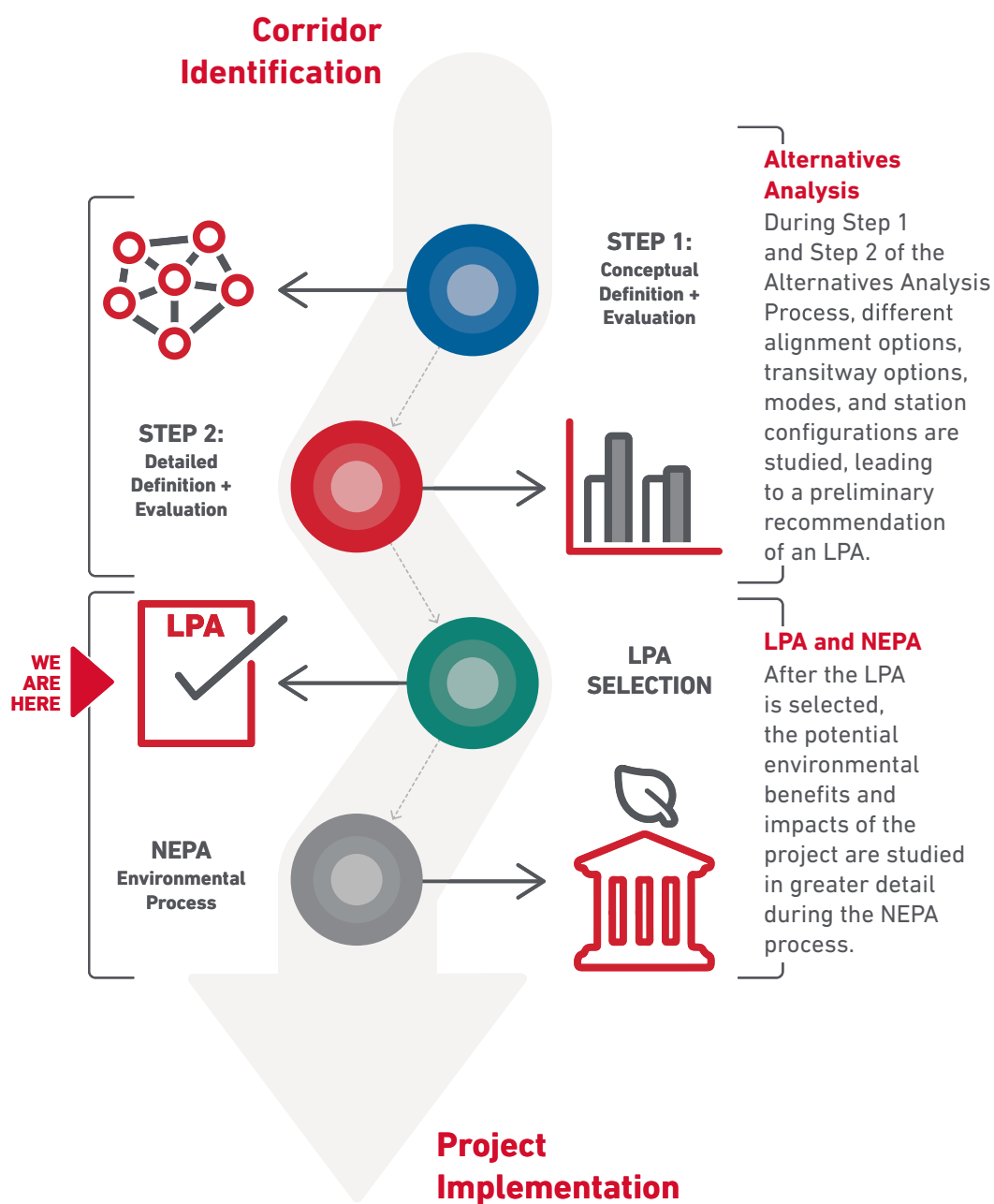
plan, and any required support infrastructure (tracks, stations, and maintenance facilities). The LPA may be broken into phases for implementation.

Capital Metro is working with stakeholders across the region to identify individual LPAs for each of the Project Connect transit investments that are seeking capital funding from the FTA.

HOW WE GOT HERE

» THE PROCESS

The Blue Line and Gold Line Corridor Study has used a phased approach, in conjunction with guidelines set by the FTA. The process is structured as a tiered screening, where alternatives are defined, evaluated, and refined or eliminated in each step of the process. The result is a proposed LPA that will be further refined in the National Environmental Policy Act (NEPA) process and future project phases.



WHO IS INVOLVED



COMMUNITY LEADERS

Public input has been essential to the development of the LPA. Capital Metro has worked with the Project Connect Ambassador Network (PCAN), made up of more than 150 community organizations and stakeholders to provide input through a community lens.



PARTNER AGENCIES

Throughout the process, Capital Metro regularly convened a Technical Advisory Committee (TAC) of public agency staff members from local cities, counties, transportation agencies and other entities to provide technical feedback related to the project. TAC members included:

- The City of Austin and the Austin Transportation Department
- Texas Department of Transportation (TxDOT)
- Capital Area Metropolitan Planning Organization (CAMPO)
- Travis County
- ...and many others



YOU, THE PUBLIC

To date, Capital Metro has conducted three rounds of formal public engagement to gather input at key points in the process. Capital Metro made a special effort to meet people in their communities: the Project Connect team tabled at community events, conducted outreach at transit stops, and implemented innovative strategies including online open houses and virtual outreach when community members were unable to attend in person public meetings.



STAKEHOLDERS

Capital Metro conducted extensive outreach to stakeholders, including neighborhood meetings, corridor working groups, and small-group presentations. Stakeholder working groups helped provide focused feedback on critical pinch points within the corridor.





»» WHAT ALTERNATIVES WERE CONSIDERED?

Alignment

The Project Connect Team studied two alignment alternatives for how the corridor could cross Lady Bird Lake: a new crossing connecting to Trinity Street; or a shared crossing with the Orange Line Corridor near the S. 1st Street Bridge.



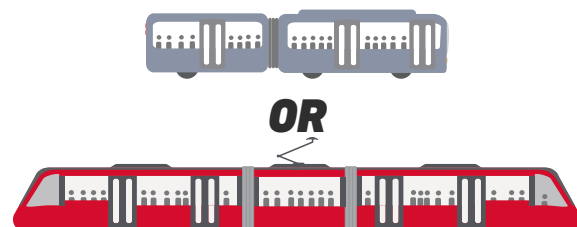
Transitway

The Project Connect Team studied whether the corridor would operate in a street level, elevated, or underground dedicated transitway depending on corridor constraints.



Mode

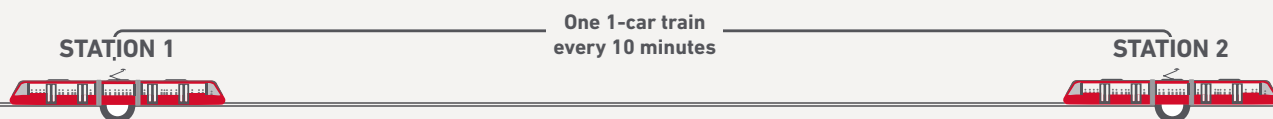
Two options were considered for the vehicle type that would operate on the transitway: **Bus Rapid Transit (BRT)** or **Light Rail Transit (LRT)**.



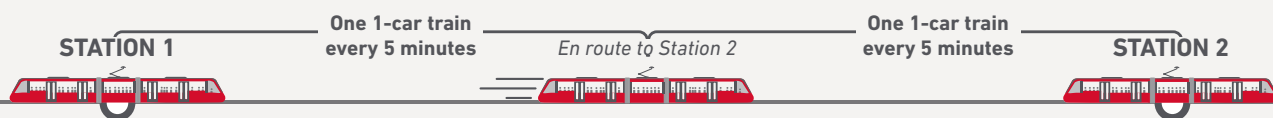
»» HOW TO ENSURE THE MOST FLEXIBILITY

The technical recommendation for the Blue Line & Gold Line is Light Rail Transit (LRT). LRT allows for the most capacity and operational flexibility to handle the needs of existing and future estimated ridership.

To Carry 1,032 People Per Hour:



To Carry 2,064 People Per Hour:



To Carry 4,128 People Per Hour:



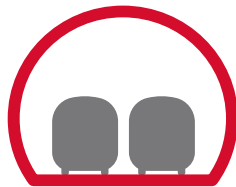
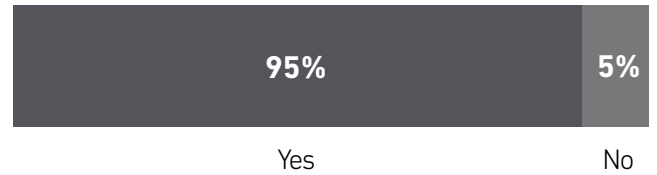
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WHAT WE HEARD



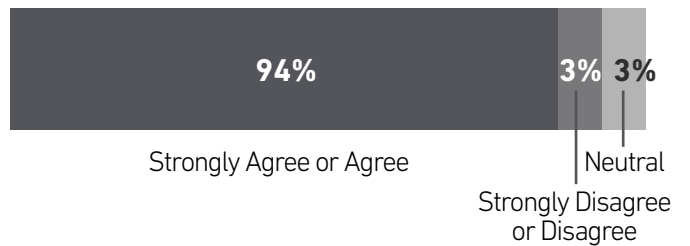
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» BUILD ALTERNATIVE BETTER MEETS THE PROJECT PURPOSE AND NEED

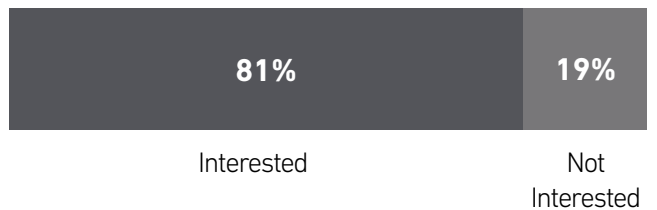


There is interest in further studying a Downtown tunnel.

» DEDICATED TRANSITWAY IS IMPORTANT



» PUBLIC INTEREST IN TUNNEL



OR



Light Rail is the mode preferred by most respondents.

» MODE CHOICE



Most respondents prefer crossing Lady Bird Lake on a new bridge using the Trinity Street alignment.

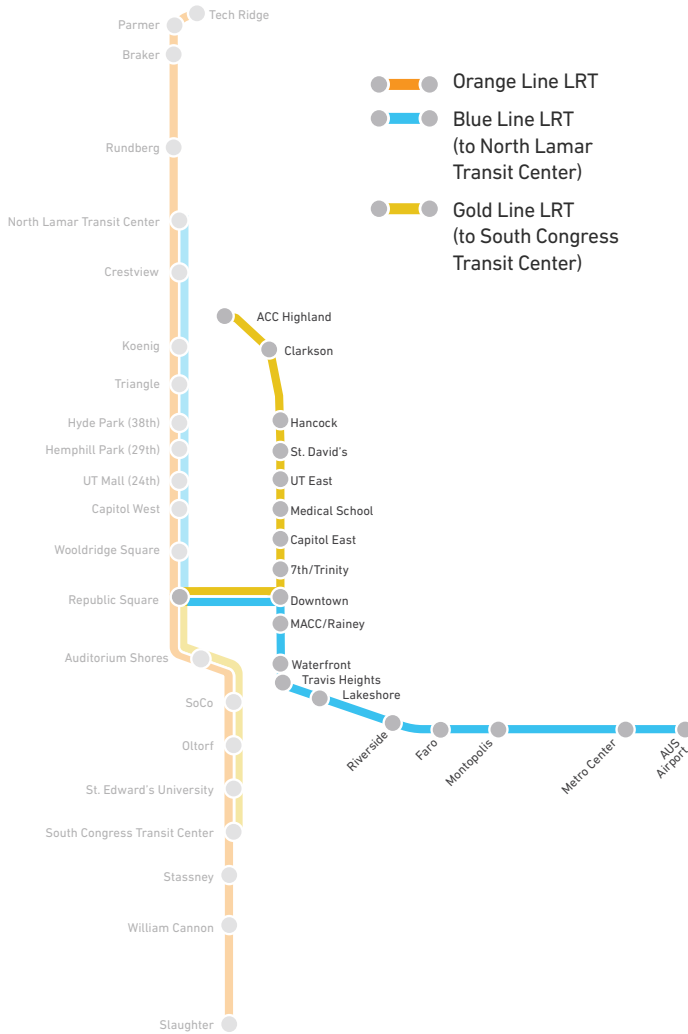
» LADY BIRD LAKE CROSSING



Note: Based on survey responses during July and November 2019 Engagement Survey responses based on initial definition of the entire Blue Line Corridor (ACC Highland to AUS Airport via Republic Square).

HOW IT COULD BE IMPLEMENTED

» BLUE & GOLD CORRIDOR LONG TERM VISION



The Blue Line, Gold Line, and Orange Line work together as a system of interconnected services. A funding and construction sequencing plan will outline how and when each part of the system is paid for, built, and operated.

» PROJECT CONNECT CORRIDORS

As the Project Connect corridors proceed through the federal process, the following definitions will be used to categorize projects separately for engineering purposes. These definitions are most useful to the technical team but may be helpful in understanding how the Project Connect team will delineate projects within formal applications for federal funding. These corridor definitions are also used in this report to ensure that key performance metrics – such as capital cost and ridership – best reflect the projects that will be carried into the federal environmental process.

ORANGE CORRIDOR

Tech Ridge to Slaughter Lane



GOLD CORRIDOR

Republic Square to ACC Highland



BLUE CORRIDOR

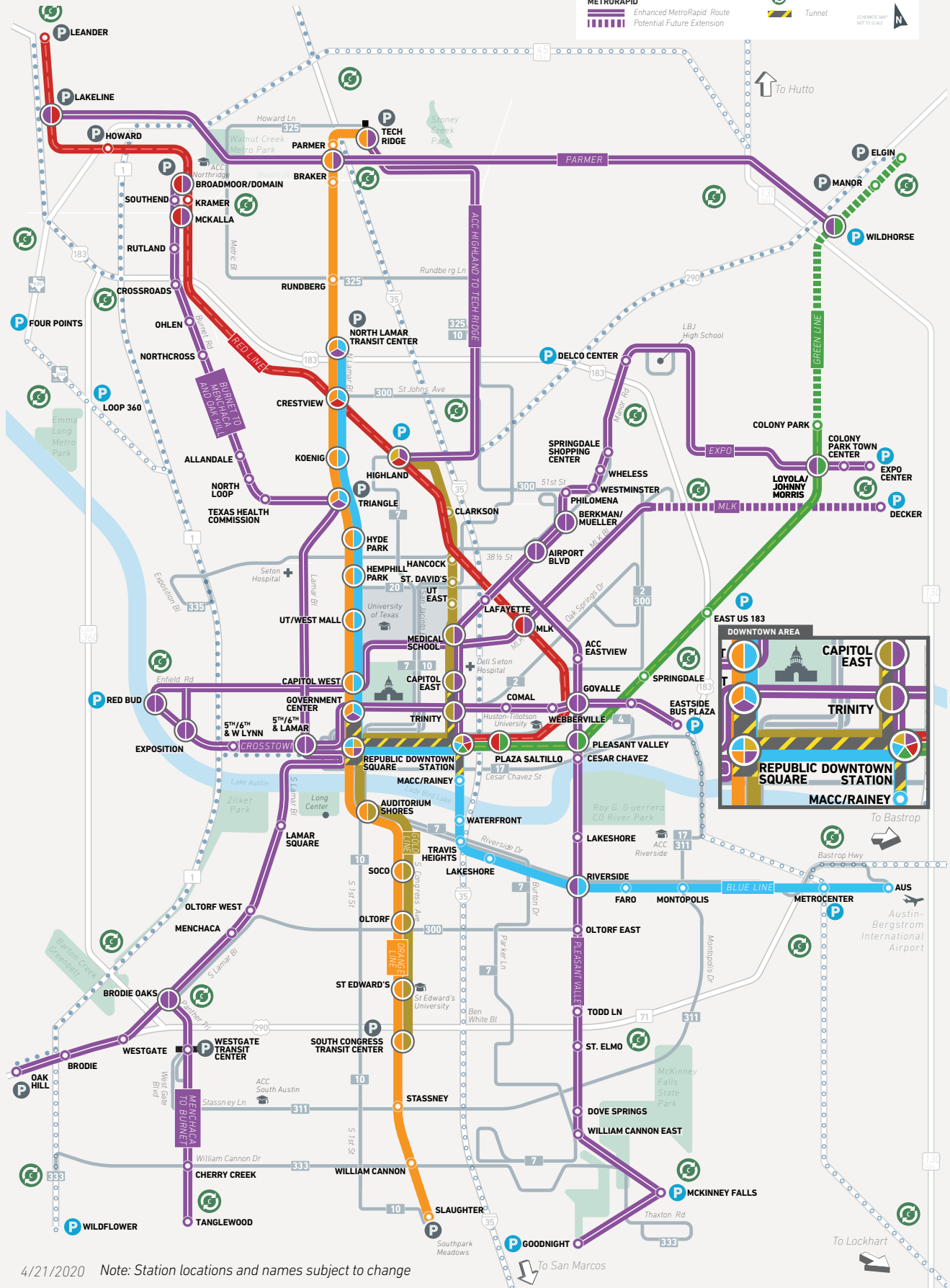
Austin Airport (AUS) to Republic Square



HOW IT ALL COMES TOGETHER

LEGEND

- LIGHT RAIL**
 - Orange Line
 - Blue Line
 - Gold Line
- METRO RAIL**
 - Red Line
 - Green Line
 - Potential Future Extension
- METRO RAPID**
 - Enhanced MetroRapid Route
 - Potential Future Extension
- METROBUS**
 - Current Frequent Local Routes
- METRO EXPRESS**
 - Current MetroExpress
 - Future MetroExpress
- METRO ACCESS**
 - Available within CapMetro service area
 - Current Park & Ride
 - Proposed Park & Ride
 - Circulator
 - Tunnel

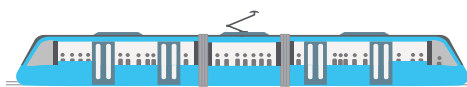


4/21/2020 Note: Station locations and names subject to change

BLUE LINE *at a glance*

Mode *Light Rail*

Alignment *Trinity St*



42 connections to MetroBus routes



8.2 miles & 11 stations

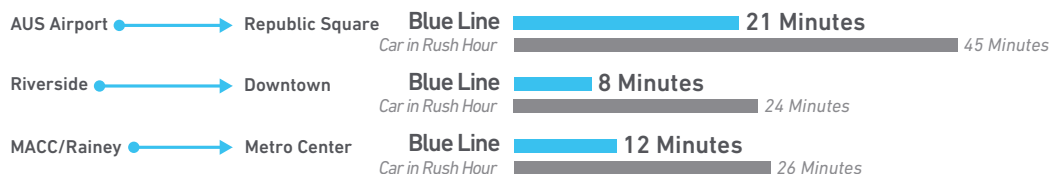
3 connections to LRT routes

2 connections to MetroRail routes

3 connections to MetroRapid routes



Travel Time



Cost

Capital Cost

\$1.5 - \$1.8 billion

Operations & Maintenance

\$14.2 - \$17.5 million annually



Ridership

Weekday Ridership (2040)

16,000 - 19,000



Environmental

Vehicle Miles Traveled Reduction

16.7 million fewer miles annually

Greenhouse Gas Reduction

6,600 tons fewer annually



Demographics

Zero Car Households in Station Areas

3,000 | 10%

Individuals in Poverty in Station Areas

17,900 | 26%

Minorities in Station Areas

41,100 | 59%

»» WHAT IS THE PROPOSED BLUE LINE?

The proposed Blue Line is Light Rail operating in a 8.2-mile dedicated transitway from Republic Square on the northern end of the corridor to Austin Bergstrom International Airport (AUS) on the southern end of the corridor using Trinity Street to cross Lady Bird Lake on a new bridge.

The transitway is proposed to operate at street level (center running) throughout most of the corridor, except elevated at the southern end of the corridor from Metro Center to AUS, over US 183. Through Downtown, there are two potential transitway options: street level and tunnel. Selection of the preferred transitway option (or combination of transitway options) between Republic Square and MACC/Rainey Stations will be made during the next project phase (Preliminary Engineering).

Eleven stations are planned along the route. The placement of these facilities will be coordinated with the local community during the design phase. Service has been modeled to operate every 10 to 15 minutes, seven days a week, from 5:00 a.m. to 3:50 a.m. (12:50 a.m. on Sundays). The Blue Line will feature off-board fare collection, larger stations with level boarding, ADA accessibility, and intersection signal prioritization.

The Blue Line will connect with the Orange Line & Gold Line in downtown Austin; the location of those connections (including potential joint use of a tunnel) will be determined in Preliminary Engineering.

Note: the data presented in the "at a glance" section reflects only the Blue Line as an independent project.

GOLD LINE *at a glance*

Mode *Light Rail*



6.4 Miles & 10 Stations

- 3 connections to LRT routes
- 3 connections to MetroRail routes
- 6 connections to MetroRapid routes



Travel Time

ACC Highland	→	Republic Square	Gold Line	20 Minutes	
			<i>Car in Rush Hour</i>		45 Minutes
St. David's	→	Downtown	Gold Line	9 Minutes	
			<i>Car in Rush Hour</i>		35 Minutes
UT East	→	ACC Highland	Gold Line	10 Minutes	
			<i>Car in Rush Hour</i>		40 Minutes



Cost

Capital Cost

\$1.0 - \$1.2 billion

Operations & Maintenance

\$12.3 - \$15.5 million annually



Environmental

Vehicle Miles Traveled Reduction

17.4 million fewer miles annually

Greenhouse Gas Reduction

7,000 tons fewer annually



Ridership

Weekday Ridership (2040)

18,000 - 20,000



Demographics

Zero Car Households in Station Areas

3,000 | 11%

Individuals in Poverty in Station Areas

11,400 | 20%

Minorities in Station Areas

25,200 | 37%

»» WHAT IS THE PROPOSED GOLD LINE?

The proposed Gold Line is Light Rail operating in a 6.4-mile dedicated transitway from ACC Highland on the northern end of the corridor to Republic Square on the southern end of the corridor.

The transitway is proposed to operate at street level (center running) throughout most of the corridor and elevated in two sections: where the Gold Line will cross over the Red Line north of Hancock Station; and through the University of Texas from Dean Keeton Street south to Martin Luther King Boulevard. Through Downtown, there are two potential transitway options: street level and tunnel. Selection of the preferred transitway option (or combination of transitway options) between Republic Square and Capitol East Stations will be made during the next project phase (Preliminary Engineering).

Ten stations are planned along the route. The placement of these facilities will be coordinated with the local community during the design phase. Service has been modeled to operate every 10 to 15 minutes, seven days a week, from 5:00 a.m. to 3:50 a.m. (12:50 a.m. on Sundays). The Gold Line will feature off-board fare collection, larger stations with level boarding, ADA accessibility, and intersection signal prioritization.

The Gold Line will connect with the Blue Line & Orange Line in downtown Austin; the location of those connections (including potential joint use of a tunnel) will be determined in Preliminary Engineering.

Note: the data presented in the "at a glance" section reflects only the Gold Line as an independent project.

WHAT'S IN IT FOR YOU

IMPROVED RELIABILITY

- The Blue Line & Gold Line will operate in dedicated transitways (separated from general traffic).
- This means fewer service interruptions and freedom from congestion.
- Dedicated transitways take the guesswork out of estimating transit travel times.

A STRONGER NETWORK

- Investing in congestion-proof transit is a necessary complement to other regional transportation investments, like improving I-35 and 183, and expanding Austin-Bergstrom International Airport.
- Each of these investments is needed to keep Austin moving.

EXPANDED ACCESS TO JOBS

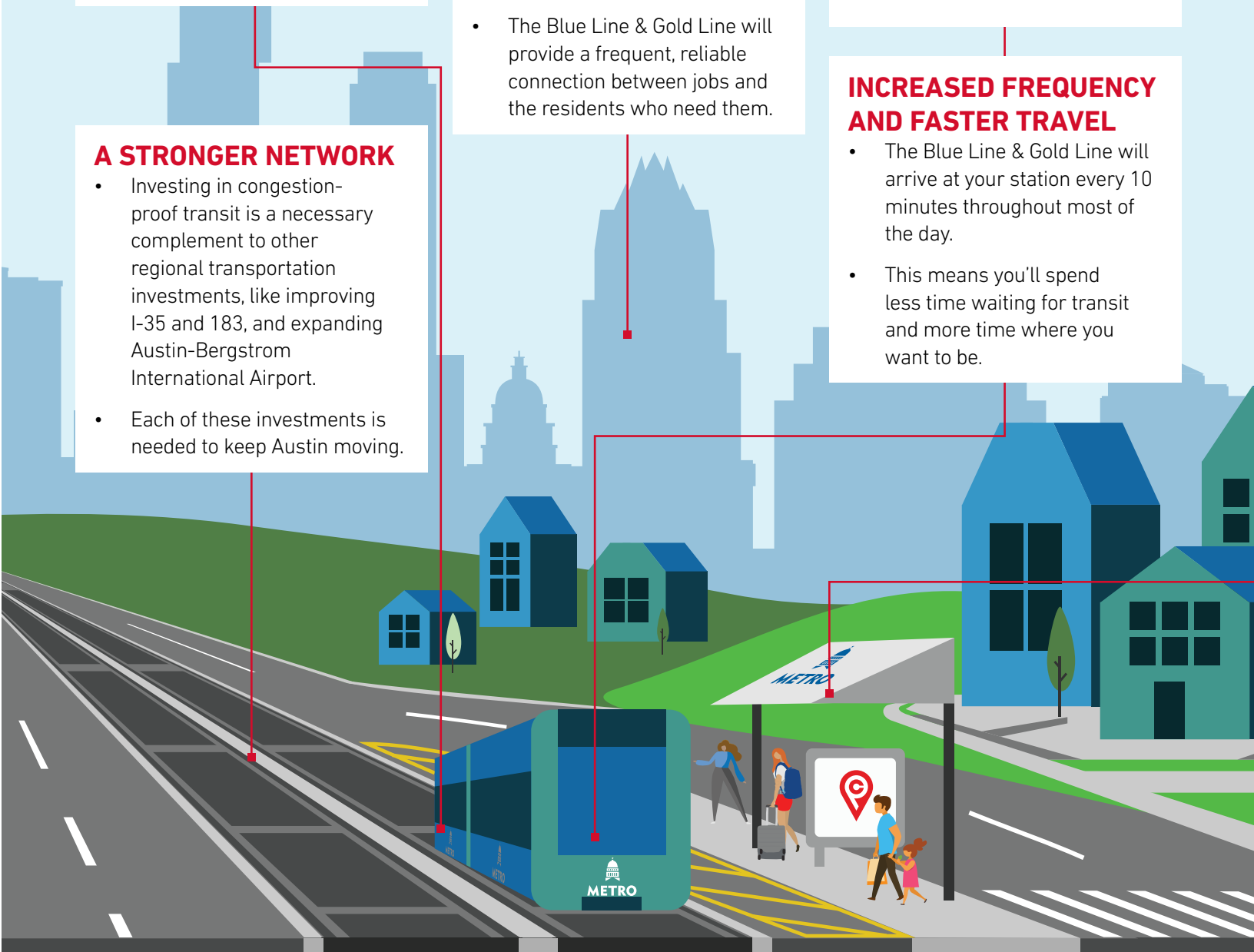
- 10% of Blue Line corridor and 11% of Gold Line corridor households do not have access to a car.
- 26% of Blue Line corridor and 20% of Gold Line corridor individuals live below the poverty line.
- 118,000+ jobs will be accessible from the Blue Line & Gold Line.
- The Blue Line & Gold Line will provide a frequent, reliable connection between jobs and the residents who need them.

EXPANDED SPAN OF SERVICE

- The service planning models assume LRT service starts at 5:00 a.m. and ends at 3:50 a.m. the following day (except 12:50 a.m. on Sunday).
- This nearly 24-hour, 7-days-a-week modeled service means that the Blue Line & Gold Line will be ready when you are.

INCREASED FREQUENCY AND FASTER TRAVEL

- The Blue Line & Gold Line will arrive at your station every 10 minutes throughout most of the day.
- This means you'll spend less time waiting for transit and more time where you want to be.



SUPPORT FOR REGIONAL PLANS

- The Austin Strategic Mobility Plan envisions that 16% of Austinites will use transit to get to work by 2039.
- Fast, reliable, frequent transit service (like the Blue Line & Gold Line) is necessary to make this happen.

MORE OPTIONS

- The Blue Line & Gold Line corridors are being designed to maximize connections to where you want to go.
- Congestion-proof transit will get you there without the headache of traffic and parking.
- If you're a driver, there will be fewer cars in front of you.

THRIVING COMMUNITIES

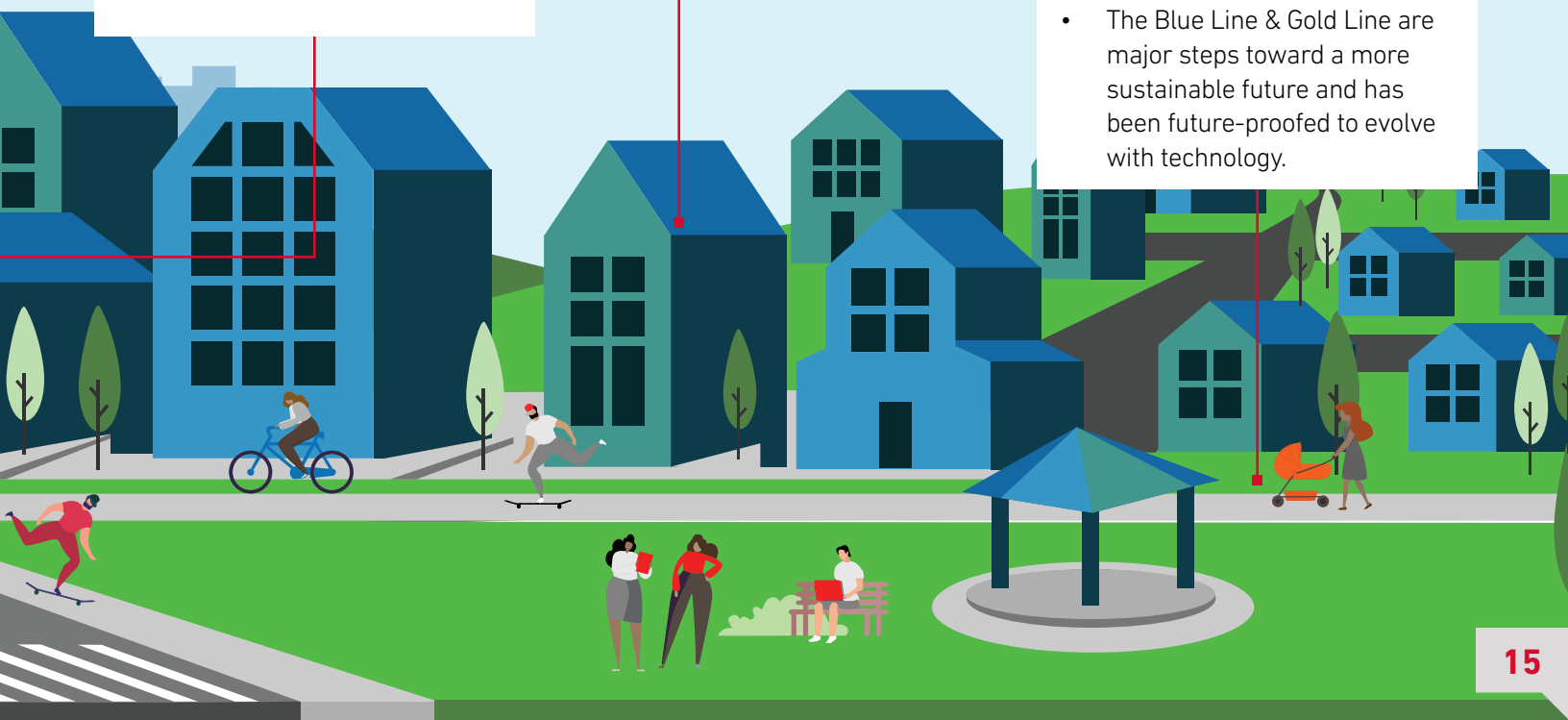
- Central Texas' population is expected to nearly double over the next 20 years.
- Housing construction is not meeting this demand, which means housing costs will continue to increase.
- The Blue Line & Gold Line can be a tool to help preserve affordable housing and produce housing for Austinites of all income levels.

SUSTAINABILITY AND IMPROVED AIR QUALITY

- Transportation plays an important role in confronting environmental challenges.
- Investing in the Blue Line & Gold Line will help Austin meet national air quality standards by reducing overall vehicle emissions and pollutants.
- The Blue Line & Gold Line support the greenhouse gas reduction goals of the City of Austin's Community Climate Plan.

INVESTMENT IN THE FUTURE

- The Blue Line corridor is the key to growth of the Airport and Central Texas.
- Rethinking how we use this space to move people is key to a healthy Austin.
- The Blue Line & Gold Line are major steps toward a more sustainable future and has been future-proofed to evolve with technology.



WHAT'S NEXT

Once the Capital Metro Board of Directors adopts the Blue Line & Gold Line LPA and the Austin City Council endorses it, both projects will be ready to advance through next steps in the implementation process. These next steps include: identifying an implementation plan including funding, completing the federal environmental review process, completing final design, and starting construction. Capital Metro will continue to engage with the community as the Blue Line and Gold Line projects advance.

Blue Line & Gold Line

It's time for regional public transit we can rally behind.

It's Go Time!

» HOW WILL IT BE FUNDED?

Once an LPA is adopted, the Blue Line & Gold Line would be eligible for Federal funding in line with recent trends in Capital Investment Grant (CIG) authorizations. The CIG program may award up to 50% of the capital cost. Other funding will primarily

come from local sources, and authorization of new local funding to be directed towards some or all of the Blue Line & Gold Line could be on the November 2020 ballot.



Capital Metro Board Action on LPA

- Capital Metro Board adopts independent corridor LPA
 - Necessary step for federal funding
- Capital Metro Board adopts System Plan



Local Partner Action on LPA

- Austin City Council endorses LPA
- CAMPO adopts LPA into Long Range Transportation Plan (LRTP) in June 2020



Implementation

- Develop implementation plan
- Define projects for construction/funding
- Finalize funding package



Investments Advanced



Environmental Work (NEPA)

Potential impacts to natural, social, and built environments

Engagement

Preliminary Engineering

Design advanced to support environmental work

Blue & Gold Line Implementation

Final Design

- Design is finalized for construction
- Costs are finalized
- Funding is finalized

FTA Approval & Construction

- FTA funds
- Construction begins

2020



2025



METRO



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QUESTIONS?



**Visit the Project Connect Community Office
located at 607 Congress Ave.**

Talk with project staff, ask questions and provide feedback between 9 a.m. and 4 p.m.



Visit ProjectConnect.com

We value your input! Sign up to receive updates or learn about upcoming meetings.



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AECOM **HR**

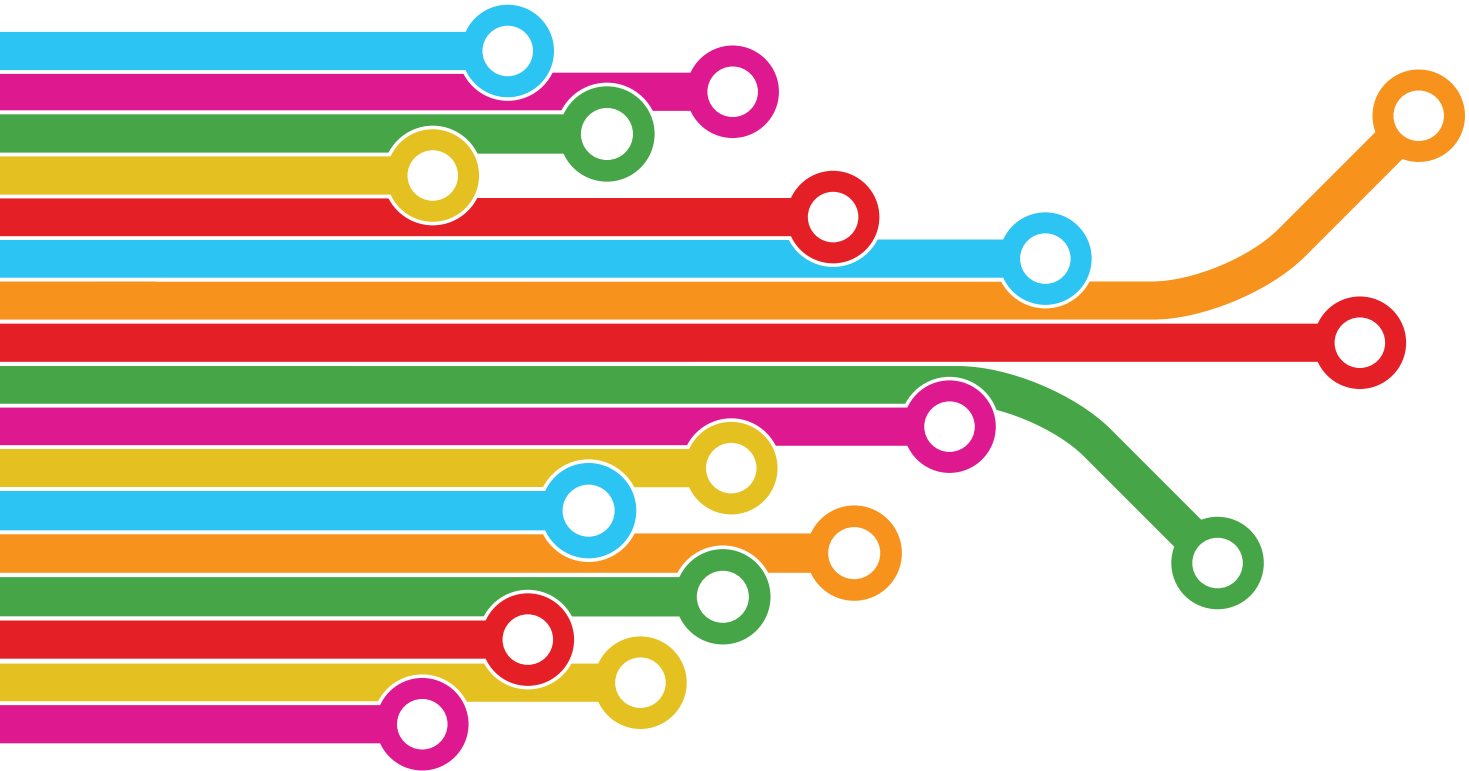
HNTB **N NELSON
NYGAARD**



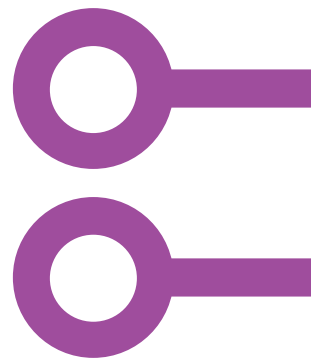
METRO



projectconnect



Your Plan, Your
MetroRapid
Corridors



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METRO



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WHY PLAN THE METRORAPID CORRIDORS

Capital Metro began developing the Project Connect Vision Plan in 2016. The need for the Project Connect vision is the result of Central Texas' booming population which is projected to double by 2040. This growth will cause additional strain on the roadway network, result in increased travel times and travel costs, decrease our mobility, hinder our region's economic health, and threaten our air quality.

In December 2018, the Capital Metro Board of Directors approved the **Project Connect Vision Plan**, which identified corridors for potential investment in High Capacity Transit (HCT), in addition to other improvements like new MetroRapid routes, Red Line improvements, development of the Green Line, additional MetroExpress routes with park-and-rides, and Neighborhood Circulators.

In 2019, the Austin City Council approved the **Austin Strategic Mobility Plan (ASMP)**, which establishes a policy goal to quadruple the share of commuters who use transit by 2039. The Project Connect Vision Plan is included as an integral part of the ASMP, and both initiatives provide a way forward for solving future mobility challenges the region faces.

This document provides an overview of the process used to evaluate enhanced transit options in Austin and the path to developing a proposed Locally Preferred Alternative (LPA), including how public and agency input was fused to craft the proposed LPA. Key features and benefits of the LPA are illustrated, and future actions on the path towards implementation are outlined.

2019
Population: **2M+**



2040
Population: **4M+**



»» HOW THE METRORAPID CORRIDORS FIT INTO THE SYSTEM

The Project Connect Vision Plan identified MetroRapid Corridors as part of its proposed system plan. As part of the broader Capital Metro System, each of the seven MetroRapid corridors will be evaluated and assessed separately for possible federal funding.

Defining the LPA is part of the federal planning process and involves working with stakeholders to make sure all the pieces of Project Connect will ultimately work together to improve mobility, including maximizing coordination between the seven MetroRapid Corridors, the Orange and Blue & Gold Line Corridors, the Red and Green Lines, MetroExpress, and Neighborhood circulators.

This level of system planning has already begun and will continue as the MetroRapid Corridors advance through planning and engineering.

» WHAT IS A LOCALLY PREFERRED ALTERNATIVE?

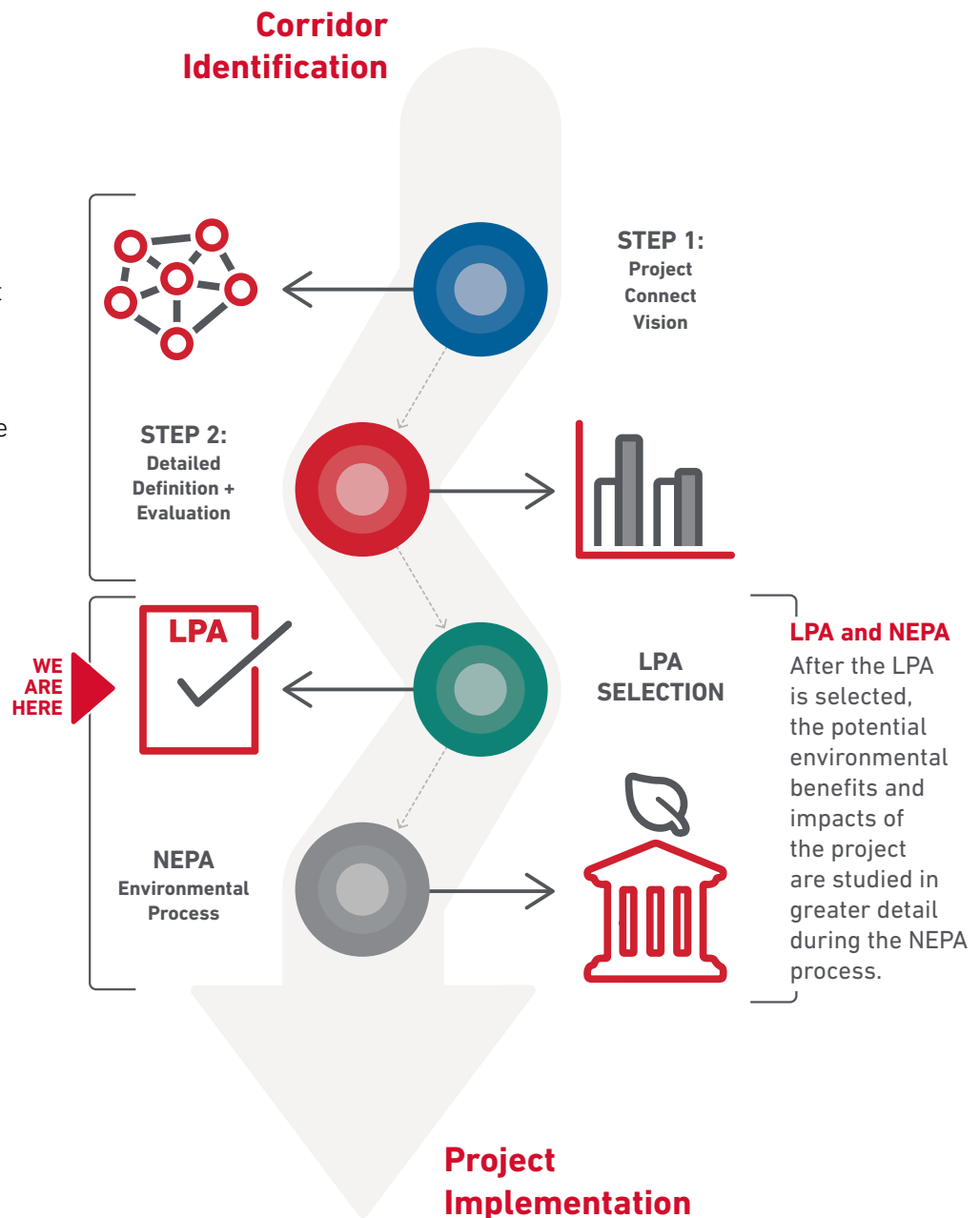
Locally Preferred Alternative (LPA) is the technical term that the Federal Transit Administration (FTA) uses to describe a community-selected transit investment that is seeking federal capital funds. An LPA, or project, is made up of a corridor, vehicle, service plan, and any required support infrastructure. The LPA may be organized into phases for implementation.

HOW WE GOT HERE

» THE PROCESS

Capital Metro worked with stakeholders to determine the best transit investment for the MetroRapid Corridors through analysis of the MetroRapid corridors. The outcome of the analysis will be a proposed LPA that is best suited to serve current and anticipated travel demand along the MetroRapid Corridors.

Detailed information on the study process and outcomes can be found on the resources page at Capital Metro's website (www.projectconnect.com).



WHO IS INVOLVED



COMMUNITY LEADERS

Public input has been essential to the development of the MetroRapid LPA. The engagement process included formal public engagement that was designed to share technical results with the public and seek feedback from communities to deepen the project team’s understanding of local issues, considerations, and constraints. The process included a series of open house style meetings in the MetroRapid Corridors to discuss the Purpose and Need and corridor-specific concepts. In addition, a Virtual Open House (VOH) was conducted online to provide an opportunity for the public to review the materials provided at the in-person open house meetings. Additional details about Project Connect’s engagement efforts can be viewed at the Community Engagement Dashboard at: www.capmetro.org/get-involved.



STAKEHOLDERS

Capital Metro conducted extensive outreach to stakeholders, including project-focused public meetings and numerous other outreach events as part of the Project Connect program.



YOU, THE PUBLIC

To date, Capital Metro has conducted formal public engagement to gather input on the MetroRapid corridors at key points in the process. Public engagement incorporated a range of outreach methods, including public open house events and an online virtual open house. Additional details about engagement efforts can be viewed at the Community Engagement Dashboard at: www.capmetro.org/get-involved.

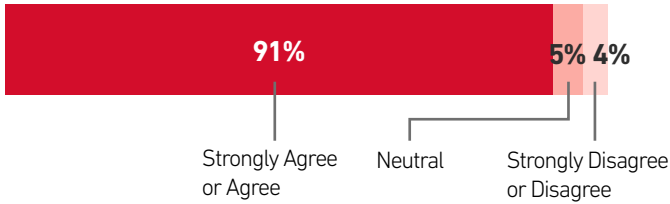


PARTNER AGENCIES

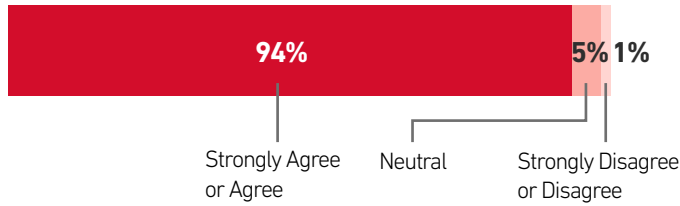
The Capital Metro Board of Directors is the decision-making body for the MetroRapid Corridors and has worked closely with Capital Metro staff, the City of Austin staff, and Austin City Council through several joint sessions to build consensus on an LPA. Capital Metro will pursue federal funding from the Federal Transit Administration (FTA) and is working closely with the FTA to ensure that MetroRapid’s progress is in alignment with FTA requirements. Partner agencies include the Texas Department of Transportation (TxDOT) and the Capital Area Metropolitan Planning Organization (CAMPO). In addition, throughout the process Capital Metro regularly convened a Technical Advisory Committee (TAC) of public agency staff members from local cities, counties, transportation agencies and other entities to provide technical feedback related to project engineering and design.



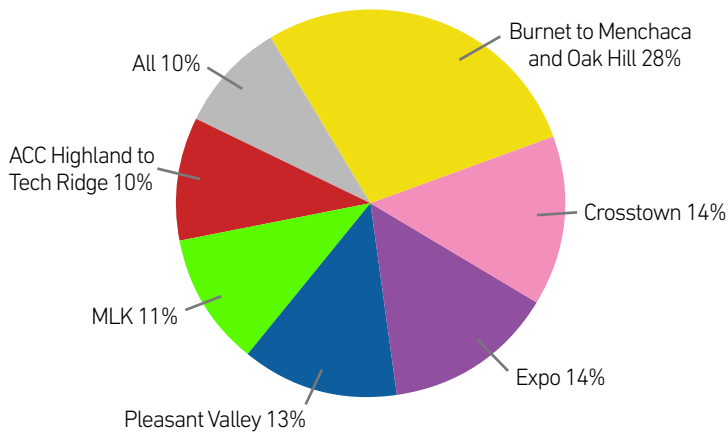
» PUBLIC ENGAGEMENT PARTICIPANTS AGREE WITH THE CORRIDORS DRAFT NEED



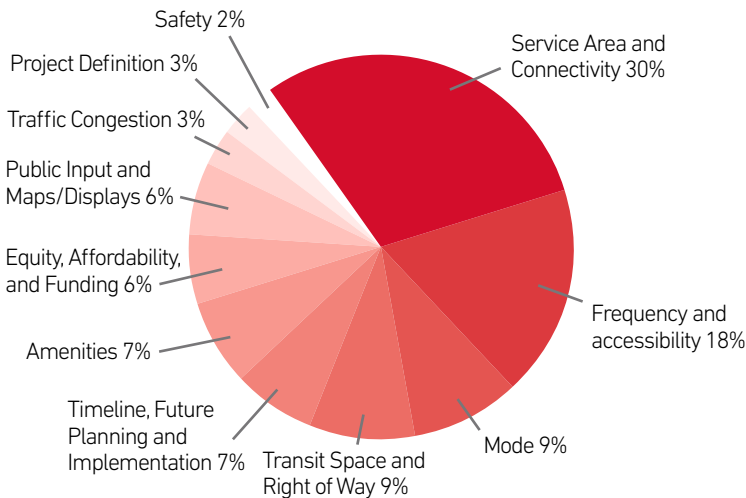
» PUBLIC ENGAGEMENT PARTICIPANTS AGREE WITH THE PROJECT'S DRAFT PURPOSE



» PUBLIC ENGAGEMENT PARTICIPANTS IDENTIFIED THE METRORAPID CORRIDORS THEY ARE MOST LIKELY TO USE



» WRITTEN COMMENTS ARE DIVIDED INTO 11 CATEGORIES



WHAT WE HEARD



There is broad concurrence with the Draft Purpose and Need Statement.

Public support for all seven MetroRapid Corridors, with the highest level of public support for the Burnet to Menchaca and Oak Hill (North and South) Corridor.

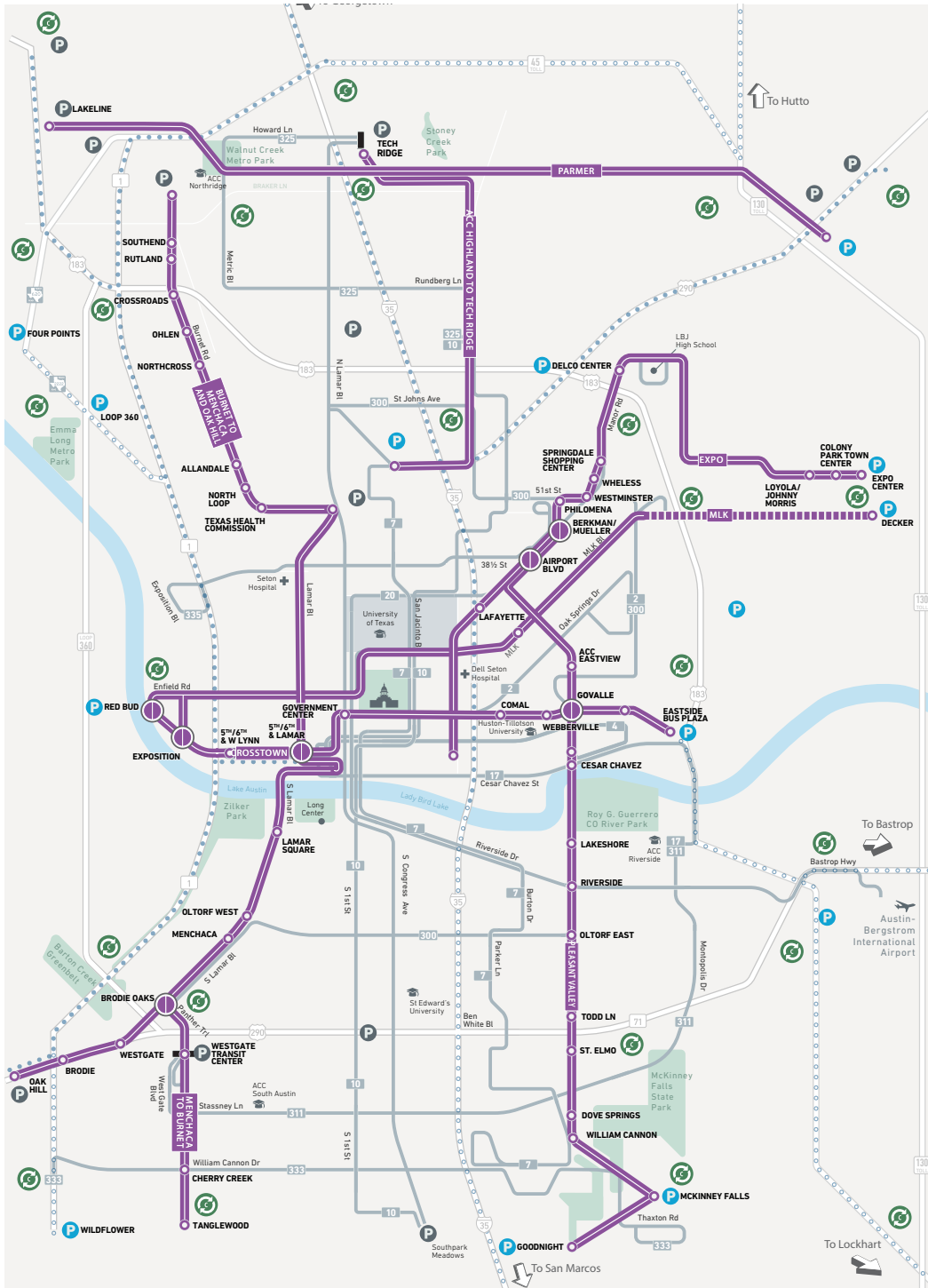
Nearly half of all comments were related to service area, connectivity, frequency, and accessibility.

HOW IT COULD BE IMPLEMENTED

PROJECT CONNECT CORRIDORS

As the Project Connect corridors proceed through the federal process, the following definitions will be used to categorize projects separately for engineering purposes. These definitions are most useful to the technical team but may be helpful in understanding how the Project Connect team will delineate projects within formal applications for federal funding. These corridor definitions are also used in this report to ensure that key performance metrics – such as capital cost and ridership – best reflect the projects that will be carried into the federal environmental process.

METRO RAPID CORRIDOR LONG TERM VISION



The MetroRapid Corridors work together as a system of interconnected services. A funding and construction sequencing plan will outline how and when each part of the system is paid for, built, and operated.

HOW IT ALL COMES TOGETHER

LIGHT RAIL

- Orange Line
- Blue Line
- Gold Line

METROEXPRESS

- Current MetroExpress
- Future MetroExpress

METROACCESS

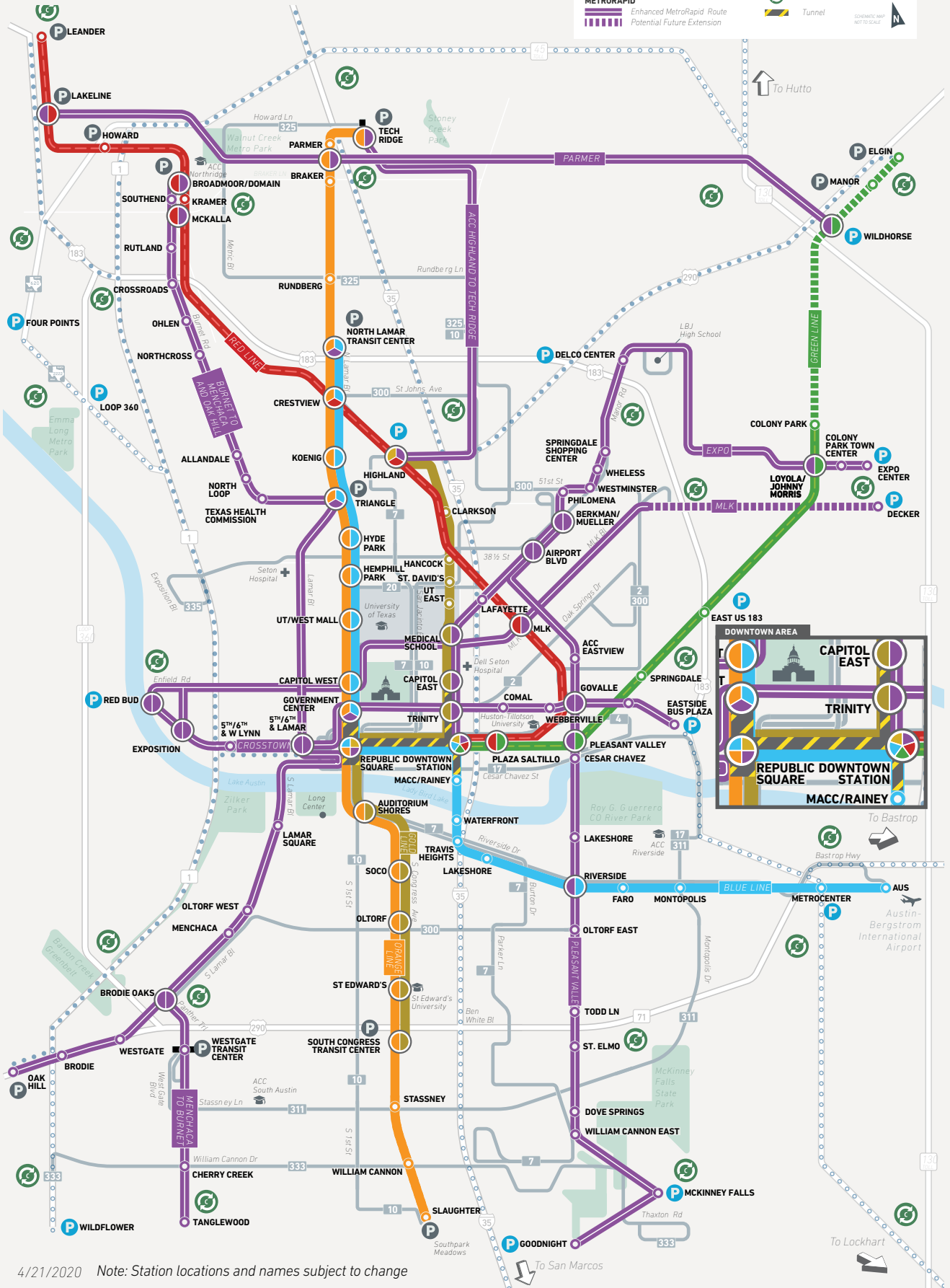
- Available within CapMetro service area
- Current Park & Ride
- Proposed Park & Ride
- Circulator
- Tunnel

METRORAIL

- Red Line
- Green Line
- Potential Future Extension

METRORAPID

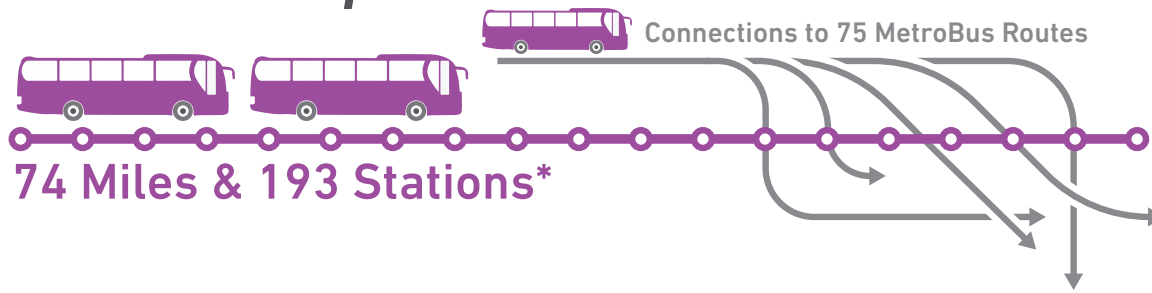
- Enhanced MetroRapid Route
- Potential Future Extension



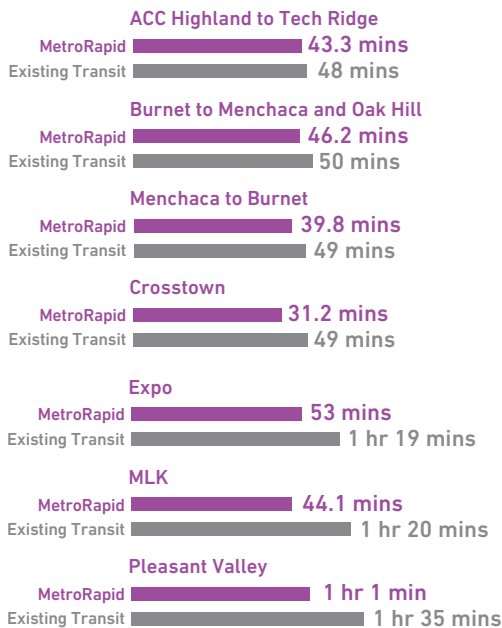
4/21/2020 Note: Station locations and names subject to change

METRORAPID CORRIDORS *at a glance*

Mode *Bus Rapid Transit*



Travel Time



Capital Cost
\$150 - \$170 million

Operations & Maintenance
\$6 - \$9 million per corridor annually



Weekday Ridership (2040)
30,000 (for all lines)



Vehicle-Miles-Traveled
8 million fewer miles annually

Carbon Monoxide Emissions Reduction
40 Tons fewer annually



Zero Car Households in Station Areas
14,555 | 8% of households

Individuals in Poverty in Station Areas
91,919 | 20%

People of Color in Station Areas
262,873 | 54%

» WHAT IS THE PROPOSED METRORAPID CORRIDOR LPA?

The MetroRapid LPA consists of the following corridors for enhanced transit options:

- ACC Highland to Tech Ridge
- Crosstown
- Burnet to Menchaca and Oak Hill
- Oak Hill to Burnet and Menchaca to Oak Hill
- Expo
- MLK
- Pleasant Valley

The proposed MetroRapid Corridor LPA would provide approximately 74 miles of new Bus Rapid Transit service on seven corridors with access at 193 stations throughout Central Texas*. The MetroRapid Corridors would operate on existing roadways within existing travel lanes and service is currently planned to operate every 10 minutes during the day (7am-6pm) and every 15-20 minutes during the early morning and at night.

The MetroRapid Corridors are currently designed to deliver services to northern, southern, and eastern communities in Central Texas. Through Downtown, there are options to connect to planned HCT services (Blue/Gold and Orange Line Corridors). Locations of connections to all proposed Project Connect System Plan services and existing routes will be determined in PE.

The MetroRapid Corridors would feature stations with shelters and transit amenities, and the MetroRapid Corridors would be served by electric buses.

*Includes existing MetroRapid Route 803 mileage and stations

WHAT'S IN IT FOR YOU

IMPROVED RELIABILITY

- Opportunities for Traffic Signal Priority (TSP), near-level boarding, and off-board fare collection
- Faster, more efficient, and more predictable travel times throughout the day compared to existing bus service
- Provides a dependable system that gets you where you want to go quickly and on time

EXPANDED ACCESS TO JOBS

- MetroRapid would improve Austinites' access to jobs
- Improved access to more than 488,000 jobs, including jobs in densely populated areas like ACC Highland
- Corridors provide improved access for households that are low-income or do not have access to a vehicle (twenty percent and eight percent of households along all corridors, respectively)
- Improved access would help employers connect with job-seeking Austinites

EXPANDED SPAN OF SERVICE

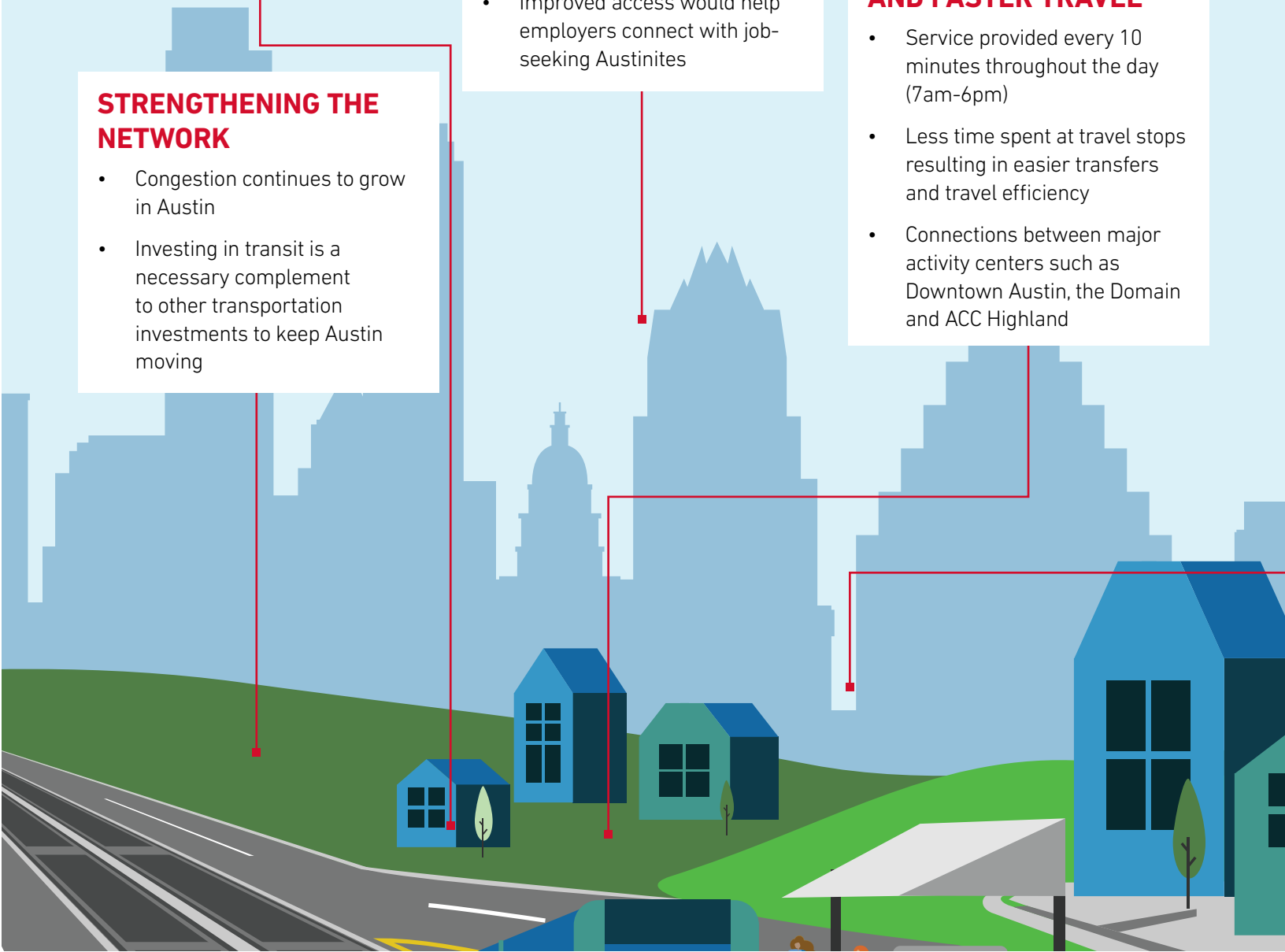
- Near 24-hour service: MetroRapid service would begin at 5:30am and operate until 3:30am the next day
- Improved mobility when coupled with more frequent service and faster travel times
- Early morning and late night transit needs will be better served

STRENGTHENING THE NETWORK

- Congestion continues to grow in Austin
- Investing in transit is a necessary complement to other transportation investments to keep Austin moving

INCREASED FREQUENCY AND FASTER TRAVEL

- Service provided every 10 minutes throughout the day (7am-6pm)
- Less time spent at travel stops resulting in easier transfers and travel efficiency
- Connections between major activity centers such as Downtown Austin, the Domain and ACC Highland



INCREASING OPTIONS

- Connections with existing transit routes, with the Blue/Gold and Orange Line Corridors, and with each other
- Provides customers with multiple options to get to their destinations

CONNECTING THE DOTS

- Increased mobility between transportation options
- Connections to cars (park-and-rides), on foot (improved sidewalks), on wheels (bikes on vehicles), and beyond

EXPANDING CHOICE

- Designed to make transit more reliable
- Frequent, reliable, convenient connections to get you where you want to go without the headache of traffic and parking

SUPPORT FOR REGIONAL PLANS

- Supports regional plans such as Imagine Austin and the Austin Strategic Mobility Plan
- Imagine Austin core principles include encouraging a more compact city that is supported by a multi-modal transportation system and promotes mixed-use developments
- Austin Strategic Mobility Plan goal that 16 percent of Austinites will use transit to get to work by 2040. This goal will require significant transit investment including implementation of the MetroRapid Corridors

THRIVING COMMUNITIES

- Our region's population expected to double in next 20 years
- MetroRapid investment would help focus the region's growth and development
- Investment in enhanced transit will help create attractive places to live, work, and play

INVESTING IN THE FUTURE

- MetroRapid Corridors would use electric buses providing a step forward towards a more sustainable future



WHAT'S NEXT

Once the Capital Metro Board of Directors adopts the MetroRapid LPA, with the support of the Austin City Council, MetroRapid Corridors will be ready to advance through next steps in the implementation process. These next steps include: identifying an implementation plan including funding, completing the federal environmental review process, completing final design, and starting construction. Capital Metro will continue to engage with the community as the MetroRapids projects advance.

MetroRapids

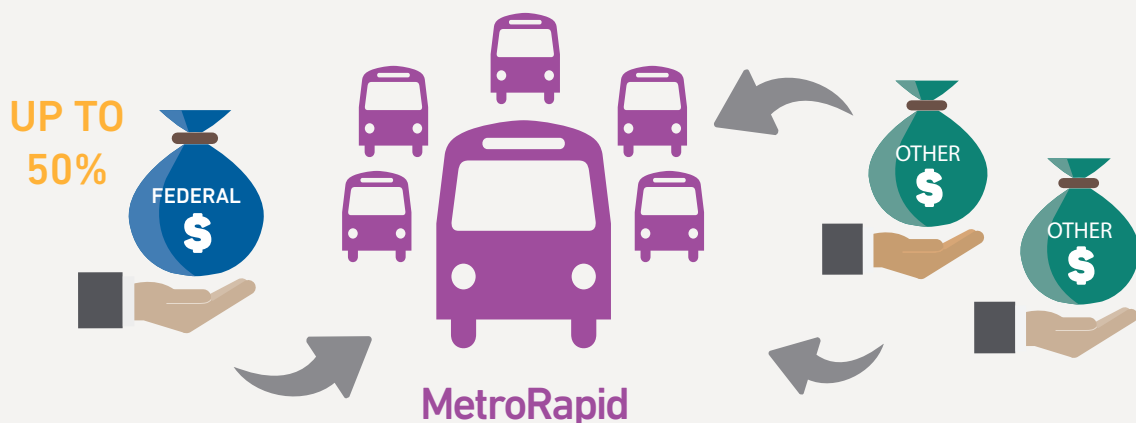
It's time for regional public transit we can rally behind.

It's Go Time!

» HOW WILL IT BE FUNDED?

Once an LPA is adopted, the MetroRapid projects would be eligible for Federal funding in line with recent trends in Capital Investment Grant (CIG) authorizations. The CIG program may award up to 50% of the capital cost. Other funding will primarily

come from local sources, and authorization of new local funding to be directed towards some or all of the MetroRapid projects could be on the potential transit referendum.



Capital Metro Board Action on LPA

- Capital Metro Board adopts independent corridor LPA
 - Necessary step for federal funding
- Capital Metro Board adopts System Plan



Local Partner Action on LPA

- Austin City Council considers a local funding decision
- CAMPO adopts LPA into Long Range Transportation Plan (LRTP)



Implementation

- Develop implementation plan
- Define projects for construction/funding
- Finalize funding package



Investments Advanced

MetroRapid Implementation

Environmental Work (NEPA)

Potential impacts to natural, social, and built environments

Engagement

Project Development

- Complete Environmental Review Process
- Gain commitment of all non-Small Starts funding
- Complete sufficient engineering and design

Small Starts Grant Agreement

- FTA funds
- Construction begins

2020



2021



QUESTIONS?



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Visit ProjectConnect.com

We value your input! Sign up to receive updates or learn about upcoming meetings.



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Led by Capital Metro with support from the City of Austin

AECOM **HR**

HNTB **N NELSON**
NYGAARD

ORANGE LINE



»» ORANGE LINE AT A GLANCE

The Orange Line is an approximately 21-mile light rail link with 22 stations, running from North Lamar Transit Center (183 & N. Lamar) along the North Lamar/Guadalupe corridor, UT campus, downtown to Lady Bird Lake and along South Congress to Stassney Lane.

»» DOWNTOWN TRANSIT TUNNEL

The Downtown Transit Tunnel can separate light rail vehicles from downtown traffic, allowing service to move faster, safer and more reliably through downtown benefiting all system users.

»» INCREASED FREQUENCY AND FASTER TRAVEL

The Orange Line will operate every 10 minutes throughout most of the day.

This means you'll spend less time waiting for transit and more time where you want to go.

»» MORE CONNECTIONS

The Orange, Blue and Gold Line corridors are being designed to maximize connections to where you want to go.

The Orange Line will connect to the larger transit system, including the Red, Blue and Gold Lines, as well as MetroRapid and MetroBus routes.



See reverse side for detailed **ORANGE LINE MAP**



Visit ProjectConnect.com

We value your input! Sign up to receive updates or learn about upcoming meetings.



Visit the Project Connect Community Office located at 607 Congress Ave.

Stop by any time between 9 a.m. and 4 p.m. Talk with project staff, ask questions and provide feedback.



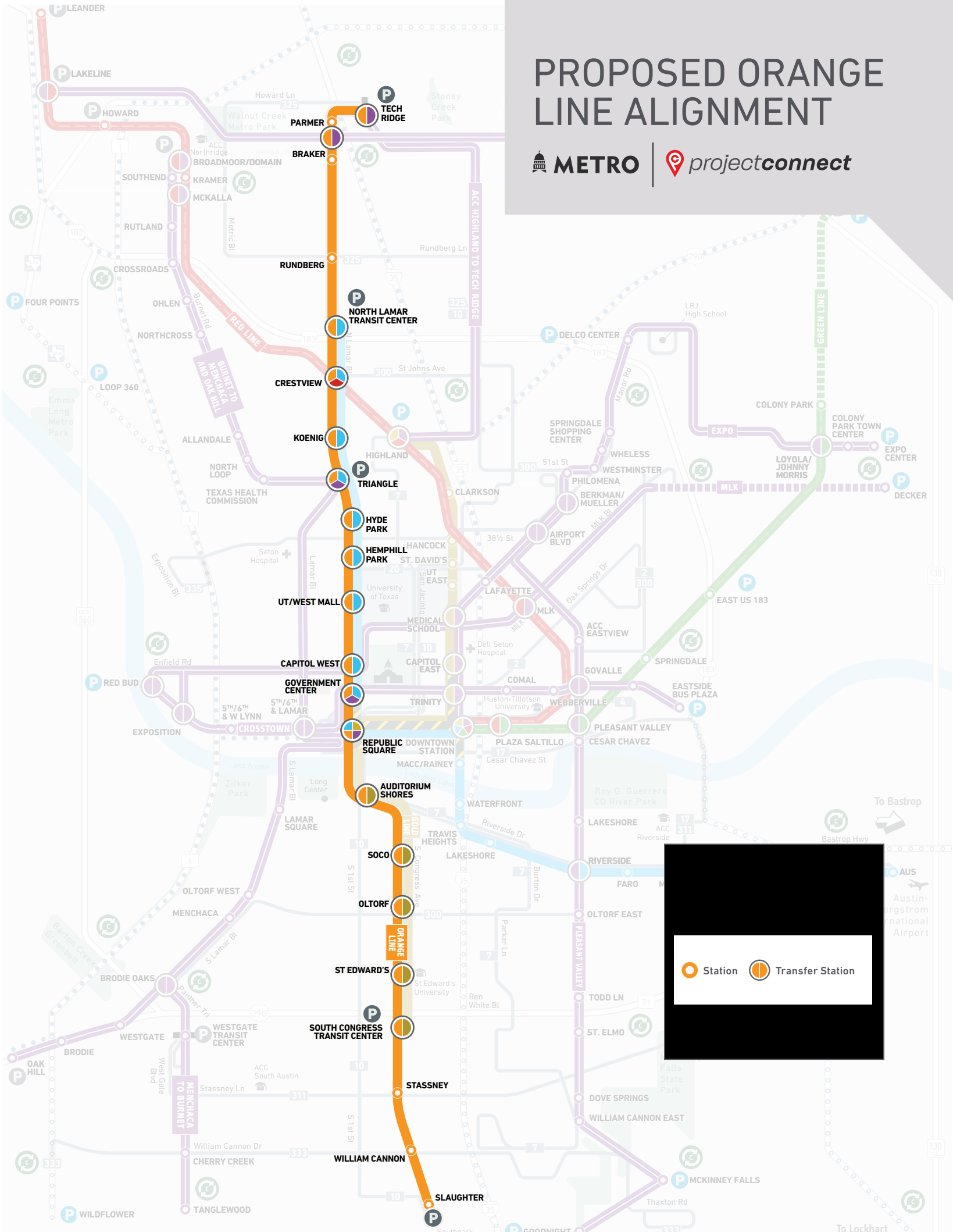
PROPOSED ORANGE LINE ALIGNMENT





METRO



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 Station  Transfer Station

BLUE LINE



» BLUE LINE AT A GLANCE

The Blue Line would operate for approximately 15 miles connecting 20 stations, running from Austin-Bergstrom International Airport, providing service along East Riverside Drive, across Lady Bird Lake to the Convention Center and west along 4th Street to Republic Square. It then operates along the Orange Line to U.S. 183 and North Lamar.

» DOWNTOWN TRANSIT TUNNEL

The Downtown Transit Tunnel can separate light rail vehicles from downtown traffic, allowing service to move faster, safer and more reliably through downtown benefiting all system users.

» INCREASED FREQUENCY AND FASTER TRAVEL

The Blue Line will operate every 10 minutes throughout most of the day.

This means you'll spend less time waiting for transit and more time where you want to go.

» MORE CONNECTIONS

The Orange, Blue and Gold Line corridors are being designed to maximize connections to where you want to go. Congestion-proof transit will get you there without the headache of traffic and parking.

The Blue Line will connect to the larger transit system, including the Red, Green, Orange and Gold Lines, as well as MetroRapid and MetroBus routes.



See reverse side for detailed **BLUE LINE MAP**



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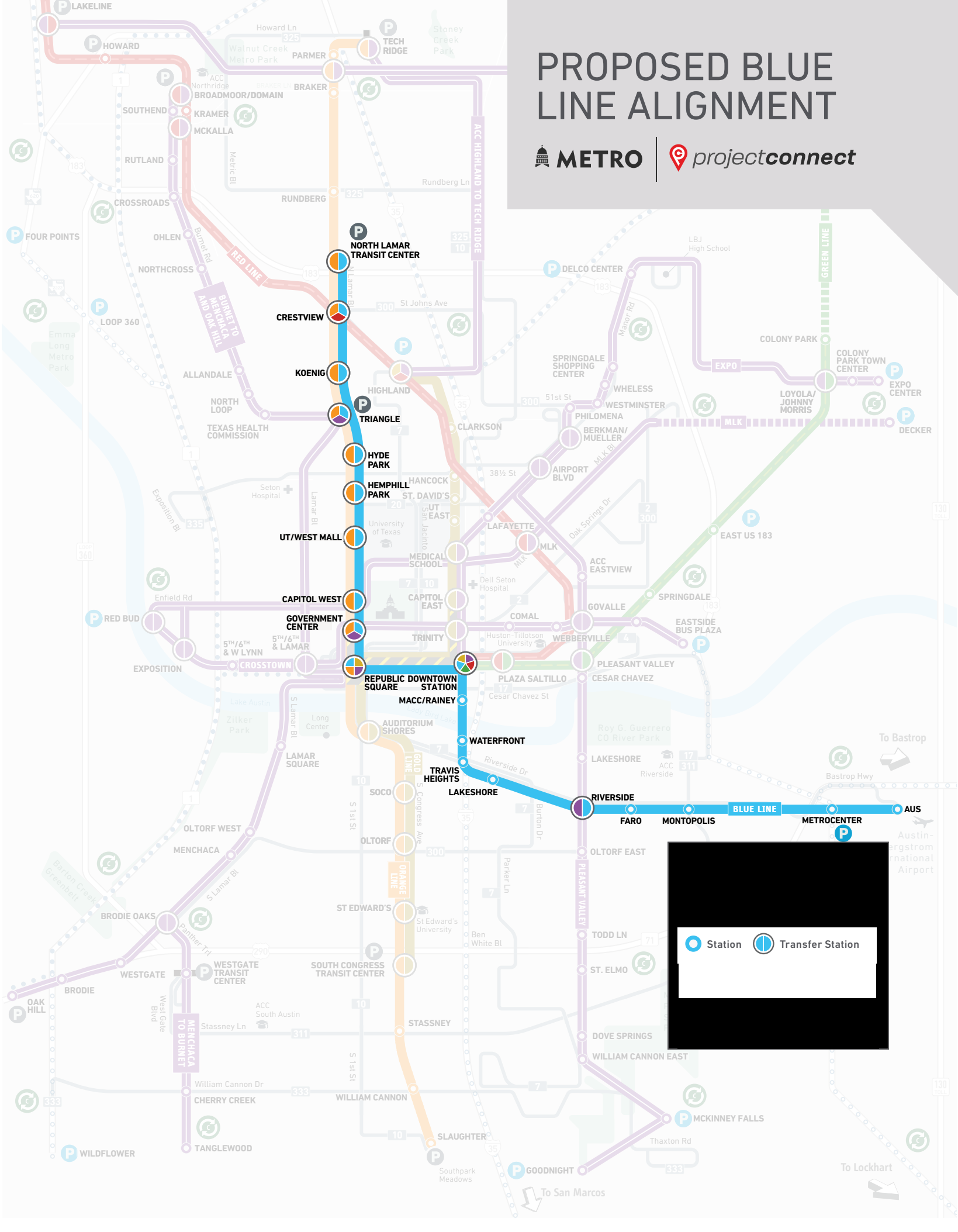
PROPOSED BLUE LINE ALIGNMENT



METRO



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Legend:

- Station (represented by a blue circle with a white center)
- Transfer Station (represented by a blue circle with a white center and a blue 'T')

GOLD LINE



»» GOLD LINE AT A GLANCE

The Gold Line light rail would operate for approximately 9.5 miles connecting 15 stations from Austin Community College's Highland campus through downtown to the Convention Center and Republic Square. The Gold Line may initially be MetroRapid with later conversion to light rail service. After conversion to light rail service the Gold Line can operate along the Orange Line to South Congress Transit Center.

Accommodates future growth.

Population is expected to grow along the proposed Gold Line corridor, and this light rail service would support that growth and ensure its sustainability.

»» DOWNTOWN TRANSIT TUNNEL

The Downtown Transit Tunnel separates light rail vehicles from downtown traffic, allowing service to move faster, safer and more reliably through downtown benefiting all system users.

»» INCREASED FREQUENCY AND FASTER TRAVEL

The Gold Line will operate every 10 minutes throughout most of the day. This means you'll spend less time waiting for transit and more time where you want to go.

»» MORE CONNECTIONS

The Orange, Blue and Gold Line corridors are being designed to maximize connections to where you want to go. Congestion proof transit will get you there without the headache of traffic and parking.

The Gold Line will connect to the larger transit system, including the Red, Green, Orange and Blue Lines, as well as MetroRapid and MetroBus routes.



See reverse side for detailed **GOLD LINE MAP**



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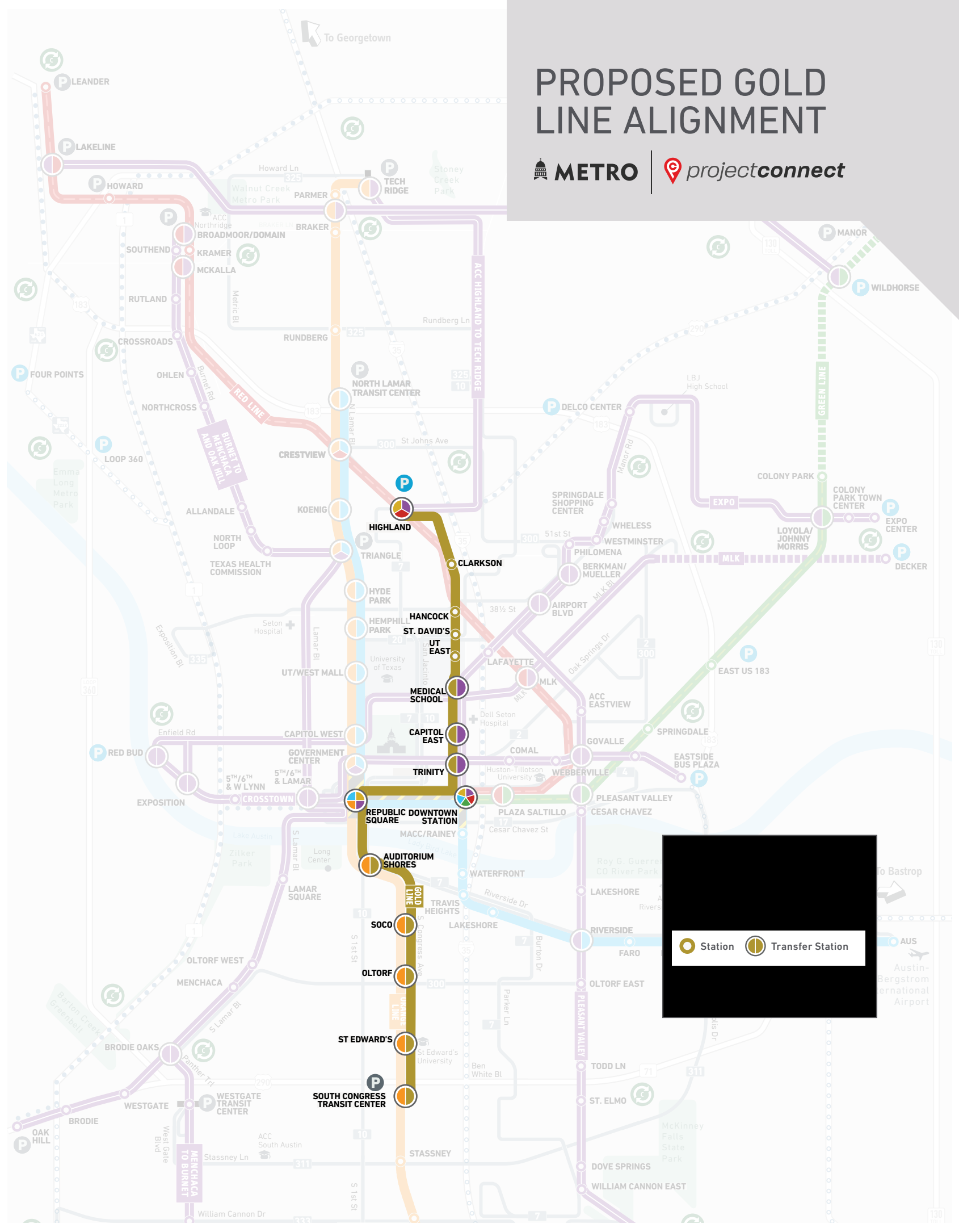
PROPOSED GOLD LINE ALIGNMENT



METRO



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Station **Transfer Station**

METRORAPID



» METRORAPID EXPANSION & ENHANCEMENTS AT A GLANCE

Provides frequent service with a limited number of stops and faster travel times. Priority lanes, transit signal priority, queue jumps, enhanced and improved bus stops and higher frequency are all features of MetroRapid.

Serving all areas of the city: Burnet to Menchaca and Oak Hill, ACC Highland to Tech Ridge, Parmer, Expo Center, MLK, Crosstown and Pleasant Valley.

» METRORAPID BENEFITS

Improved Reliability.

Faster, more efficient, and more predictable travel times throughout the day compared to existing bus service.

Provides a dependable system that gets you where you want to go quickly and on time.

Increasing Connections.

The MetroRapid routes will connect to the larger transit system, including the Red, Green, Blue, Orange, and Gold Lines, as well as MetroBus routes.

Improving mobility connections to Park & Rides, better sidewalks, bike lanes, and beyond.


Expanding Choice.

Frequent, reliable, convenient connections to get you where you want to go without the headache of traffic and parking.

Features and Service Quality.

- Multi-door boarding
- Digital information centers
- USB charging
- Smart ticket scanner
- Free Wi-Fi
- All electric buses



 See reverse side for detailed **METRORAPID MAP**



Visit [ProjectConnect.com](https://www.projectconnect.com)

We value your input! Sign up to receive updates or learn about upcoming meetings.

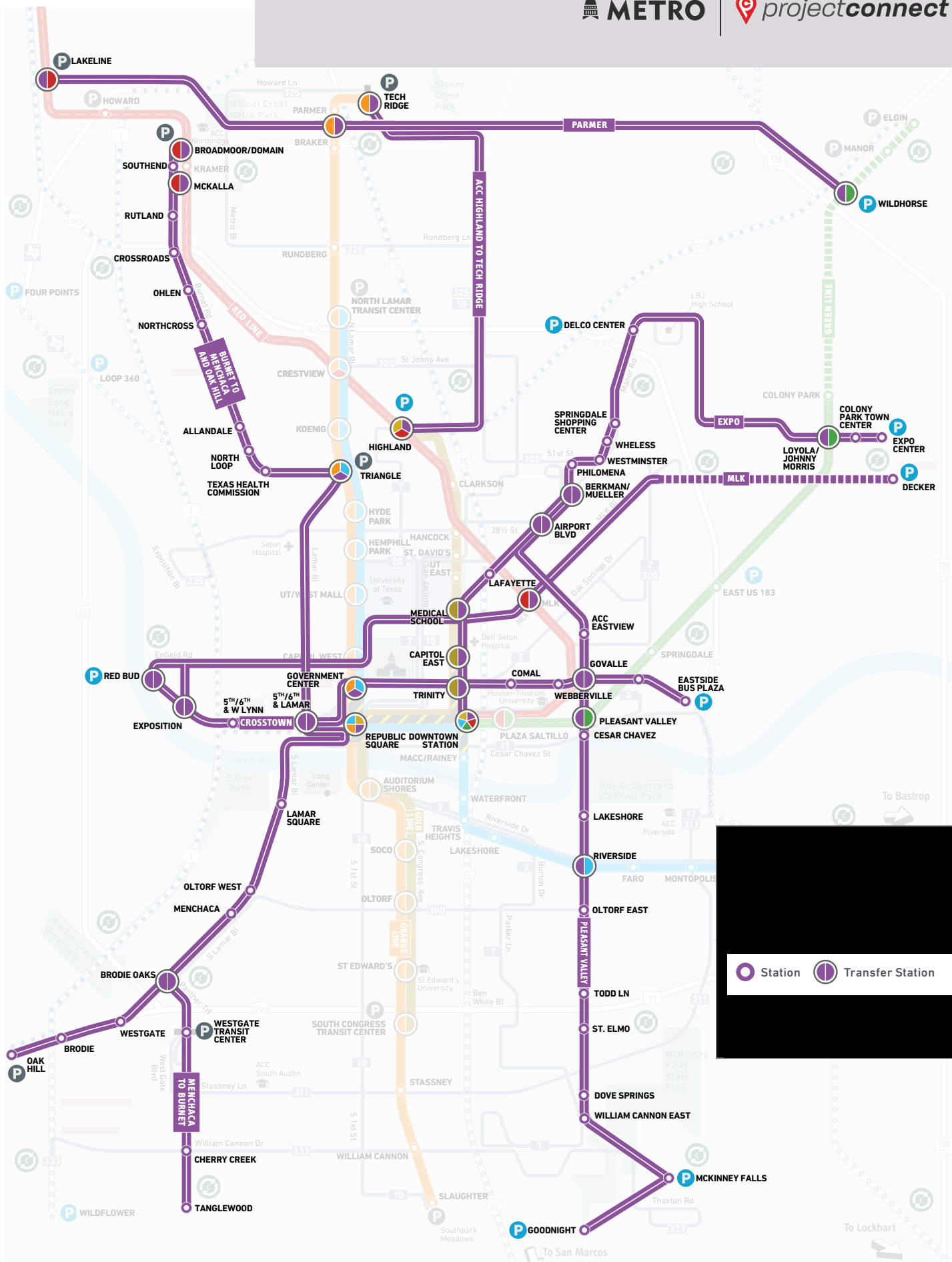


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PROPOSED METRORAPID LINES



RED LINE



»» RED LINE ENHANCEMENTS AT A GLANCE

The Red Line is a commuter rail service that operates from downtown Austin, through Central and Northwest Austin, and the city of Leander. The first phase of improvements will include building two new stations and double tracking to increase frequency and capacity. The second phase includes increasing station lengths, additional double tracking, and maintenance facility upgrades to support additional vehicles.

»» RED LINE FACTS

Would provide additional capacity for both commuter rail and freight operations. The line currently serves nine stations along 32 miles of track. Red Line service is already over capacity at rush hour, and ridership continues to increase.

»» RED LINE BENEFITS

Connects people to key activity centers.

Commuter rail would operate more frequently meaning more space for riders. Key activity centers along the Red Line include the Convention Center, Plaza Saltillo, and neighborhoods like Crestview, along with connections to Park & Rides at Howard, Lakeline and Leander. New stations would include Broadmoor/Domain and McKalla by the Austin FC soccer stadium.

Accommodates future growth.

Population is expected to continue to grow along the Red Line Corridor. Employment opportunities continue to increase within and adjacent to the Red Line Corridor, such as the Northline Transit Oriented Development in Leander.

The Red Line will connect to the larger transit system, including the Green, Blue, Orange, and Gold Lines, as well as MetroRapid and MetroBus routes.



See reverse side for detailed **RED LINE MAP**



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GREEN LINE



» GREEN LINE AT A GLANCE

A new commuter rail line operating on Capital Metro's existing freight track, the Green Line will connect neighborhoods throughout East Austin. The first phase would be from Downtown to Colony Park. The next phases would go further east to Manor and Elgin.

» GREEN LINE FACTS

The first phase will be eight miles long to Colony Park and includes seven stations. The next phases could add an additional 17 miles and three more stations.

Commuter rail would operate more frequently and move people quickly and efficiently.


» GREEN LINE BENEFITS

Unique opportunities for housing and development. The proposed Green Line corridor could provide unique opportunities for more affordable housing options along the corridor. This could be an integral part of the Colony Park Master Plan.

Increased access to jobs and services. The proposed Green Line could provide more households with high-capacity transit as an option to travel to jobs, health care, and education.

The Green Line will connect to the larger transit system, including the Red, Blue and Gold Lines, as well as MetroRapid and MetroBus routes.



 See reverse side for detailed **GREEN LINE MAP**



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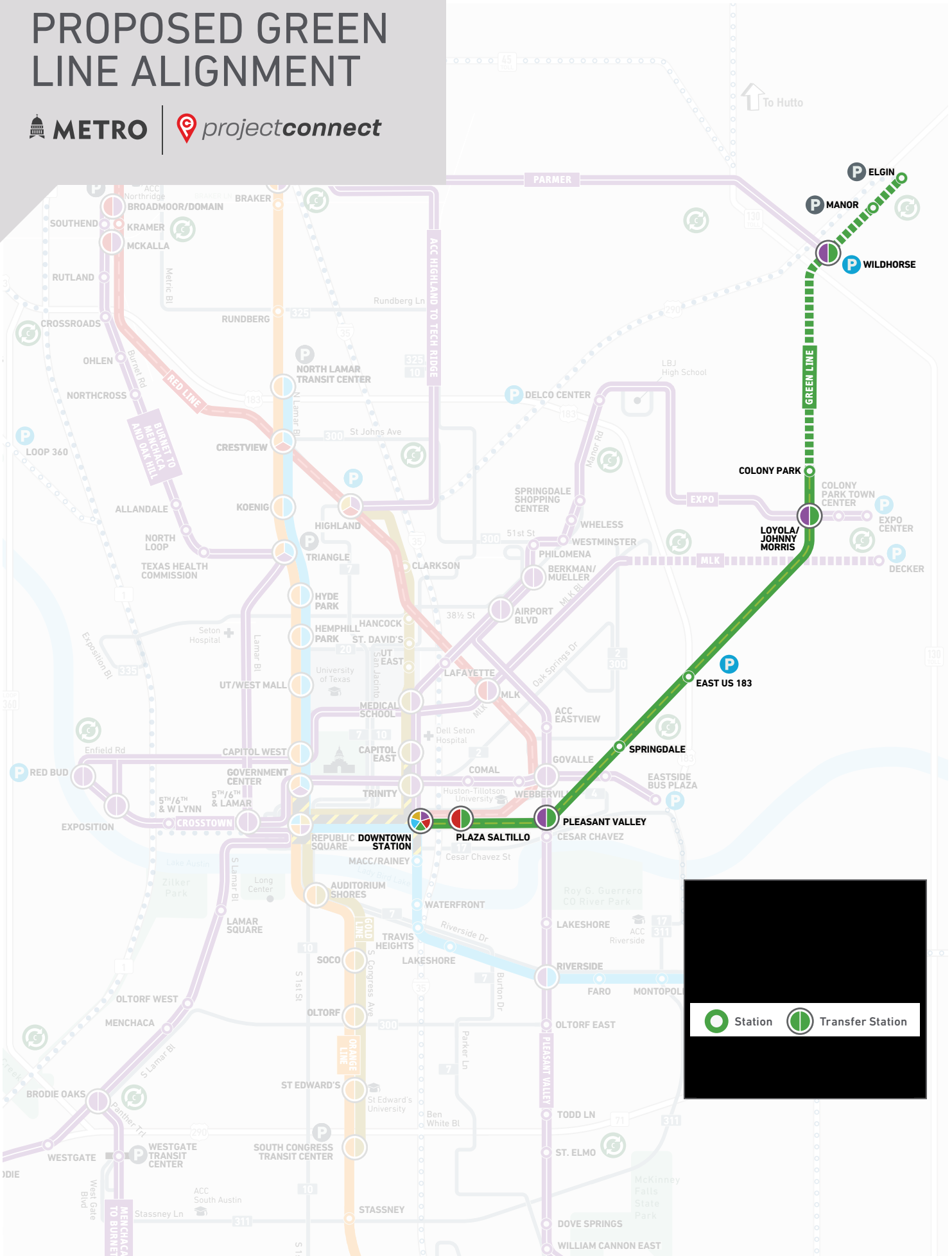
PROPOSED GREEN LINE ALIGNMENT



METRO



projectconnect



PROJECT CONNECT AUSTIN UNDERGROUND TUNNEL



» SAFER OPERATION WITH COMPLETE SEPARATION:



A downtown tunnel will provide a safer environment for all mobility modes.

» PLACEMAKING OPPORTUNITIES:



These types of transit spaces could include:

- retail/food
- restrooms
- public art
- AC-controlled environments

» FUTURE-PROOFING:



Allows the system to increase capacity for future service demand, including up to 4 car trains.

» IMPROVEMENT IN TRANSIT OPERATIONAL RELIABILITY:



The benefits of grade separation and the elimination of surface conflicts improves travel time reliability and ultimately the quality of the customer's trip for everyone citywide.

» FASTER SERVICE UNDERGROUND:



The downtown tunnel would bypass approximately 20% of surface level traffic signals, which improves speed and reliability of the whole network.

There are

14 TOWERS BUILT BETWEEN 2010 AND 2018

37 TOWERS being planned for DOWNTOWN AUSTIN

3.7 MILLION FT² of office space including an additional to the area

WHICH WILL BRING TENS OF THOUSANDS OF WORKERS TO DOWNTOWN

Source: Austin Business Journal, March 2020

» REDUCTION IN SURFACE CONFLICTS:



With the construction of a downtown tunnel, approximately twenty percent of the intersections could be made conflict free resulting in improved safety, reliability and travel time for all mobility modes, including emergency vehicles.

» EXPANDING TRANSIT FOOTPRINT:



By placing a light rail transit system in a tunnel and expanding the service options of the corridor, one can help maintain the mobility capacity of the corridor and react to the growth and the congestion that comes with it.

PARK & RIDES



»» PARK & RIDES AT A GLANCE

Project Connect's vision is to add new Park & Rides and elevate our services with placemaking amenities and improved connection options – all tailored to the particular neighborhoods they serve.

- Park & Rides will serve as mobility hubs to connect to frequent and reliable transit.
- Capital Metro has 16 existing Park & Rides, and Project Connect will add an additional 24 (10 that are outside of the service area).

»» GENERAL IMPROVEMENTS MAY INCLUDE:

- Unique landscaping and lighting
- Increased parking
- Security cameras
- Pedestrians, bicycle and scooter connections
- Electric vehicle charging stations

»» OVERALL BENEFITS

Increased Access to Transit

Park & Rides will facilitate safe, easy and efficient connections between travel modes.

Welcoming Environments

Enjoyable and enticing environments for transit users that include amenities, and information resources to create a user-friendly experience.

More Transportation Options

Park & Rides will be located in areas that are optimal to make connections with the various transit lines and equipped with various modes of transportation, such as bicycles stations.



See reverse side for detailed **PARK & RIDES MAP**



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METROBUS & METROACCESS



» METROBUS AT A GLANCE

MetroBus service is the backbone of the Capital Metro system. The agency has invested greatly in improvements to the customer experience in the past year, including the first electric buses in Central Texas, 125 new bus shelters with more to come, adding solar panel lighting to improve security, and investing in technology that provides customers with more accurate Next Departure information.

FAST FACTS:

- 60+ routes
- 14 High-Frequency routes
- UT Shuttle service
- E-Bus & Night Owl Late-Night service
- 544 square mile service area
- 1.3 million population served
- 368 fully accessible MetroBuses
- Award-winning transit app
- Ridership increases 17 consecutive months

» METROACCESS AT A GLANCE

MetroAccess is a shared-ride paratransit service for registered clients with different abilities. Availability of MetroAccess service expands as the CapMetro system grows.

FAST FACTS:

- 108 MetroAccess paratransit vehicles
- Free travel training provided to clients who are learning to use transit
- Project Connect includes enhanced MetroAccess services.



MetroBus and MetroAccess services are integral to Project Connect.

SUPPORTING PROJECT CONNECT

All the recent investments and improvements made to our MetroBus service are aligned with Project Connect. Future MetroBus improvements will include:

- More zero- emission, all-electric vehicles added to the fleet
- Electric bus yard with charging stations for 200+ buses
- Improved bus amenities like USB charging outlets
- Future connections to the Orange, Blue, Red, Green and Gold lines, as well as MetroRapid stations and Park & Rides



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PROJECT CONNECT ECONOMIC IMPACTS



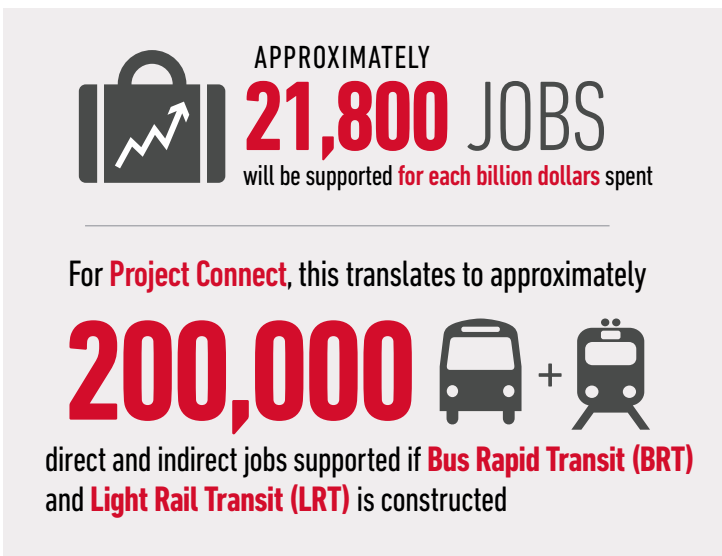
» PUBLIC TRANSPORTATION INVESTMENT IMPACTS

Based on data presented by the American Public Transportation Association (APTA)¹, investments in public transportation can have significant impacts on the economy by bringing new housing and employment opportunities to the city.



» JOB CREATION

Capital investment in public transportation is a significant source of jobs. Project Connect, like other multi-billion dollar projects, will create job opportunities across the region.



» DISADVANTAGED BUSINESS ENTERPRISE (DBE) PROGRAM

It is anticipated that the program will receive federal funding and therefore, will have a robust DBE program. This program expands business opportunities for minority and women-owned companies on federally-funded transportation projects.

Depending on the final program configuration...



¹ APTA Economic Impact of Public Investment 2014 Update

PROJECT CONNECT NEXT GEN CUSTOMER TECHNOLOGY



» MAKING IT EASIER THAN EVER TO PLAN, PAY AND GO!

Capital Metro brings technology and mobility together in Project Connect with the next evolution in smart trip planning, payment and multi-modal integration.

We'll use industry-leading best practices from Europe and Asia to create mobility-as-a-service, making transportation frictionless and simple.

Customers will have the option to use their mobile phones to access a new account-based fare system or to get a physical smart card. A new program called Fare Capping will offer pay-as-you-go fares, an innovative equity solution to pre-paying for weekly or monthly passes. With Fare Capping, you'll never pay for more than a monthly pass or what you need for the rides you take.

You can use your smart card or smart phone to pay for and use all types of transportation. Tap or scan to validate tickets on bus or rail, and you'll be on your way! The same account can manage parking, electric scooter and bike rentals, and more to create better first-last mile options. Account-based technology allows CapMetro and the City of Austin to partner for in-app integrations on other city and partner services to create a true smart city!

THE CUSTOMER TECHNOLOGY
EXPERIENCE IS MADE POSSIBLE
THROUGH A FULLY FUNDED
PROJECT CONNECT.



MOBILE APP

- » Use it for trip planning
- » Buy your tickets in advance
- » Account-based technology lets you view and track usage, plus the potential for loyalty rewards from agency partners
- » Apple and Google Pay



SMART CARD

- » Just tap and go when you board the bus
- » It's reloadable and reusable
- » Special event and community services integration



SMART TRIP PLANNING

- » Make and manage trip plans
- » Track your ride with real-time locations
- » Learn about latest detours and service impacts make informed travel choices

PROJECT CONNECT SUSTAINABILITY & AIR QUALITY



» TRANSPORTATION AND CLIMATE CHANGE

Capital Metro is committed to reducing transit emissions by focusing on these four areas:



Increasing vehicle efficiency



Zero emissions



Reducing vehicle miles traveled (VMT)



Improving transit system efficiency



12 zero emission electric buses will be in service by the end of 2020. This is the first of Capital Metro's investment towards a zero emission fleet.

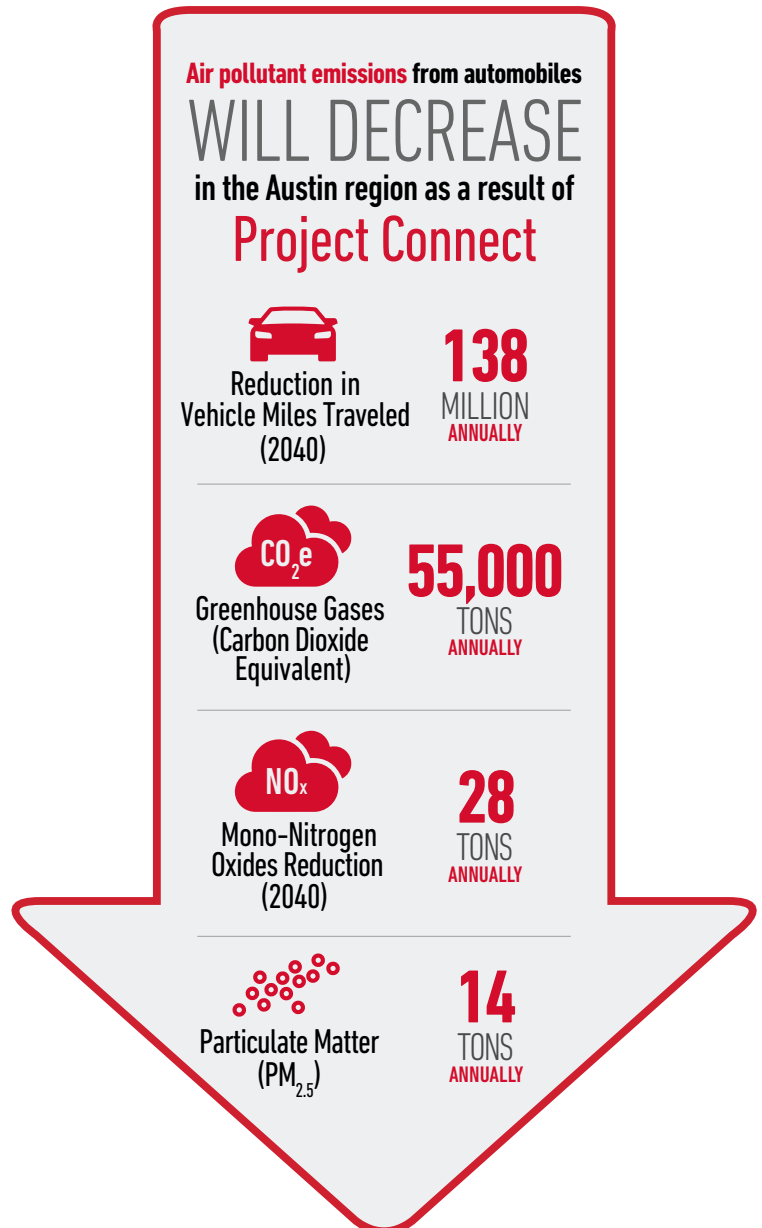
The Agency continues to focus on aligning their capital projects, operations, and the Project Connect program with:

- The City of Austin Office of Sustainability Climate Program.
- The City of Austin 2019 Strategic Mobility Plan.
- Capital Area Metropolitan Planning Organization (CAMPO) 2040 and future 2045 Plans.
- The City of Austin Smart Mobility Roadmap, an outline for an approach to new mobility capabilities such as all-electric fleets and solar powered transit stations.
- Construction of an innovative Electric Bus charging facility in North Austin.

» AUSTIN'S AIR

Air pollution in the Austin metro area was worse in 2018 than in 2017 and Ozone levels were high enough to put the region at risk of receiving an EPA violation. The primary cause of air pollution in the Austin region is emissions from automobiles. The anticipated increase in population and Vehicle Miles Traveled (VMT) is likely to result in an increase in greenhouse gases emissions in Austin.

The anticipated reduction of VMT as a result of Project Connect and the program's zero emissions fleet will help offset the increase in greenhouse gas emissions and bring Austin closer to its goal of net-zero community-wide greenhouse emissions by 2050.



Project Connect

Project Connect: Casa Abierta Virtual

Visión General de Project Connect

Visión de alto nivel de la propuesta de transporte de Project Connect que incluye un sistema de tránsito rápido de alta capacidad que conectará las áreas de alta densidad de desarrollo con los centros de empleo y educación.



Beneficios

- Conectar las áreas de alta densidad de desarrollo con los centros de empleo y educación.
- Reducir el tiempo de viaje y el costo de transporte.
- Reducir la congestión vial y las emisiones de carbono.
- Crear empleos y oportunidades de desarrollo.
- Mejorar la calidad de vida y el acceso a servicios.
- Reducir el costo de vivienda y el costo de transporte.
- Reducir el tiempo de viaje y el costo de transporte.
- Reducir la congestión vial y las emisiones de carbono.
- Crear empleos y oportunidades de desarrollo.
- Mejorar la calidad de vida y el acceso a servicios.

Agende sobre las propuestas

Lineas Naranja

Lineas Azul & Lineas Doradas

Metrolink

Tren Suburbano

Conexiones Regionales

Conexiones Locales



Tren Suburbano

Conexiones Regionales

Conexiones Locales

Plan de Tránsito del Centro



Visión a Largo Plazo

Propuestas Alternativas



Lineas Naranja

Conectar Naranja Alternativa Profunda Localmente & Visión a Largo Plazo



Modo Tren Ligero

21 Millas y 22 Estaciones

Tiempo de Viaje

Costo

Ambiental

Presupuesto

Beneficio neto



Lineas Azul & Lineas Doradas



Modo de Transporte: Tren Ligero

LÍNEA AZUL de un vistazo

9.2 Millas • 11 Estaciones

Modo de Transporte: Tren Ligero

LÍNEA DORADA de un vistazo

4.4 Millas • 10 Estaciones

Key information sections for both lines, including maps and descriptive text.

MetroRapid

MetroRapid Propuesto

¿Cómo encaja MetroRapid en el sistema?

- Costo: \$1.5 a \$1.7 millones
- Proveedores: 1000
- Área de Servicio: 1000
- Impacto: 1000

Additional text and icons describing the MetroRapid project's integration and benefits.

Tren Suburbano

¿Qué es el Tren Suburbano y por qué debería ser parte del sistema de transporte público? ¿Por qué debería ser parte del sistema de transporte público?

Línea Roja del Tren Suburbano

Línea Verde del Tren Suburbano

Text describing the suburban train lines, their routes, and their role in the transit system.

¿Por qué debería ser parte del sistema de transporte público?

Map showing the proposed routes for the suburban train lines.


Mapa del Tren Suburbano

Additional text and graphics related to the suburban train project, including a table of data.

Linea	Longitud	Estaciones	Costo
Línea Roja	1.5 millas	3	\$1.5 millones
Línea Verde	1.5 millas	3	\$1.5 millones

Conexiones Regionales

Conexiones Regionales - MicroExpress, Park & Ride



El sistema de transporte público de Austin ofrece una amplia variedad de opciones para viajar entre las zonas metropolitanas de Austin y Round Rock. Estas opciones incluyen MicroExpress y Park & Ride, que ofrecen una manera conveniente y económica de viajar entre las zonas metropolitanas de Austin y Round Rock.

MicroExpress: Este servicio ofrece una manera conveniente y económica de viajar entre las zonas metropolitanas de Austin y Round Rock. El servicio opera entre las zonas metropolitanas de Austin y Round Rock, y ofrece una manera conveniente y económica de viajar entre las zonas metropolitanas de Austin y Round Rock.

Park & Ride: Este servicio ofrece una manera conveniente y económica de viajar entre las zonas metropolitanas de Austin y Round Rock. El servicio opera entre las zonas metropolitanas de Austin y Round Rock, y ofrece una manera conveniente y económica de viajar entre las zonas metropolitanas de Austin y Round Rock.

Tabla de horarios:

Políticas de tarifas	Horarios	MicroExpress	Park & Ride	Transferencia de transporte
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Conexiones Locales

Conexiones Locales - Metrobus, Metro Access, Neighborhood Circulator



El sistema de transporte público de Austin ofrece una amplia variedad de opciones para viajar dentro de la zona metropolitana de Austin. Estas opciones incluyen Metrobus, Metro Access y Neighborhood Circulator, que ofrecen una manera conveniente y económica de viajar dentro de la zona metropolitana de Austin.

Metrobus: Este servicio ofrece una manera conveniente y económica de viajar dentro de la zona metropolitana de Austin. El servicio opera dentro de la zona metropolitana de Austin, y ofrece una manera conveniente y económica de viajar dentro de la zona metropolitana de Austin.


Metro Access: Este servicio ofrece una manera conveniente y económica de viajar dentro de la zona metropolitana de Austin. El servicio opera dentro de la zona metropolitana de Austin, y ofrece una manera conveniente y económica de viajar dentro de la zona metropolitana de Austin.

Neighborhood Circulator: Este servicio ofrece una manera conveniente y económica de viajar dentro de la zona metropolitana de Austin. El servicio opera dentro de la zona metropolitana de Austin, y ofrece una manera conveniente y económica de viajar dentro de la zona metropolitana de Austin.

Tabla de horarios:

Políticas de tarifas	Horarios	Metrobus	Metro Access	Neighborhood Circulator
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Túnel de Tránsito del Centro



El Túnel de Tránsito del Centro es un proyecto de transporte público que mejorará la movilidad y la conectividad de los residentes de Austin. El túnel se encuentra en el centro de Austin, y ofrece una manera conveniente y económica de viajar dentro de la zona metropolitana de Austin.

Tabla de horarios:

Políticas de tarifas	Horarios	Metrobus	Metro Access	Neighborhood Circulator
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

El 37 TORRES

3.7 MILLÓN FT²

EL CENTRO DE AUSTIN



El 37 Torres es un proyecto de desarrollo inmobiliario que mejorará la movilidad y la conectividad de los residentes de Austin. El edificio se encuentra en el centro de Austin, y ofrece una manera conveniente y económica de viajar dentro de la zona metropolitana de Austin.

Tabla de horarios:

Políticas de tarifas	Horarios	Metrobus	Metro Access	Neighborhood Circulator
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



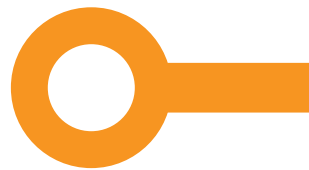
METRO



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Tu Plan, Tu
Línea Naranja



CONTENIDO

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PLANEACIÓN DEL CORREDOR Y EVOLUCIÓN DEL LA RUTA	2
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CÓMO SE CONFORMA TODO EL SISTEMA	5
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METRO



projectconnect

POR QUÉ PLANEAR LA LÍNEA NARANJA

» LA NECESIDAD Y LA VISIÓN

Capital Metro comenzó a desarrollar el Plan de Visión de Project Connect en el 2016. La necesidad de la visión de Project Connect es el resultado del auge de la población del centro de Texas, que prevé duplicarse para 2040. Este crecimiento causará tensión adicional en la red de carreteras y dará como resultado un aumento a los tiempos de viaje y los costos de viaje, disminuyen nuestra movilidad, obstaculizan la salud económica de nuestra región y amenazan la calidad del aire.

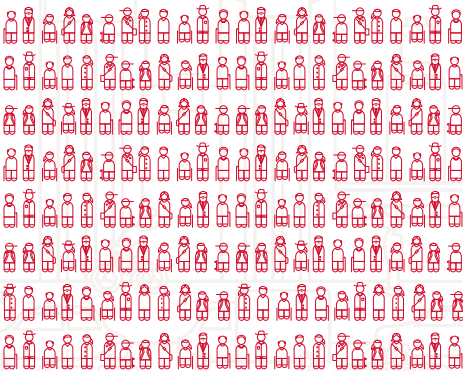
En diciembre de 2018, la Junta Directiva de Capital Metro aprobó el Plan de Visión de Project Connect, que identificó corredores para la inversión potencial en Tránsito de Alta Capacidad (HCT por sus siglas en inglés), además de otras mejoras como nuevas rutas de MetroRapid, mejoras de la Línea Roja, desarrollo de la Línea Verde, rutas adicionales de MetroExpress con estacionamientos dedicados a pasajeros, y Circulación de Barrios (Neighborhood Circulator).

En el 2019, el Ayuntamiento de Austin aprobó el Plan de Movilidad Estratégica de Austin, que establece un objetivo de política para cuadruplicar la proporción de viajeros que usan el tránsito para el 2039. El Plan de Visión de Project Connect se incluye como parte integral de la ASMP, y ambas iniciativas proporcionan un camino a seguir para resolver los futuros desafíos de movilidad que enfrenta la región.

La construcción y operación de HCT es una herramienta efectiva para abordar las presiones de crecimiento de la región, mejorar la movilidad y conectar a los tejanos de la región con sus destinos de viaje. HCT hará que los tiempos pico de viaje en transporte sean más rápidos que los tiempos pico de viaje en automóvil y creará un servicio de transporte confiable. Project Connect es una inversión multigeneracional y se planificará para dar cabida a la última tecnología de vehículos en lo que respecta al mercado.

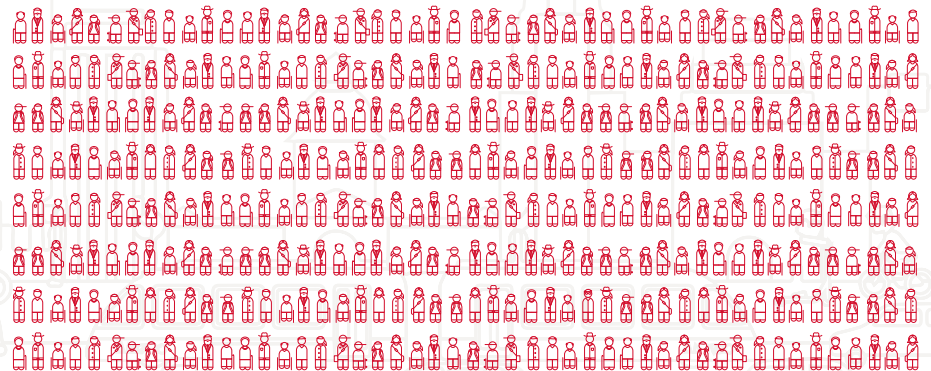
2019

Población: 2M+



2040

Población: 4M+



» CÓMO SE ADAPTA AL SISTEMA LA LÍNEA NARANJA

El Plan de Visión del Project Connect identificó dos corredores HCT - el Corredor Línea Azul y el Corredor Línea Naranja - como la columna vertebral del futuro sistema. Capital Metro inició el Estudio del corredor de Línea Naranja en el 2019 para definir mejor manera la Línea Naranja HCT y explorar cómo podría avanzar a ser como una inversión individual (para atraer fondos federales) y como ser parte del sistema Capital Metro (como parte del sistema local y proceso de planificación regional). El Plan del Sistema Project Connect avanzará significativamente luego de la adopción de la Alternativa Preferida Localmente (LPA) de la Línea Naranja.

Este documento proporciona una visión general del proceso utilizado para evaluar HCT en Austin y la ruta para desarrollar un LPA propuesto, incluyendo cómo se utilizaron los aportes del público y de la agencia para elaborar el LPA propuesto. Se ilustran las principales características y los beneficios de la LPA, y se describen las acciones futuras en el camino hacia la implementación.

PRUEBA A FUTURO DEL SISTEMA

- » Identificar cómo la Líneas Naranja, Azul y Dorada se cruzan (sirven a la misma estación) o se interlinean (operan en una misma parte de la ruta)
- » Considerando los costos y beneficios asociados con la construcción de un túnel de tránsito para la Línea Naranja, Azul y Dorada
- » Coordinación con MetroRapid, Líneas Roja y Verde, MetroExpress y Circulación de Barrios (Neighborhood Circulator) para facilitar las conexiones con todo el sistema.

PLANEACIÓN DEL CORREDOR Y EVOLUCIÓN DEL LA RUTA

»» DESARROLLO DE CONCEPTO DE LA LÍNEA NARANJA

En abril de 2019, Capital Metro inició un estudio formal para investigar la viabilidad del Tránsito de Alta Capacidad (HCT) desde Tech Ridge en el norte de Austin hasta Slaughter en el sur de Austin. Basado en el sistema anterior en los ejercicios de planificación, Capital Metro identificó la Línea Naranja como un corredor de aproximadamente 21 millas con 21 estaciones. La evaluación técnica y los comentarios de la comunidad determinaron que el transporte de Tren Ligerero (LRT) es el más eficaz para satisfacer la demanda de viajes en el corredor de la Línea Naranja y maximizar la compatibilidad con la línea azul y la línea dorada.



PROYECTO PARA CONECTAR RUTAS

La configuración del sistema LRT permite que múltiples rutas operen en el mismo corredor, creando muchas combinaciones de ruta. La intercalación de las rutas puede proporcionar a los pasajeros un servicio más frecuente o tiempos más cortos de espera para un camión o tren. Los segmentos que tendrían un servicio intercalación incluyen:

»» Línea Dorada / Línea Azul intercalación en la calle 4 entre el centro MetroRail Station y Republic Square

»» Línea Naranja / Línea Azul intercalación entre Republic Square y Lamar Norte Transit Center

»» Línea Naranja / Línea Dorada intercalación entre Republic Square y Congress Sur Transit Center

MEJORES TRASBORDOS EN PUNTOS CLAVE

El programa de Project Connect incluye un plan para mejorar algunas de las ubicaciones de transporte existentes de Capital Metro, los cuales se convertirán en lugares más agradables que funcionarán como centros de movilidad multimodal. Los centros de movilidad son más que simples estaciones de transportes típicas. Estos se encuentran programados, bien diseñados en lugares con múltiples comodidades y facilidad de acceso para el transporte. Los centros de movilidad exitosos pueden ayudar a hacer que el servicio de transporte sea más grato tanto para viajeros frecuentes como para ocasionales. Se planea que la Línea Naranja tenga paradas en centros de transporte existentes que pueden evolucionar a centros de movilidad para facilitar el uso del sistema y los transbordos entre rutas.



EJEMPLOS DE VIAJES

Sofía comienza su viaje en Crestview y trabaja cerca de la estación Oltorf. Su tiempo actual en auto varía de **24 a 55 minutos**, mientras que su viaje en camión es de **31 minutos**.



con el nuevo tren ligero

El viaje de Sofía en la Línea Naranja sería de **23 minutos**.



Ria se dirige desde su casa cerca de Rundberg a un concierto en Riverside. Ella **no tiene carro**. Su tiempo de viaje actual en camión es de **63 minutos**, haciendo transbordo entre dos líneas de camiones locales.

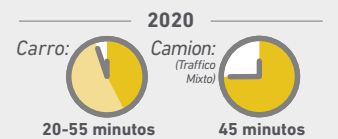


con el nuevo tren ligero

El traslado de Ria sería de **35 minutos**, incluyendo el transbordo de la Línea Naranja a la Línea Azul en Republic Square.

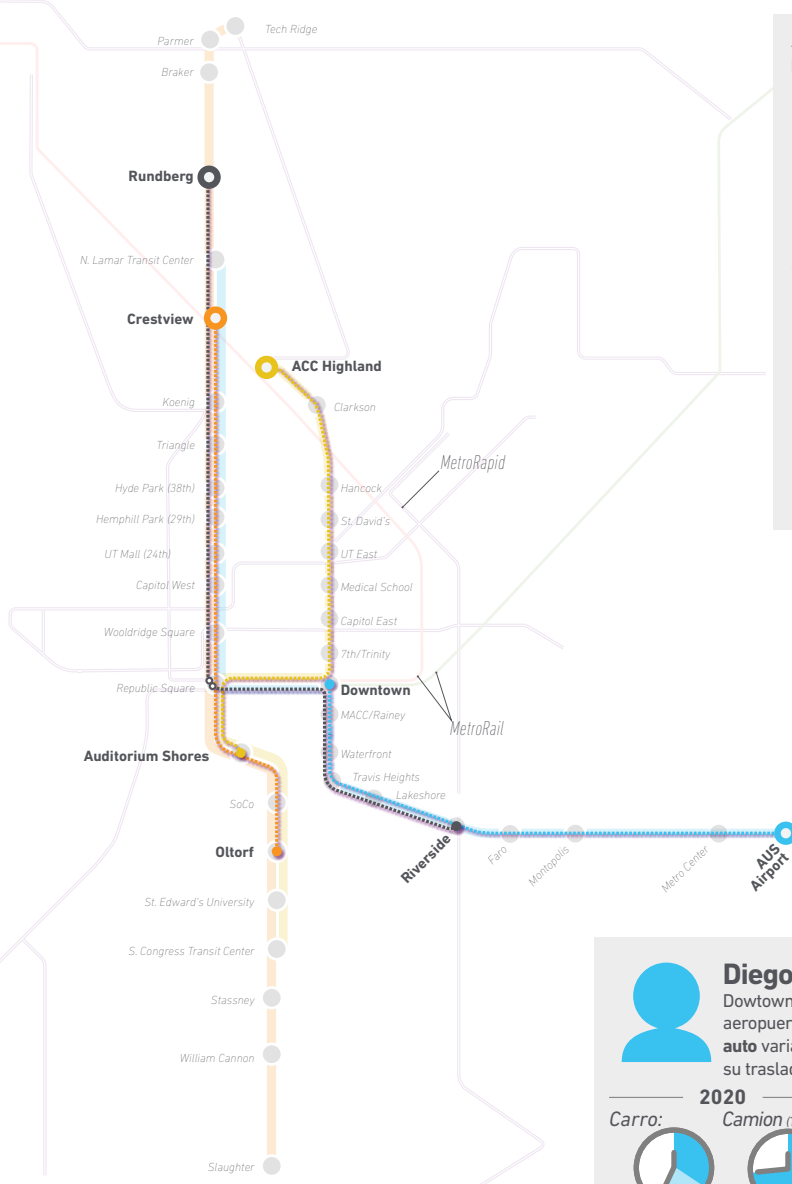


Sanjay comienza su viaje en ACC Highland e irá con sus amigos a Auditorium Shores. Su tiempo actual de traslado en auto varía de **20 a 55 minutos**, mientras que su traslado en camión es de **45 minutos**.

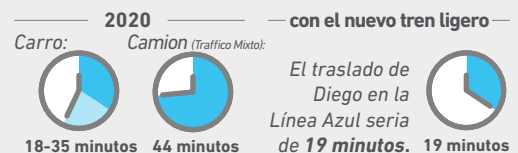


con el nuevo tren ligero

El tiempo de traslado de Sanjay en la Línea Dorada sería de **22 minutos**.



Diego es un sobrecargo de vuelo que vive en Downtown y se traslada regularmente al aeropuerto. Su tiempo actual de traslado en auto varía entre **18 a 35 minutos**, mientras que su traslado en camión es de **44 minutos**.



Nota: El tiempo de viaje en automóvil no considera el tiempo que se ocupa para encontrar un lugar de estacionamiento.

EXPLORANDO NUESTRAS OPCIONES PARA UN TÚNEL

Dependiendo de la frecuencia del servicio y de cómo se interrelaciona el sistema LRT, un túnel del centro podría proporcionar beneficios operativos. Al operar a nivel de la calle, la cantidad de trenes por hora a través de una intersección específica (por ejemplo, 4th Street y Guadalupe o Cesar Chavez y Trinity) podría afectar negativamente a la red de transporte, ya que otros modos esperan a que pase el tren. La frecuencia de los trenes podría ajustarse con más tiempo entre trenes para mitigar estos efectos, pero esto

limitaría la capacidad del sistema. Un túnel no solo evita conflictos a nivel de la calle, sino que también elimina las limitaciones de capacidad.

El equipo de Project Connect continuará estudiando la viabilidad de un túnel de tránsito durante la fase ambiental. El costo estimado del túnel es de \$ 2- \$ 2.5 mil millones de dólares. Este costo se compartiría junto con otros costos de todo el sistema de los corredores Naranja, Azul y Dorado.

»» OPERACIÓN MÁS SEGURA CON UNA COMPLETA AUTONOMÍA:



Un túnel en el centro proporcionará un entorno más seguro para todos los tipos de movilidad.

»» OPORTUNIDAD DE DESARROLLO:



Este tipo de transporte puede generar diversos tipos de espacios incluyendo:

- ventas minoristas/comida
- baños
- espacios de arte
- ambientes controlados con aire acondicionado

»» PREPARADO PARA EL FUTURO:



Permite que el sistema aumente la capacidad para la demanda futura de servicios.

»» MEJORA LA FIABILIDAD OPERACIONAL EN EL TRANSPORTE:



Los beneficios de la autonomía con el exterior y/o la superficie mejoran la fiabilidad del tiempo de viaje y, en última instancia, la calidad del viaje para todos en toda la ciudad.

»» UN SERVICIO SUBTERRÁNEO MÁS RÁPIDO:



El túnel del centro evitaría aproximadamente el 20% de las señales de tráfico que se encuentran en la superficie, lo que mejora la velocidad y la fiabilidad de toda la red.



»» REDUCCIÓN DE CONFLICTOS EN LA SUPERFICIE:



Con la construcción de un túnel en el centro, aproximadamente el veinte por ciento de las intersecciones podrían quedar libres de conflictos, lo que mejoraría la seguridad, la confiabilidad y el tiempo de viaje para todos los tipos de movilidad, incluidos los vehículos de emergencia.

»» CRECIMIENTO DEL SISTEMA DE TRANSPORTE PÚBLICO:



Al colocar un sistema de transporte de tren ligero en un túnel y expandir las opciones de servicio del corredor, se puede ayudar a mantener la capacidad de movilidad del corredor y reaccionar ante el crecimiento y la congestión que conlleva.

» ¿QUÉ ES UNA ALTERNATIVA LOCALMENTE PREFERIDA?

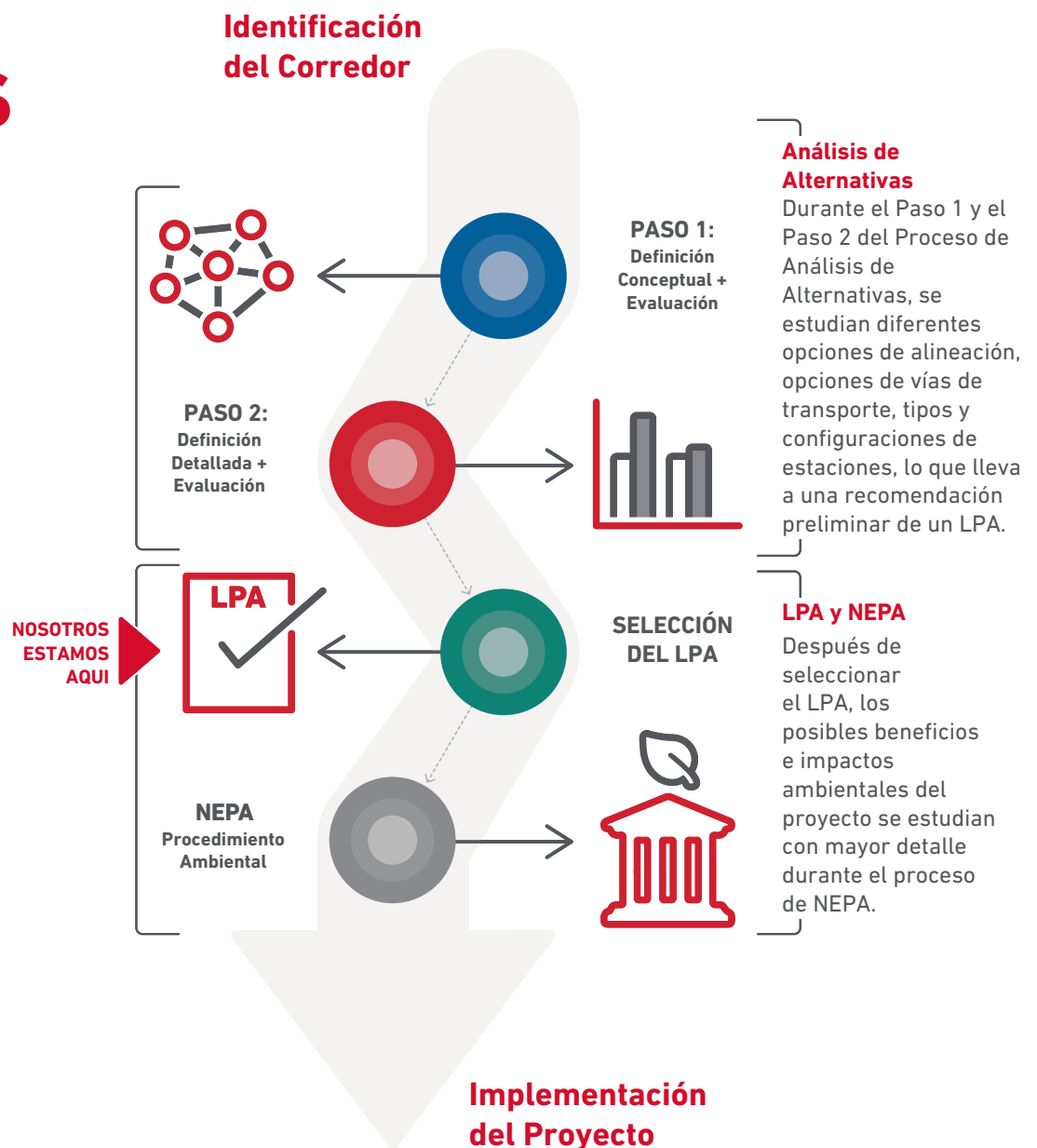
LPA es el término técnico que la Administración Federal de Tránsito (FTA por sus siglas en inglés) usa para describir una inversión de tránsito seleccionada por la comunidad que busca fondos de capital federal. Project Connect buscará fondos federales en línea con las tendencias recientes en las autorizaciones de Subvención de Inversión de Capital bajo el Programa New Starts. El programa considerará otorgar hasta un 50 por ciento. Un

LPA, o proyecto, se compone de una ruta, ruta de tránsito, vehículo, plan de servicio y cualquier infraestructura de soporte requerida (pistas, estaciones e instalaciones de mantenimiento). El LPA puede dividirse en fases para su implementación Capital Metro está trabajando con las partes interesadas en toda la región para identificar LPA individuales para cada una de las inversiones de tránsito de Project Connect que buscan fondos de capital del FTA.

CÓMO LLEGAMOS AQUÍ

» EL PROCESO

El Estudio del corredor de la Línea Naranja ha sido mediante un enfoque por fases, junto con las pautas establecidas por el FTA. El proceso está estructurado como una evaluación escalonada, donde las alternativas se definen, evalúan y refinan o eliminan en cada paso del proceso. El resultado es un LPA propuesto que se refinará aún más en el proceso y las futuras fases del proyecto de la Ley Nacional de Política Ambiental (NEPA).



QUIENES ESTÁN INVOLUCRADOS



LÍDERES DE LA COMUNIDAD

La participación pública ha sido esencial para el desarrollo de la LPA. Capital Metro ha trabajado con la Red de Embajadores de Project Connect (PCAN), compuesta por más de 150 organizaciones y sujetos interesados de la comunidad en proporcionar información útil para el proyecto.



AGENCIAS ASOCIADAS

A lo largo del proceso, Capital Metro convocó regularmente un Comité Técnico Asesor (TAC) de miembros del personal de agencias públicas de ciudades locales, condados, agencias de transporte y otras entidades para proporcionar comentarios técnicos relacionados con el proyecto. Los miembros del TAC incluyeron:

- La Ciudad de Austin y el Departamento de Transporte de Austin
- Departamento de Transporte de Texas (TxDOT)
- Organización de Planificación Metropolitana del Área Capital (CAMPO)
- Condado de Travis
- ...y muchos otros



USTEDES, LOS USUARIOS

A la fecha, Capital Metro ha llevado a cabo tres rondas de participación pública formal para recopilar información en puntos clave del proceso. Capital Metro hizo un esfuerzo especial para conocer a personas en sus comunidades: el equipo de Project Connect se presentó en eventos comunitarios, realizó actividades de divulgación en las paradas del transporte e implementó estrategias innovadoras que incluyeron jornadas en línea para miembros de la comunidad que no podían asistir a las reuniones públicas en persona.



ACCIONISTAS

Capital Metro realizó un gran acercamiento con los accionistas, incluyendo reuniones en vecindarios, grupos de trabajo y presentaciones en grupos pequeños. Los grupos de trabajo de las partes interesadas ayudaron a proporcionar comentarios centrados en los puntos críticos del corredor.





» ¿QUÉ ALTERNATIVAS FUERON CONSIDERADAS?

Alineación

Alternativas de alineación para el Corredor de la Línea Naranja fueron evaluadas y descartadas durante la fase de planificación del sistema del Proyecto Connect.



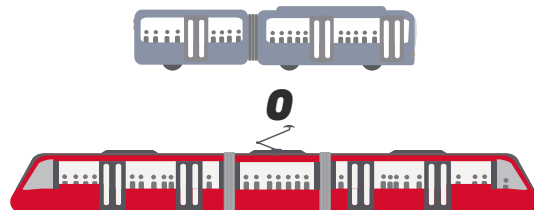
Carril de Tránsito

El equipo de Project Connect estudió si el corredor de la Línea Naranja operaría en un nivel de calle, elevado o subterráneo, tomando en consideración las restricciones del corredor.



Modalidad

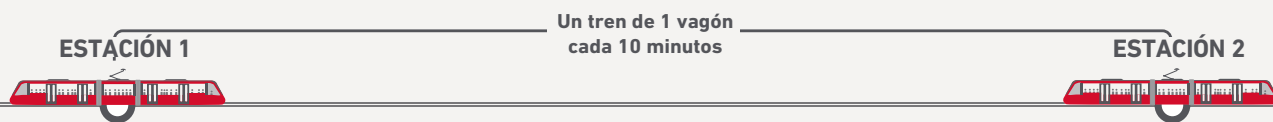
Dos opciones fueron consideradas para el tipo de vehículo que operaría en el proyecto: **Autobús de Tránsito Rápido (BRT)** o **Tren Ligero (LRT)**.



» CÓMO ASEGURAR LA MAYOR FLEXIBILIDAD

La recomendación técnica para la Línea Naranja es el Tren Ligero (LRT). LRT permite mayor capacidad y flexibilidad operativa para manejar las necesidades de pasajeros estimados existentes y futuros.

Para Transportar 1,032 Personas Por Hora:



Para Transportar 2,064 Personas Por Hora:



Para Transportar 4,128 Personas Por Hora:



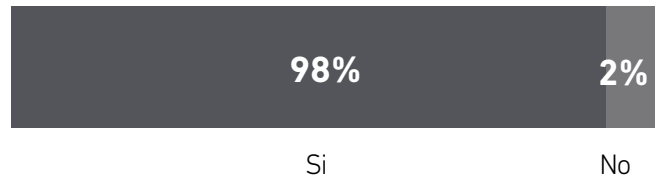
Nota: Las ilustraciones de capacidad son en una sola dirección. Las longitudes en las cuadras del centro (272 pies) pueden acomodar hasta tres vagones.]

QUE HEMOS ESCUCHADO

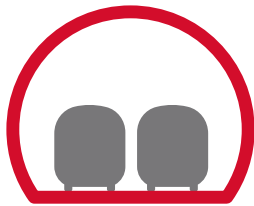
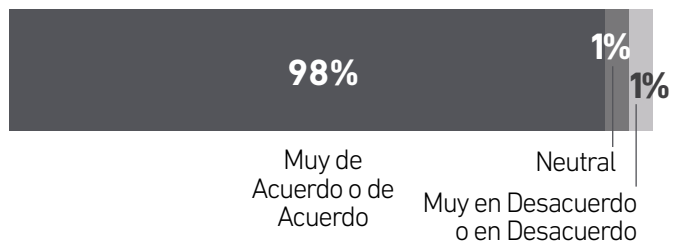


Existe un amplio apoyo para construir las vías dedicadas al corredor para la Línea Naranja.

»» ESTA ALTERNATIVA CUMPLE CON EL PROPÓSITO Y LA NECESIDAD DEL PROYECTO

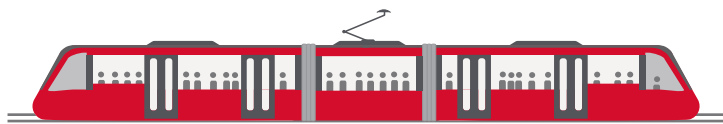
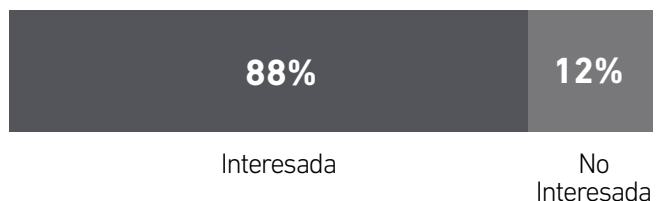


»» ESTA VÍA DE TRANSITO ES IMPORTANTE



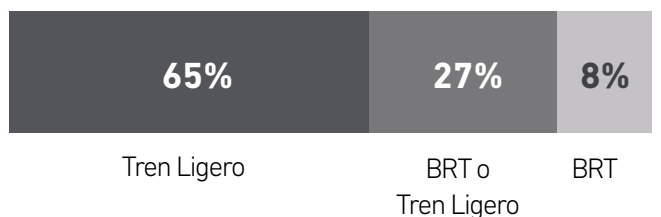
Hay un interés en profundizar el estudio de un túnel en el centro.

»» POBLACIÓN INTERESADA EN EL TÚNEL



El tren ligero es el medio de transporte preferido por los encuestados

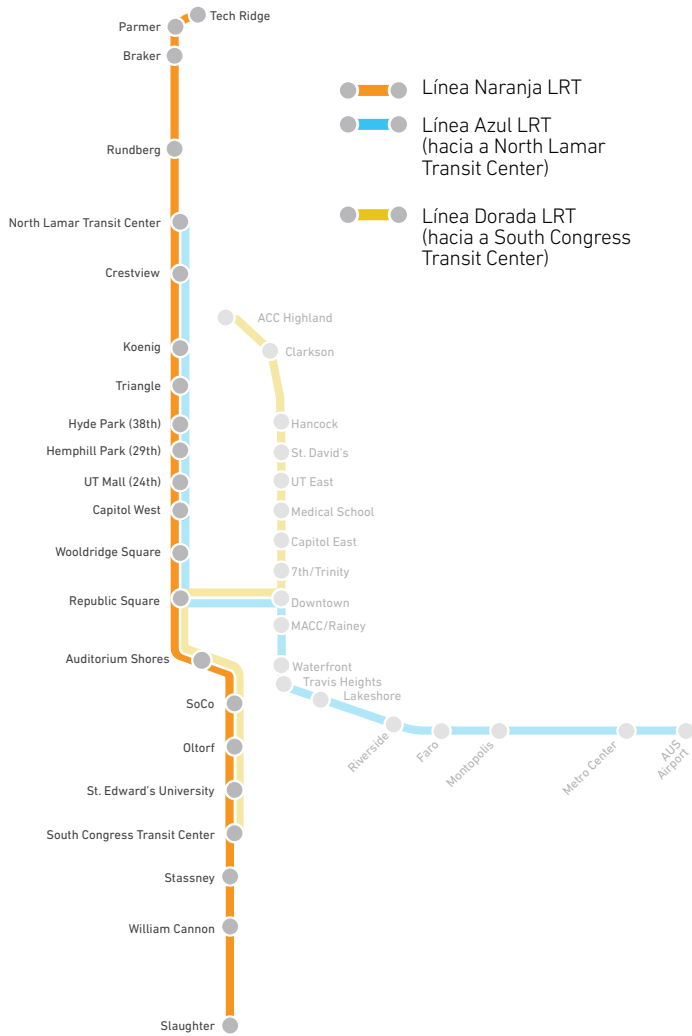
»» TIPO DE TRANSPORTE



Nota: Basado en las respuestas de la encuesta realizada durante julio y noviembre de 2019

CÓMO PODRÍA SER IMPLEMENTADO

»» CORREDOR NARANJA LPA Y VISIÓN A LARGO PLAZO



Las Líneas Azul, Dorada y Naranja trabajan en conjunto como un sistema de Servicios interconectados. El plan de financiación y construcción describirá cómo y cuándo cada parte del sistema es pagado, construido, y operado.

»» CORREDORES DE PROJECT CONNECT

A medida que avanzan los corredores de Project Connect mediante el proceso federal, las siguientes definiciones serán utilizadas para clasificar proyectos por separado para fines de ingeniería. Estas definiciones son de mayor utilidad para el equipo técnico, pero puede ser útil entender cómo el equipo de Project Connect delinear los proyectos para el financiamiento Federal. Estas definiciones también son utilizadas en este informe para garantizar que las métricas, como el costo de capital y la cantidad de pasajeros, reflejen de la mejor manera los proyectos que se llevarán a cabo en el proceso ambiental federal.

CORREDOR NARANJA

Tech Ridge
a Slaughter



CORREDOR DORADA

Republic Square
a ACC Highland



CORREDOR AZUL

Aeropuerto Austin (AUS)
a Republic Square

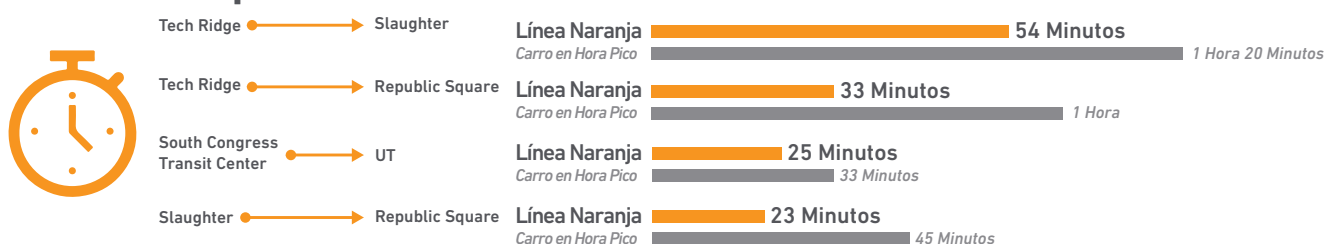


LÍNEA NARANJA *en un vistazo*

Modalidad Tren Ligero



Tiempo de Recorrido



Nota: Los recorridos en auto son 2020 p.m. viajes a horas pico. Fuente Google.

Costo

Costo de Capital
\$3.8 - \$5.1 mil millones

Operaciones y Mantenimiento
\$47 - \$57 millones anuales

Usuarios

Usuarios en día hábil (2040)
54,000 - 74,400

Ambiental

Reducción de Millas en Traslado de Vehículos
107.8 millones de menos millas recorridas anualmente

Reducción de Combustible Greenhouse
42,800 toneladas menos anualmente

Demografía

Hogares con cero automóviles en áreas de estaciones
3,400 | 8%

Individuos en pobreza en áreas de estaciones
21,900 | 23%

Minorías en áreas de estaciones
45,700 | 48%

» ¿CUÁL ES LA LPA DE LA LÍNEA NARANJA PROPUESTA?

La LPA de la Línea Naranja propuesta es un tren ligero que opera en 21 millas desde Tech Ridge en el extremo norte del corredor hasta South Park Meadows en el extremo sur del corredor.

Se propone que la vía de tránsito funcione a nivel de la calle (centro de funcionamiento) en la mayor parte del corredor. El perfil del tránsito de la Línea Naranja cerca de la Estación Crestview y el cruce de la Línea Roja se determinarán en espera del resultado de un estudio separado. A través del centro de la ciudad y UT, hay cuatro posibles opciones de tránsito: a nivel de la calle, parcialmente elevado, túnel corto y túnel largo. La selección de la opción de tránsito preferida (o combinación de opciones de tránsito) entre Auditorium Shores y Hemphill Park Station (29th St) se realizará durante la siguiente fase del proyecto (Ingeniería Preliminar).

Se planean 22 estaciones a lo largo de la ruta. La ubicación de estas instalaciones se coordinará con la comunidad local durante la fase de diseño. El servicio ha sido diseñado para operar cada 10 a 15 minutos, siete días a la semana, de 5:00 a.m. a 3:50 a.m. (12:50 a.m. los domingos). La Línea Naranja contará con tarifas fuera del tablero, estaciones más grandes con abordaje nivelado, accesibilidad ADA y priorización de la señal de intersección.

La Línea Naranja se conectará con la Línea Azul y Dorada en el centro de Austin; la ubicación de esa conexión (incluido el posible uso conjunto de un túnel) se determinará en Ingeniería preliminar.

Nota: los datos presentados en la sección "De un vistazo" reflejan solo la Línea Naranja como un proyecto independiente.

TÚ QUE SACAS DE ESTO

MAYOR CONFIABILIDAD

- La Línea Naranja operará en vías de tránsito exclusivas (separado del tráfico en general).
- Esto significa menos interrupciones en el servicio y libre de congestiones.
- Las vías de tránsito exclusivas dejan de lado conjeturas para la estimación en tiempos de viajes.

UNA RED MÁS FUERTE

- Inversiones en transporte a prueba de congestiones es un complemento necesario para otras inversiones en transporte, como mejorar la I-35 y 183, y la expansión del Aeropuerto Internacional Austin-Bergstrom.
- Cada una de estas inversiones es fundamental para mantener a Austin en movimiento.

MAYOR ACCESO A EMPLEOS

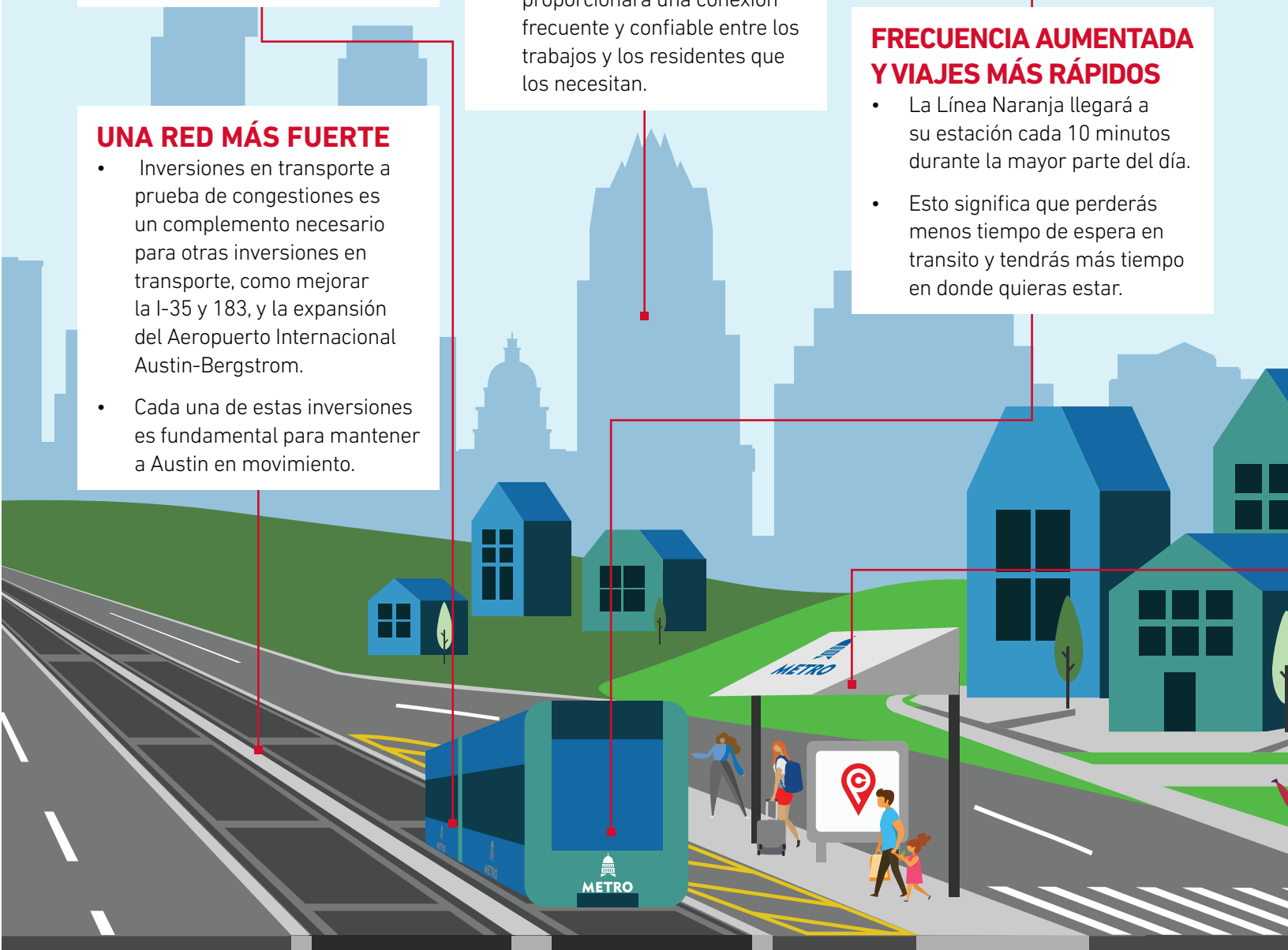
- 8%+ de los hogares cercanos al corredor de la Línea Naranja no tienen acceso a un auto.
- 23%+ de las personas cercanas al corredor de la Línea Naranja viven bajo la línea de pobreza.
- 150,000+ trabajos estarán accesibles usando la Línea Naranja.
- La Línea Naranja proporcionará una conexión frecuente y confiable entre los trabajos y los residentes que los necesitan.

AMPLIA VENTANA DE SERVICIO

- El servicio de la Línea Naranja asume un comienzo a las 5:00 a.m. y termina a las 3:50 a.m. del día siguiente (los Domingos a las 12:50 a.m.).
- Este servicio modelo de casi 24 horas, 7 días a la semana, significa que la Línea Naranja estará lista cuando usted la necesite.

FRECUENCIA AUMENTADA Y VIAJES MÁS RÁPIDOS

- La Línea Naranja llegará a su estación cada 10 minutos durante la mayor parte del día.
- Esto significa que perderás menos tiempo de espera en tránsito y tendrás más tiempo en donde quieras estar.



APOYO PARA PLANES REGIONALES

- El plan de movilidad estratégica de Austin prevé que el 16% de Austin utilizará el transporte para poder ir trabajar para 2039.
- Transporte rápido, servicio confiable y frecuente (como el de la Línea Naranja) es necesario para que esto suceda.

MAS OPCIONES

- Los corredores de las Líneas Naranja, Azul y Dorada están siendo diseñados para maximizar conexiones hacia donde quieras ir.
- Tránsito a prueba de congestión te llevará allí sin el dolor de cabeza ocasionado por tráfico y estacionarse.
- Si eres conductor, habrá menos autos frente a ti.

COMUNIDADES PROSPERAS

- Se espera que la población del centro de Texas casi se duplique en los próximos 20 años.
- La construcción de viviendas no esta cumpliendo con la demanda, que significa que los costos de vivienda seguirían aumentando.
- Las Líneas Naranja, Azul y Dorada pueden ser una buena herramienta para ayudar a preservar viviendas accesibles para todos los niveles de ingresos.

SUSTENTABILIDAD Y MEJOR CALIDAD DEL AIRE

- El transporte juega un papel importante en la confrontación de retos ambientales.
- Invertir en la Línea Naranja ayudará a Austin a cumplir con normas nacionales de calidad del aire reduciendo las emisiones y contaminantes de vehículos en general.
- La Línea Naranja apoya los objetivos del Plan Climático Comunitario de la Ciudad de Austin al reducir los gases del efecto invernadero.

INVIRTIENDO EN EL FUTURO

- El corredor de la Línea Naranja es la columna vertebral de Austin y la región.
- Repensar cómo usamos nuestro espacio para mover personas es clave para un Austin saludable.
- La Línea Naranja es un gran paso hacia un futuro más sustentable y ha sido pensada para evolucionar con la tecnología.



QUE SIGUE

Una vez que la Mesa Directiva de Capital Metro adopte el LPA de la Línea Naranja y el Consejo de la Ciudad de Austin lo respalde, el proyecto estará listo para avanzar a través de los próximos pasos en el proceso de implementación. Los siguientes pasos incluyen: identificar un plan de implementación que incluya fondos, completar el proceso de revisión ambiental federal, completar el diseño final y comenzar con la construcción. Capital Metro continuará interactuando con la comunidad a medida que avance el proyecto de la Línea Naranja.

Línea Naranja

Es tiempo de un transporte público regional en el que podemos confiar.

¡Es tiempo de dar partida!

» ¿CÓMO SERÁ FINANCIADO?

Una vez que se seleccione un LPA, la Línea Naranja sería elegible para recibir fondos federales en línea con las tendencias recientes en las autorizaciones de Subvención de Inversión de Capital (CIG). El programa CIG puede otorgar hasta el 50% del

costo del capital total. Otros fondos provendrán principalmente de fuentes locales, y la autorización de nuevos fondos locales para dirigirse a una parte o la totalidad de la Línea Naranja podría estar en la boleta electoral de noviembre de 2020.



Acciones del Consejo Directivo de Capital Metro sobre la LPA

- El Consejo Directivo de Capital Metro adopta la LPA del corredor independiente.
 - Paso necesario para la financiación federal
- El Consejo Directivo de Capital Metro adopta el Plan del Sistema

Acción de los socios locales sobre LPA

- El Ayuntamiento de Austin respalda la LPA
- CAMPO adopta la LPA en el Plan de Transporte de Largo Alcance (LRTP) en junio de 2020

Implementación

- Desarrollar un plan de implementación
- Definir proyectos para la construcción / financiamiento
- Finalizar el paquete de financiamiento



Inversiones

Implementación de la Línea Naranja

Trabajo Ambiental

Posibles impactos en el medioambiente natural, social y construido

Contratación

Ingeniería Preliminar

Diseño avanzado para apoyar el trabajo ambiental

Diseño Final

- Diseño para la construcción es finalizado
- Costos son finalizados
- Financiamiento es finalizado

Aprobación FTA y Construcción

- Fondos FTA
- Comienza la construcción

2020

2025



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¿PREGUNTAS?



Visita la oficina de Project Connect localizada en 607 Congress Ave.

Hable con el personal del proyecto, haga preguntas y brinde comentarios entre las 9 a.m. y las 4 p.m.



Visita ProjectConnect.com

Valoramos su opinión! Regístrese para recibir actualizaciones u obtener información sobre las próximas reuniones.



¡Siguenos en Twitter @CapMetroATX!



¡Únete a nosotros en [Facebook.com/CapitalMetro!](https://www.facebook.com/CapitalMetro/)

Liderado por Capital Metro con el apoyo de la ciudad de Austin

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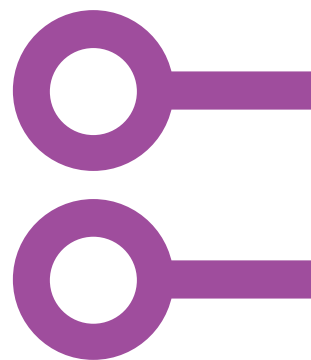
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Su plan, sus
corredores de
MetroRapid



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PARA QUÉ PLANIFICAR LOS CORREDORES DE METRORAPID

Capital Metro comenzó a desarrollar el Plan de Visión de Project Connect en 2016. La población en crecimiento del centro de Texas, que se espera que se duplique para 2040, dio como resultado la necesidad de una visión de Project Connect. Este crecimiento causará una saturación adicional en la red vial, dará como resultado mayores tiempos y costos de viaje, disminuirá nuestra movilidad, obstaculizará la salud económica de nuestra región y será una amenaza para la calidad de nuestro aire.

En diciembre de 2018, la Junta directiva de Capital Metro aprobó el **Plan de Visión de Project Connect**, que identificó corredores para posibles inversiones en el tránsito de alta capacidad (High Capacity Transit, HCT) y otras mejoras, como nuevas rutas MetroRapid, mejoras en la Línea Roja, desarrollo de la Línea Verde, rutas adicionales de MetroExpress con Park & Rides y Servicio de transporte de enlace en los vecindarios.

En 2019, el Concejo de la ciudad de Austin aprobó el **Plan de Movilidad Estratégica de Austin** (Austin Strategic Mobility Plan, ASMP), que establece un objetivo de política para cuadruplicar el porcentaje de pasajeros usuarios del tránsito para 2039. El Plan de Visión de Project Connect se incluye como una parte integral del ASMP, y ambas iniciativas ofrecen una vía de avance para resolver los desafíos de movilidad a futuro que la región enfrenta.

Este documento proporciona un resumen del proceso utilizado para evaluar las opciones de tránsito mejorado en Austin y el camino para desarrollar una alternativa preferida a nivel local (Locally Preferred Alternative, LPA), incluida la forma en que se fusionaron los aportes del público y de la agencia para diseñar la LPA propuesta. Se ilustran elementos y beneficios clave de la LPA y se mencionan acciones futuras sobre el camino hacia la implementación.

2019

Población: **más de 2 millones**



2040

Población: **más de 4 millones**



»» CÓMO SE ADAPTAN LOS CORREDORES DE METRORAPID EN EL SISTEMA

El Plan de Visión de Project Connect identificó corredores de MetroRapid como parte de su plan de sistemas propuesto. Como parte del sistema más amplio de Capital Metro, cada uno de los siete corredores de MetroRapid se evaluará y valorará de manera separada para una posible financiación federal.

Definir la LPA es parte del proceso de planificación federal e implica trabajar con accionistas para garantizar que, a la larga, todas las partes de Project Connect funcionen de manera integral para mejorar la movilidad, que incluye maximizar la coordinación entre los siete corredores de MetroRapid, los corredores de la Línea Naranja y la Línea Azul y Dorada, las Líneas Roja y Verde, MetroExpress y los servicios de transporte de enlace en los vecindarios.

Este nivel de planificación de sistemas ya ha comenzado y continuará a medida que los corredores de MetroRapid avancen con la planificación y la ingeniería.

» ¿QUÉ ES UNA ALTERNATIVA PREFERIDA A NIVEL LOCAL?

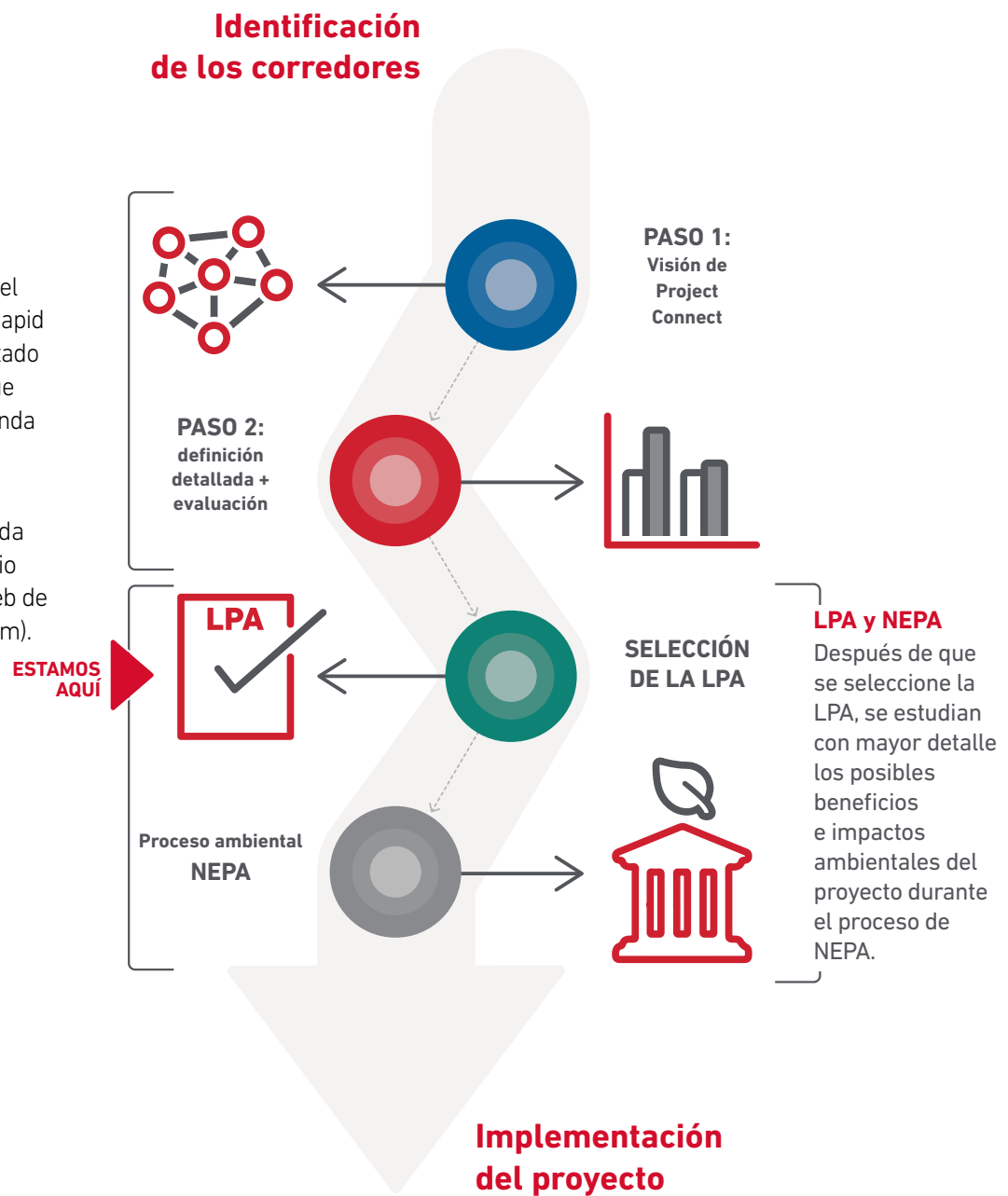
Una alternativa preferida a nivel local (Locally Preferred Alternative, LPA) es el término técnico que la Administración de Tránsito Federal (Federal Transit Administration, FTA) utiliza para describir una inversión en el tránsito seleccionada por la comunidad que busca obtener fondos del capital federal. Una LPA, o proyecto, está constituida por un corredor, vehículos, un plan de servicios y cualquier infraestructura de apoyo requerida. La LPA puede estar organizada en fases para la implementación.

CÓMO LLEGAMOS AQUÍ

» EL PROCESO

Capital Metro trabajó con accionistas para determinar la mejor inversión en el tránsito para los corredores de MetroRapid mediante el análisis de estos. El resultado del análisis será una LPA propuesta que mejor se adapte para atender la demanda de viajes actual y anticipada en los corredores de MetroRapid.

Se puede obtener información detallada del proceso y los resultados del estudio en la página de recursos en el sitio web de Capital Metro (www.projectconnect.com).



QUIÉN PARTICIPA



LÍDERES DE LA COMUNIDAD

Los aportes del público han sido fundamentales para el desarrollo de la LPA de MetroRapid. El proceso de participación incluyó participación formal del público, que se diseñó a fin de compartir resultados técnicos con el público y buscar opiniones de las comunidades para profundizar la comprensión de problemas, consideraciones y restricciones locales por parte del equipo del proyecto. El proceso incluyó una serie de reuniones similares a una junta pública en los corredores de MetroRapid a fin de analizar el objetivo, la necesidad y los conceptos específicos del corredor. Además, la junta pública virtual (Virtual Open House, VOH) se llevó a cabo en línea para ofrecer una oportunidad para que el público revisara los materiales provistos en las reuniones en persona de la junta pública. Se pueden visualizar detalles adicionales sobre los esfuerzos de participación de Project Connect en la pantalla principal de participación de la comunidad en: www.capmetro.org/get-involved.



ACCIONISTAS

Capital Metro tuvo comunicaciones exhaustivas con los accionistas, incluidas reuniones públicas enfocadas en el proyecto y muchos otros eventos de comunicación como parte del programa de Project Connect.



USTED, EL PÚBLICO

Hasta la fecha, Capital MetroRapid recurrió a la participación formal del público para reunir aportes sobre los corredores de MetroRapid en puntos clave del proceso. La participación del público incorporó una variedad de métodos de comunicación, incluidos eventos de junta pública con el público y una junta pública virtual en línea. Se pueden visualizar detalles adicionales sobre los esfuerzos de participación en la página principal de participación de la comunidad en: www.capmetro.org/get-involved.

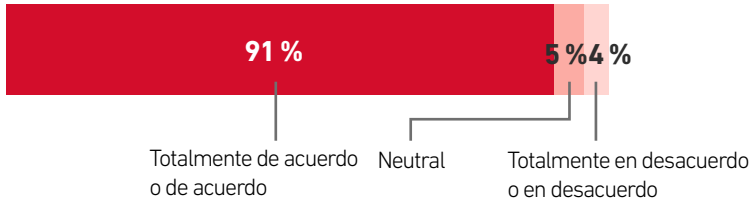


ORGANISMOS ASOCIADOS

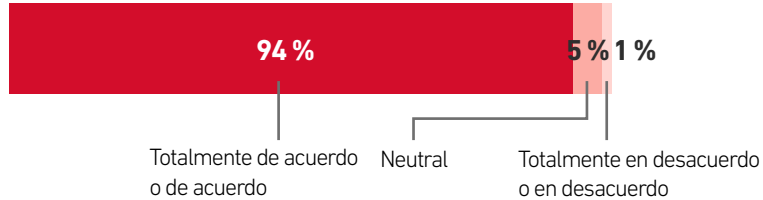
La Junta directiva de Capital Metro es el órgano que toma decisiones respecto de los corredores de MetroRapid y ha trabajado en estrecha colaboración con el personal de Capital Metro, el personal de la ciudad de Austin y el Concejo de la ciudad de Austin mediante varias sesiones conjuntas para llegar a un acuerdo sobre una LPA. Capital Metro buscará obtener fondos federales de la Administración de Tránsito Federal (FTA) y trabaja en estrecha colaboración con la FTA a fin de garantizar que el progreso de MetroRapid esté alineado con los requisitos de la FTA. Algunos organismos asociados incluyen el Departamento de Transporte de Texas (Texas Department of Transportation, TxDOT) y la Organización de Planificación del Área Metropolitana de la Capital (Capital Area Metropolitan Planning Organization, CAMPO). Además, durante todo el proceso, Capital Metro convocó de manera regular un Comité de Asesoramiento Técnico (Technical Advisory Committee, TAC) de los miembros del personal de los organismos públicos de ciudades locales, países, organismos de transporte y otras entidades a fin de brindar comentarios técnicos relacionados con la ingeniería y el diseño del proyecto.



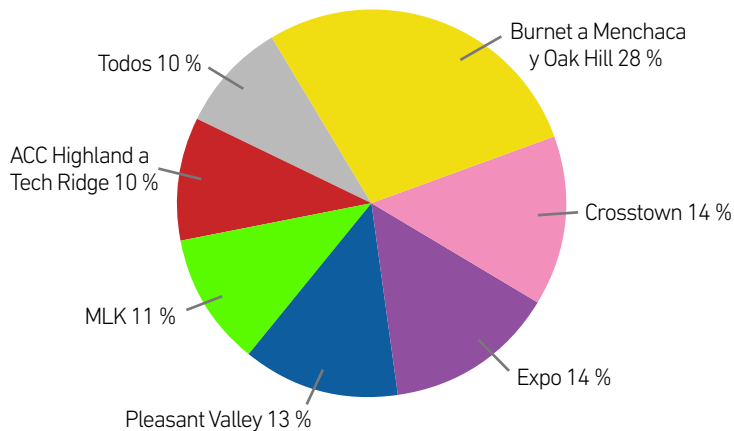
» LOS INTEGRANTES DE LA PARTICIPACIÓN DEL PÚBLICO ESTÁN DE ACUERDO CON LA NECESIDAD DEL BORRADOR DE CORREDORES



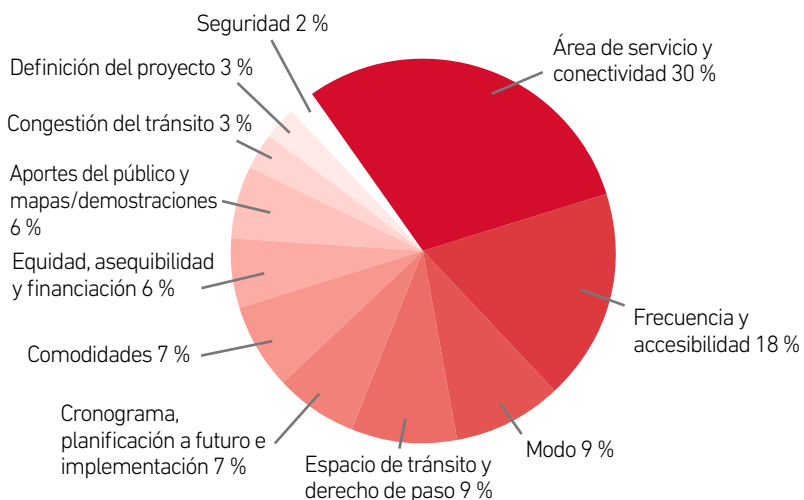
» LOS INTEGRANTES DE LA PARTICIPACIÓN DEL PÚBLICO ESTÁN DE ACUERDO CON EL OBJETIVO DEL BORRADOR DE CORREDORES



» LOS INTEGRANTES DE LA PARTICIPACIÓN DEL PÚBLICO IDENTIFICARON LOS CORREDORES DE METRORAPID QUE ES MÁS PROBABLE QUE USEN.



» LOS COMENTARIOS POR ESCRITO SE DIVIDEN EN 11 CATEGORÍAS



BORRADOR DELIBERATIVO

DE QUÉ NOS ENTERAMOS



Hay una gran concurrencia con la declaración del objetivo y la necesidad del borrador.

Apoyo del público para los siete corredores de MetroRapid; el nivel más alto de apoyo del público fue para el corredor Burnet a Menchaca y Oak Hill (norte y sur).

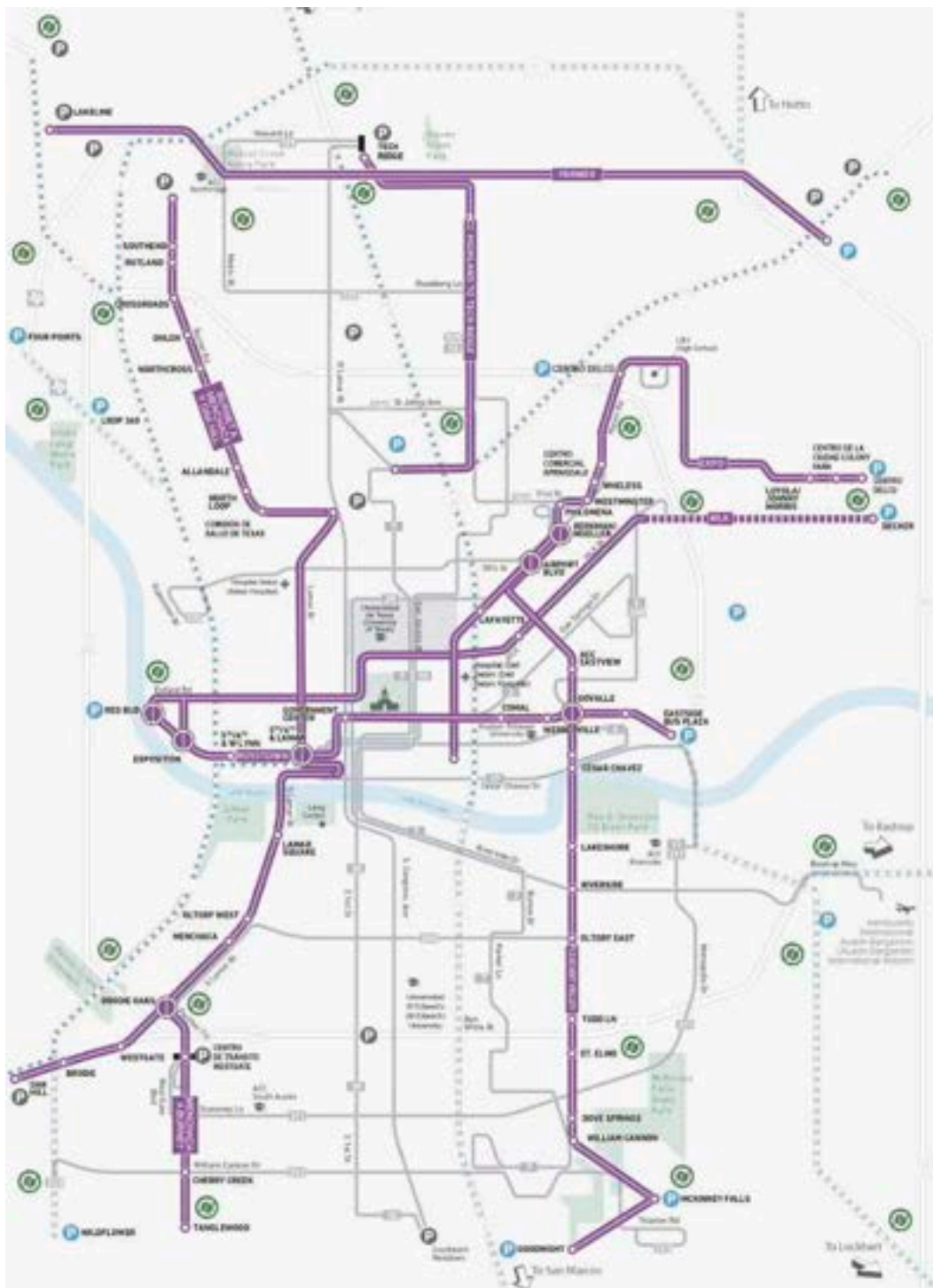
Casi la mitad de todos los comentarios estaban relacionados con el área de servicio, la conectividad, la frecuencia y la accesibilidad.

CÓMO PODRÍA IMPLEMENTARSE

»» CORREDORES DE PROJECT CONNECT

A medida que avanzan los corredores de Project Connect por el proceso federal, las siguientes definiciones se utilizarán para categorizar los proyectos de manera separada con fines de ingeniería. Estas definiciones son de mayor utilidad para el equipo técnico, pero pueden ser útiles para comprender cómo el equipo de Project Connect definirá proyectos dentro de las solicitudes formales para la financiación federal. Estas definiciones del corredor también se utilizan en el informe para garantizar que las métricas del desempeño clave, como el costo de capital y los pasajeros, reflejen de la mejor manera los proyectos que se llevarán a cabo en el proceso ambiental federal.

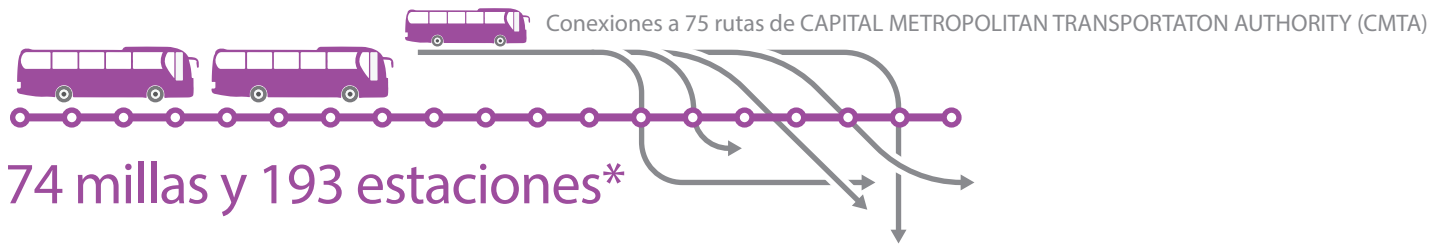
»» VISIÓN A LARGO PLAZO DEL CORREDOR DE METRORAPID



Los corredores de MetroRapid funcionan en conjunto como un sistema de servicios interconectados. Un plan de secuencia de construcción y financiación resumirá cómo y cuándo se paga y construye cada parte del sistema y cómo y cuándo opera.

CORREDORES DE METRORAPID *Un vistazo*

Modo de tránsito rápido de autobuses



Tiempo de viaje



Costo de capital
\$150 a \$170 millones
Operaciones y mantenimiento
\$6 a \$9 millones por corredor anualmente



Pasajeros los días de semana (2040)
30 000 (para todas las líneas)



Millas viajadas por vehículo
8 millones menos de millas anualmente
Reducción de emisión de monóxido de carbono
40 toneladas menos anualmente



Familias sin automóviles en áreas de estaciones
14 555 | 8 % de las familias
Personas en situación de pobreza en áreas de estaciones
91 919 | 20 %
Personas de color en áreas de estaciones
262 873 | 54 %

» ¿CUÁL ES LA LPA PROPUESTA PARA EL CORREDOR DE METRORAPID?

LA LPA DE METRORAPID CONSISTE EN LOS SIGUIENTES CORREDORES PARA OPCIONES DE TRÁNSITO MEJORADO:

- ACC Highland a Tech Ridge
- Crosstown
- Burnet a Menchaca y Oak Hill
- Oak Hill a Burnet y Menchaca a Oak Hill
- Expo
- MLK
- Pleasant Valley

La LPA propuesta para el corredor de MetroRapid ofrecería aproximadamente 74 millas de servicio nuevo de tránsito rápido de autobuses en siete corredores con acceso a 193 estaciones en todo el centro de Texas*.

Los corredores de MetroRapid operarían en autopistas existentes dentro de los carriles de viaje existentes y, actualmente, se planifica que el servicio opere cada 10 minutos durante el día (7:00 a. m. a 6:00 p. m.) y cada 15 a 20 minutos temprano a la mañana y a la noche.

Actualmente, los corredores de MetroRapid están diseñados para prestar servicios a las comunidades del norte, sur y este en el centro de Texas. Por el centro, hay opciones para conectarse a servicios de HCT planificados (corredores de la Línea Azul/Dorada y Naranja). Las ubicaciones de las conexiones a todos los servicios propuestos y las rutas existentes del Plan de Sistemas de Project Connect se determinarán en el proceso de ingeniería.

Los corredores de MetroRapid contarían con estaciones con marquesinas y comodidades en el tránsito, y funcionarían con autobuses eléctricos.

* Incluye millaje y estaciones existentes en la ruta 803 de MetroRapid.

QUÉ SE OFRECE PARA USTED

CONFIABILIDAD MEJORADA

- Oportunidades de prioridad de señales de tránsito (Traffic Signal Priority, TSP), ascenso cerca del nivel del suelo y cobro de tarifas fuera del vehículo.
- Tiempos de viaje más rápidos, más eficientes y más predecibles durante todo el día en comparación con el servicio de autobuses existente.
- Ofrece un sistema confiable que lo lleva donde quiere ir rápido y a tiempo.

ACCESO EXPANDIDO A EMPLEOS

- MetroRapid mejoraría el acceso a empleos a los residentes de Austin.
- Acceso mejorado a más de 488 000 empleos, incluidos los empleos en áreas de gran densidad poblacional, como ACC Highland.
- Los corredores brindan un acceso mejorado para las familias de bajos recursos o que no tienen acceso a un vehículo (el veinte por ciento y el ocho por ciento de las familias en todos los corredores, respectivamente).
- El acceso mejorado ayudaría a los empleadores a conectarse con residentes de Austin que buscan empleo.

RANGO DE SERVICIO EXPANDIDO

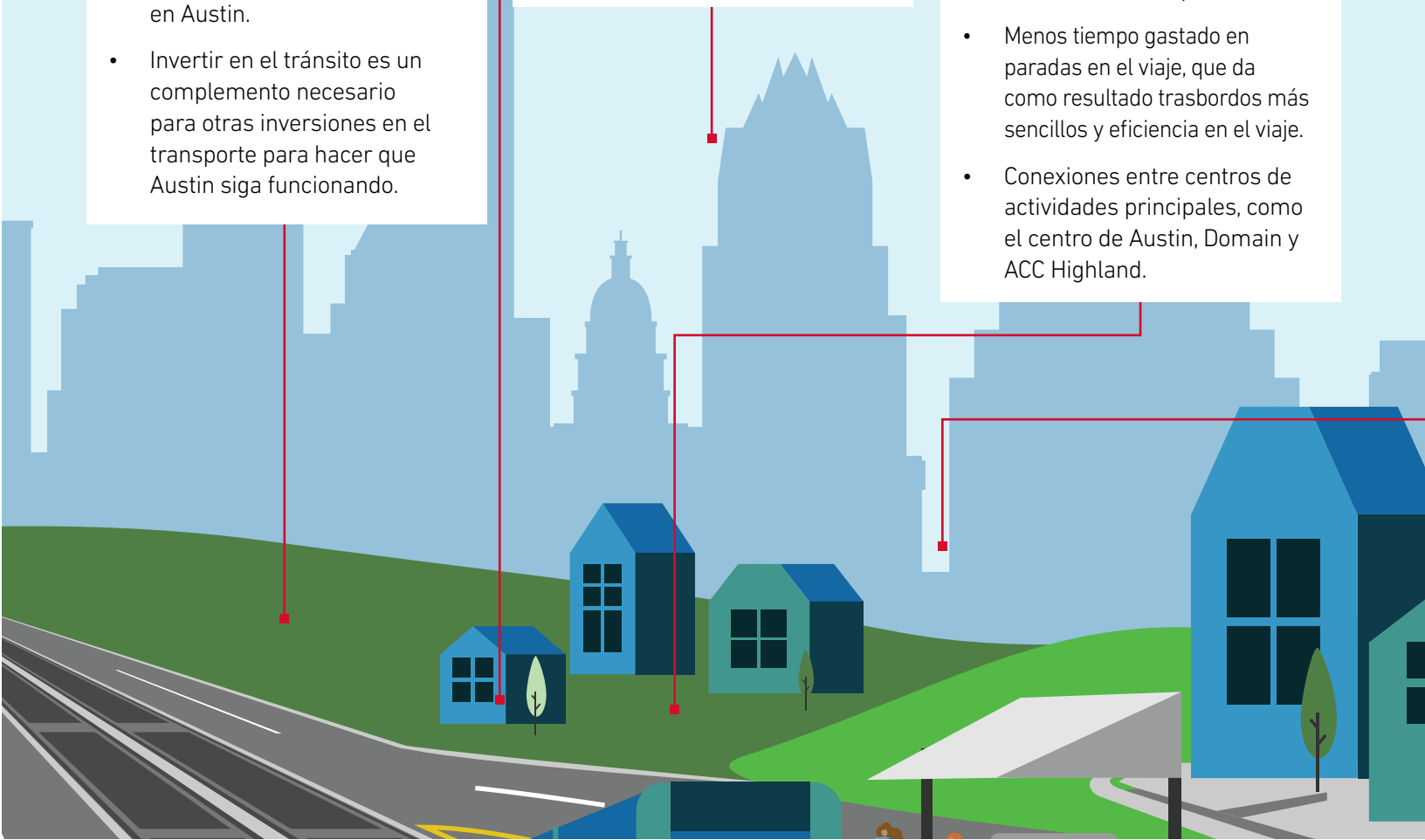
- Un servicio de casi 24 horas: el servicio de MetroRapid comenzaría a las 5:30 a. m. y funcionaría hasta las 3:30 a. m. del día siguiente.
- Movilidad mejorada cuando se una a un servicio con mayor frecuencia y tiempos de viaje más rápidos.
- Se satisfarán mejor las necesidades de tránsito nocturno y temprano a la mañana.

FORTALECIMIENTO DE LA RED

- La congestión sigue creciendo en Austin.
- Invertir en el tránsito es un complemento necesario para otras inversiones en el transporte para hacer que Austin siga funcionando.

MAYOR FRECUENCIA Y VIAJES MÁS RÁPIDOS

- Servicio brindado cada 10 minutos durante todo el día (7:00 a. m. a 6:00 p. m.).
- Menos tiempo gastado en paradas en el viaje, que da como resultado trasbordos más sencillos y eficiencia en el viaje.
- Conexiones entre centros de actividades principales, como el centro de Austin, Domain y ACC Highland.



AUMENTO DE OPCIONES

- Conexiones con rutas de tránsito existentes con los corredores de la Línea Azul/Dorada y Naranja y entre estas.
- Ofrece múltiples opciones a los clientes para llegar a sus destinos.

ATAR CABOS

- Movilidad aumentada entre las opciones de transporte.
- Conexiones a automóviles (Park & Rides), a pie (aceras mejoradas), sobre ruedas (bicicletas en vehículos) y más.

AUMENTO DE OPCIONES

- Diseñadas para hacer que el tránsito sea más seguro.
- Conexiones frecuentes, confiables y convenientes para llevarlo a donde quiere ir sin el dolor de cabeza del tráfico y el estacionamiento.

APOYO PARA LOS PLANES REGIONALES

- Apoya los planes regionales, como Imagine Austin y el Plan de Movilidad Estratégica de Austin.
- Los principios fundamentales de Imagine Austin incluyen fomentar una ciudad más compacta que esté respaldada por un sistema de transporte multimodal y promueve desarrollos de usos combinados.
- El objetivo del Plan de Movilidad Estratégica de Austin es que el 16 % de los residentes de Austin usen el tránsito para llegar al trabajo para 2040. Este objetivo requerirá inversiones significativas en el tránsito, incluida la implementación de los corredores de MetroRapid.

COMUNIDADES PRÓSPERAS

- Se espera que la población de nuestra región se duplique en los próximos 20 años.
- La inversión de MetroRapid ayudaría a enfocar el crecimiento y desarrollo de la región.
- La inversión en el tránsito mejorado ayudará a crear lugares atractivos para vivir, trabajar y jugar.

INVERSIONES PARA EL FUTURO

- Los corredores de MetroRapid usarían autobuses eléctricos, lo que brindaría una salida hacia un futuro más sustentable.



PRÓXIMOS PASOS

Una vez que la Junta directiva de Capital Metro adopte la LPA de MetroRapid, con el apoyo del Concejo de la ciudad de Austin, los corredores de MetroRapid estarán listos para avanzar con los próximos pasos en el proceso de implementación. Estos próximos pasos incluyen identificar un plan de implementación, incluida la financiación, completar el proceso de revisión ambiental federal, completar el diseño final y comenzar la construcción. Capital Metro continuará en contacto con la comunidad a medida que avancen los proyectos de MetroRapid.

MetroRapids

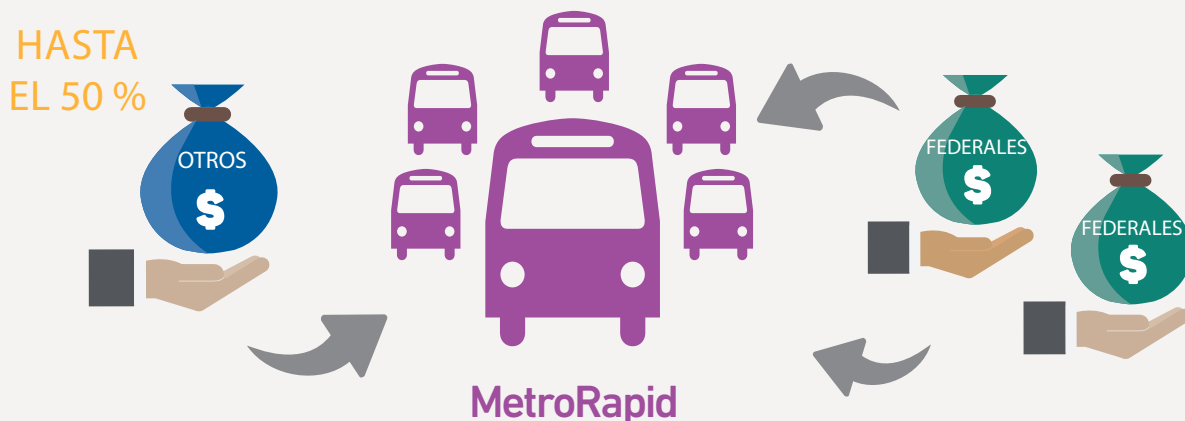
Es momento de un tránsito público regional que podamos respaldar.

¡Es hora de movilizarse!

» ¿CÓMO SE FINANCIARÁ?

Una vez que se adopte una LPA, los proyectos de MetroRapid serían elegibles para recibir la financiación federal de conformidad con las tendencias recientes en las autorizaciones de la Subvención de Inversión de Capital (Capital Investment Grant, CIG). El programa de CIG puede

conceder hasta el 50 % del costo de capital. Otros fondos provendrán principalmente de fuentes locales, y la autorización para que nuevos fondos locales se destinen a algunos o todos los proyectos de MetroRapid podría implementarse en el posible referéndum sobre el tránsito.



Medida de la Junta de Capital Metro sobre la LPA

- La Junta de Capital Metro adopta una LPA de corredor independiente.
 - Medida necesaria para la financiación federal
- La Junta de Capital Metro adopta un Plan de Sistemas.

Medida del socio local sobre la LPA

- El Concejo de la ciudad de Austin considera una decisión de financiación local.
- La CAMPO adopta una LPA en el Plan de Transporte de Largo Alcance (Long Range Transportation Plan, LRTP).

Implementación

- Desarrollar un plan de implementación.
- Definir proyectos para la construcción/financiación.
- Finalizar el paquete de financiación.

Avances en las inversiones



Implementación de MetroRapid

Trabajo ambiental (NEPA)

Posibles impactos en los entornos naturales, sociales y construidos

Participación

Desarrollo del proyecto

- Completar el proceso de revisión ambiental.
- Obtener el compromiso de todos los fondos que no sean para pequeñas iniciativas.
- Completar la ingeniería y el diseño suficientes.

Acuerdo de la subvención para pequeñas iniciativas

- Fondos de la FTA
- Comienzo de la construcción

2020

2021



METRO



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¿TIENE PREGUNTAS?



Visite la oficina comunitaria de la iniciativa Project Connect (Project Connect Community Office) ubicada en 607 Congress Ave.

Hable con el equipo del proyecto, haga preguntas y comentarios entre las 9:00 a. m. y las 4:00 p. m.



Visite ProjectConnect.com

¡Valoramos su opinión! Suscríbase para recibir actualizaciones o para enterarse de las próximas reuniones.



Síguenos en Twitter [@CapMetroATX](https://twitter.com/CapMetroATX)



Únase a nosotros en Facebook.com/CapitalMetro

Dirigido por Capital Metro con el apoyo de la ciudad de Austin

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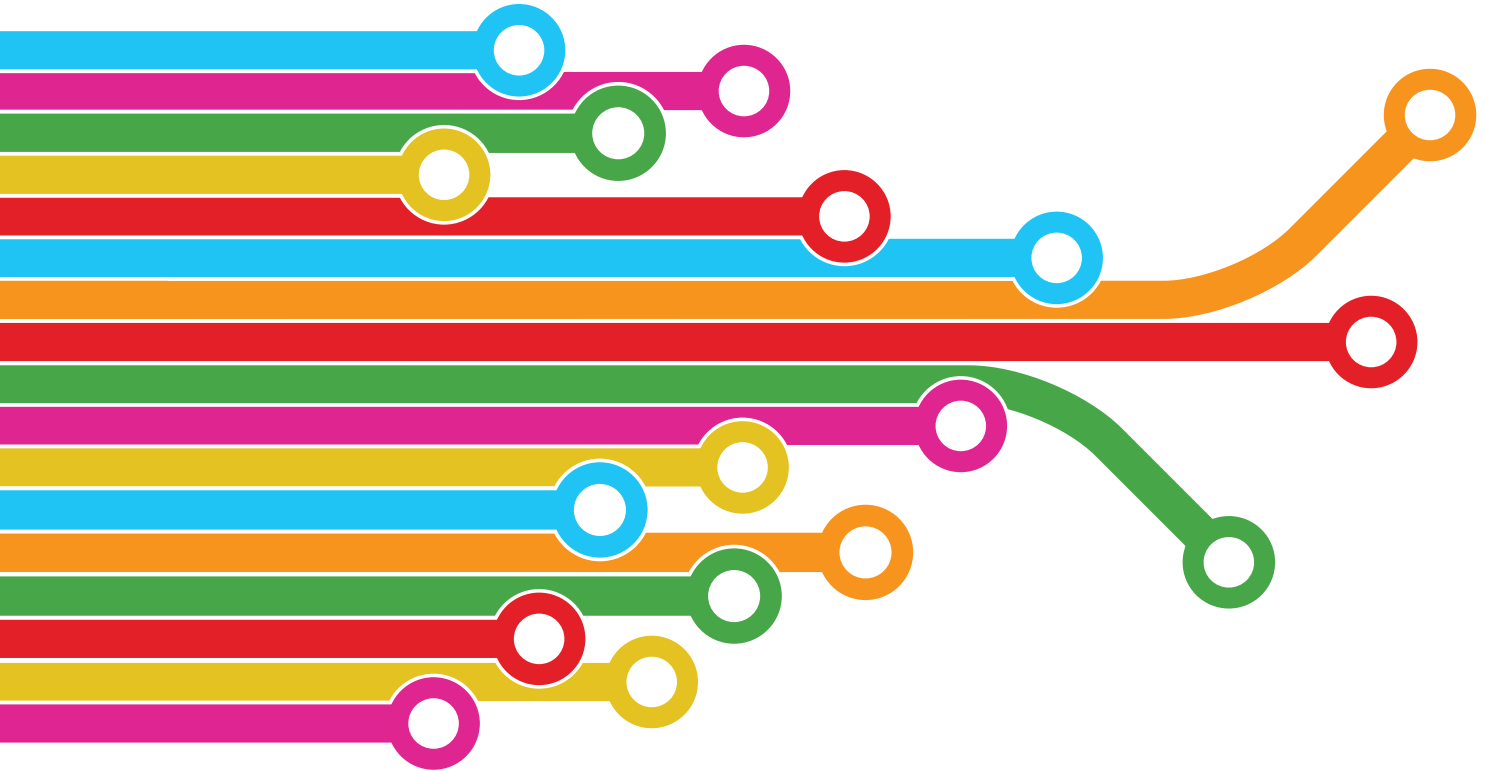
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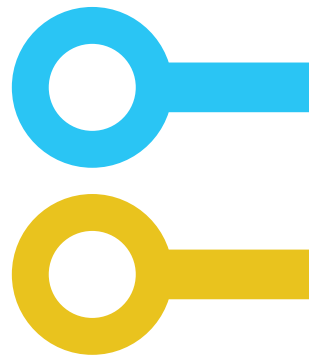
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Tu Plan, Tu
Línea Azul &
Línea Dorada



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POR QUÉ PLANEAR LAS LÍNEAS AZUL Y DORADA

» LA NECESIDAD Y LA VISIÓN

Capital Metro comenzó a desarrollar el Plan de Visión de Project Connect en 2016. La necesidad de la visión de Project Connect es el resultado del auge de la población del centro de Texas, que se prevé se duplicará para el año 2040. Este crecimiento causará tensión adicional en la red de carreteras y resultará en el aumento de los tiempos y costos de viaje, disminuirá nuestra movilidad, obstaculizará la salud económica de nuestra región y amenazará la calidad del aire.

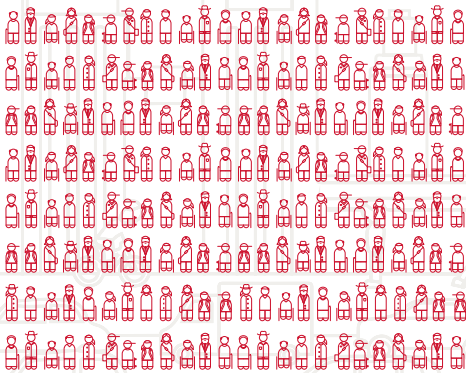
En diciembre de 2018, la Junta Directiva de Capital Metro aprobó el Plan de Visión de Project Connect. En este plan se identificaron corredores para la inversión potencial en Tránsito de Alta Capacidad (HCT por sus siglas en inglés), además de otras mejoras como nuevas rutas MetroRapid, mejoras de la Línea Roja, desarrollo de la Línea Verde, rutas adicionales de MetroExpress con estacionamientos dedicados a pasajeros y Neighborhood Circulator (rutas que circulan el vecindario).

En el 2019, el Ayuntamiento de Austin aprobó el Plan de Estrategias de Movilidad de Austin, que establece un objetivo de la política para cuadruplicar la proporción de viajeros que usan el tránsito para el 2039. El Plan de Visión de Project Connect es parte integral de la ASMP y ambas iniciativas proporcionan un camino a seguir para resolver los futuros desafíos de movilidad que enfrenta la región.

La construcción y operación de HCT es una herramienta efectiva para abordar las presiones de crecimiento de la región, mejorar la movilidad y conectar a los tejanos de la región con sus destinos de viaje. HCT hará que los tiempos pico de viaje en transporte sean más rápidos que los tiempos pico de viaje en automóvil y creará un servicio de transporte confiable. Project Connect es una inversión multigeneracional y se planificará para dar cabida a la última tecnología de vehículos en lo que respecta al mercado.

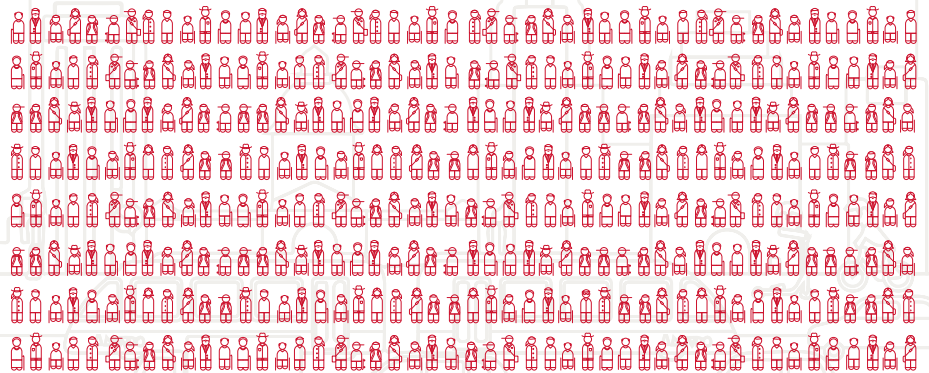
2019

Población: 2M+



2040

Población: 4M+



» CÓMO SE ADAPTA AL SISTEMA LA LÍNEA NARANJA

El Plan de Visión del Project Connect identificó dos corredores HCT - el Corredor Línea Azul y el Corredor Línea Naranja - como la columna vertebral del futuro sistema. Capital Metro inició el Estudio del corredor de Línea Naranja en el 2019 para definir mejor la Línea Naranja HCT Estrategias de y explorar cómo podrían avanzar como una inversiones individuales (para atraer fondos federales) y como parte del sistema Capital Metro (como parte del sistema local y proceso de planificación regional). El Plan de Sistema de Project Connect avanzará significativamente luego de la adopción de la Alternativa Preferida Localmente (LPA) de las líneas Azul y Dorada.

Este documento proporciona una visión general del proceso utilizado para evaluar HCT en Austin y la ruta para desarrollar un LPA propuesto, incluyendo cómo se utilizaron los aportes del público y de la agencia para elaborar el LPA propuesto. Se ilustran las principales características y beneficios de la LPA y se describen las acciones futuras en el camino hacia la implementación.

PRUEBA A FUTURO DEL SISTEMA

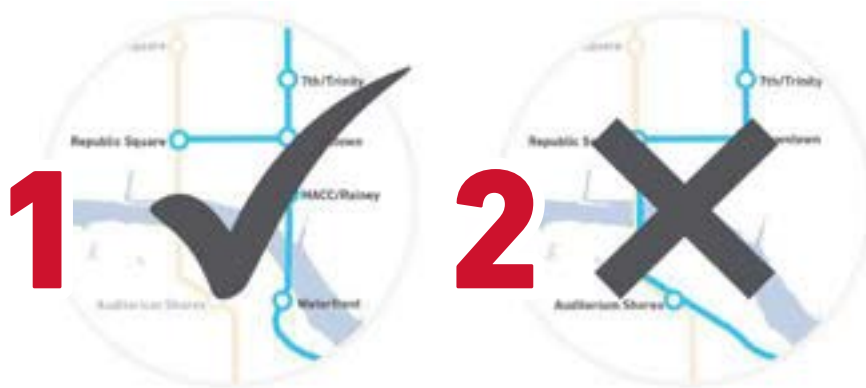
- » Identificar cómo las Líneas Naranja, Azul y Dorada se cruzan (proveen servicio la misma estación) o se interlinean (operan en una misma parte de la ruta)
- » Considerando los costos y beneficios asociados con la construcción de un túnel de tránsito para las Línea Naranja, Azul y Dorada
- » Coordinación con MetroRapid, Líneas Roja y Verde, MetroExpress y Neighborhood Circulator (rutas que circulan el vecindario) para facilitar las conexiones con todo el sistema.

PLANEACIÓN DE CORREDOR Y EVOLUCIÓN DE LA RUTA

DESARROLLO DE CONCEPTO DE LA LÍNEA AZUL

En abril de 2019, Capital Metro inició un estudio formal para investigar la viabilidad del Tránsito de Alta Capacidad (HCT) desde el Aeropuerto de Austin (AUS), a través del centro de la ciudad y una conexión a otro corredor de Project Connect (la Línea Naranja) en Republic Square, hasta el campus Highland de Austin Community College en el norte. Este corredor se llamó entonces "Línea Azul" para distinguirlo de otras rutas que también están siendo analizadas como parte del sistema Project Connect.

ALINEACIONES PROPUESTAS PRESENTADAS AL PÚBLICO



VENTAJAS DE LA ALTERNATIVA 1

- » Proporciona servicio a la zona de rápido crecimiento del vecindario Rainey
- » Fortalece el sistema LRT proporcionando una alternativa para cruzar el lago
- » Permite máxima flexibilidad para darle mantenimiento a la infraestructura

Ya que la Alternativa 1 (cruce del Lago Lady Bird conectando a Trinity Street) surgió como la preferida por la comunidad (ver resultados de la encuesta, página 9), el equipo de Project Connect también evaluó los tipos (modos) de vehículos y el perfil de las vías de tránsito (discutidos en la página 8) para la Línea Azul como un proyecto independiente, pero también como parte de un sistema multi-generacional más grande.

La demanda de traslado de pasajeros en el Corredor Línea Azul produjo una recomendación técnica de que el tren de tránsito ligero (LRT, por sus siglas en inglés) es el modo de transporte más adecuado para lograr las metas de Project Connect a largo plazo y que se ajusta mejor al crecimiento futuro que se espera de la población del Centro de Texas. Además, el LRT también fue la alternativa localmente preferida, según quedó demostrado en los resultados de la encuesta.

Por lo tanto, el equipo de Project Connect evaluó diferentes propuestas de cómo podría operar la Línea Azul para satisfacer esta demanda y mejorar las operaciones a lo largo del sistema. En una reunión conjunta del Concejo Municipal y la Junta Directiva de Capital Metro en enero del 2020, Capital Metro presentó una posible alternativa de operación en la que la ruta de la Línea Azul correría desde el Aeropuerto de Austin (AUS) por el centro de la ciudad a lo largo de la Calle 4, para luego interconectarse con la Línea Naranja.

Esta opción de ruta crearía un sistema de tránsito más sólido que se interconecte con transferencias eficientes entre corredores.



» SURGE EL CORREDOR LÍNEA DORADA

El equipo de Project Connect continuó evaluando la demanda de traslado de pasajeros y el costo potencial de una ruta desde Republic Square hasta el campus Highland de Austin Community College, para analizar la viabilidad del transporte público de alta capacidad en este segmento. En enero del 2020, Capital Metro presentó otra alternativa de ruta para este segmento - la Línea Dorada. Originalmente presentada en el mapa de visión del 2018 como una alternativa de ruta que operaría desde el campus Highland de Austin Community College por el centro de la ciudad a lo largo de la Calle 4 hasta Crestview, esta configuración resultó redundante debido a la interconexión propuesta de la Línea Azul y la Línea Naranja al norte de Republic Square. La ruta redefinida para la Línea Dorada (derecha) ofrece otro nivel adicional de flexibilidad para el sistema, que puede proporcionarle servicio al corredor desde el campus Highland de Austin Community College hasta la Estación del Centro de Austin, atravesando de este a oeste el centro de la ciudad a lo largo del Corredor Línea Azul y operando al sur en la Línea Naranja. Esta configuración proporciona mejor flexibilidad y conexión a más destinos y Centros de Tránsito de Capital Metro y proporciona bastante más servicios de LRT por menos capital y costos de operación.



CONCEPTO DE LA RUTA DORADA 2018

De Crestview a ACC Highland



CONCEPTO DE LA RUTA DORADA 2020

De South Congress Transit Center a ACC Highland

El equipo de Project Connect evaluó las opciones, incluyendo cómo funcionaría cada segmento de manera independiente al igual que juntos como un sistema. Los corredores de Project Connect han sido asignados nombres de colores, mientras que los nombres de las rutas pueden cambiar basado en su origen y destino. En este documento, los corredores y rutas están definidos como:

Corredores:

el nombre de la alineación

Rutas:

líneas del origen y destino

CÓMO SE CONFORMA EL SISTEMA DE TREN LIGERO

RUTAS DE PROJECT CONNECT

Esta configuración del sistema LRT permite que múltiples rutas operen en el mismo corredor, creando muchas combinaciones de ruta. La intercalación de las rutas puede proporcionar a los pasajeros un servicio mas frecuente o tiempos más cortos de espera para un camión o tren. Los segmentos donde se intercala el servicio incluyen:

- » Línea Dorada / Línea Azul intercalación en 4th Street entre el centro MetroRail Station y Republic Square
- » Línea Naranja / Línea Azul intercalación entre Republic Square y Centro de Transporte Lamar North
- » Línea Naranja / Línea Dorada intercalación entre Republic Square y Centro de Transporte South Congress



» MEJORES TRASBORDOS EN PUNTOS CLAVE

El programa de Project Connect incluye un plan para mejorar algunas de las ubicaciones de transporte existentes de Capital Metro, las cuales se convertirán en lugares más agradables que funcionarán como centros de movilidad multimodal. Los centros de movilidad son más que simples estaciones de transportes típicas. Estos se encuentran programados, bien diseñados en lugares con múltiples comodidades y facilidad de acceso para el transporte. Los centros de movilidad exitosos pueden ayudar a hacer que el servicio de transporte sea más grato tanto para viajeros frecuentes como para ocasionales. Se planea que la Línea Azul y la Línea Dorada tengan paradas en centros de transporte existentes que pueden evolucionar a centros de movilidad para facilitar el uso del sistema y los transbordos entre rutas.



» EJEMPLOS DE VIAJES



EXPLORANDO NUESTRAS OPCIONES PARA UN TÚNEL

Dependiendo de la frecuencia del servicio y de cómo se interrelaciona el sistema LRT, un túnel del centro podría proporcionar beneficios operativos. Al operar a nivel de la calle, la cantidad de trenes por hora a través de una intersección específica (por ejemplo, 4th Street y Guadalupe o Cesar Chavez y Trinity) podría afectar negativamente a la red de transporte, ya que otros modos esperan a que pase el tren. La frecuencia de los trenes podría ajustarse con más tiempo entre trenes para mitigar estos efectos, pero esto

limitaría la capacidad del sistema. Un túnel no solo evita conflictos a nivel de la calle, sino que también elimina las limitaciones de capacidad.

El equipo de Project Connect continuará estudiando la viabilidad de un túnel de tránsito durante la fase ambiental. El costo estimado del túnel es de \$ 2- \$ 2.5 mil millones de dólares. Este costo se compartiría junto con otros costos de todo el sistema de los corredores Naranja, Azul y Dorado.

» OPERACIÓN MÁS SEGURA CON UNA COMPLETA AUTONOMÍA:



Un túnel en el centro proporcionará un entorno más seguro para todos los tipos de movilidad.

» OPORTUNIDAD DE DESARROLLO:



Este tipo de transporte puede generar diversos tipos de espacios incluyendo:

- ventas minoristas/comida
- baños
- espacios de arte
- ambientes controlados con aire acondicionado

» PREPARADO PARA EL FUTURO:



Permite que el sistema aumente la capacidad para la demanda futura de servicios.

» MEJORA LA FIABILIDAD OPERACIONAL EN EL TRANSPORTE:



Los beneficios de la autonomía con el exterior y/o la superficie mejoran la fiabilidad del tiempo de viaje y, en última instancia, la calidad del viaje para todos en toda la ciudad.

» UN SERVICIO SUBTERRÁNEO MÁS RÁPIDO:



El túnel del centro evitaría aproximadamente el 20% de las señales de tráfico que se encuentran en la superficie, lo que mejora la velocidad y la fiabilidad de toda la red.



» REDUCCIÓN DE CONFLICTOS EN LA SUPERFICIE:



Con la construcción de un túnel en el centro, aproximadamente el veinte por ciento de las intersecciones podrían quedar libres de conflictos, lo que mejoraría la seguridad, la confiabilidad y el tiempo de viaje para todos los tipos de movilidad, incluidos los vehículos de emergencia.

» CRECIMIENTO DEL SISTEMA DE TRANSPORTE PÚBLICO:



Al colocar un sistema de transporte de tren ligero en un túnel y expandir las opciones de servicio del corredor, se puede ayudar a mantener la capacidad de movilidad del corredor y reaccionar ante el crecimiento y la congestión que conlleva.

» ¿QUÉ ES UNA ALTERNATIVA LOCALMENTE PREFERIDA?

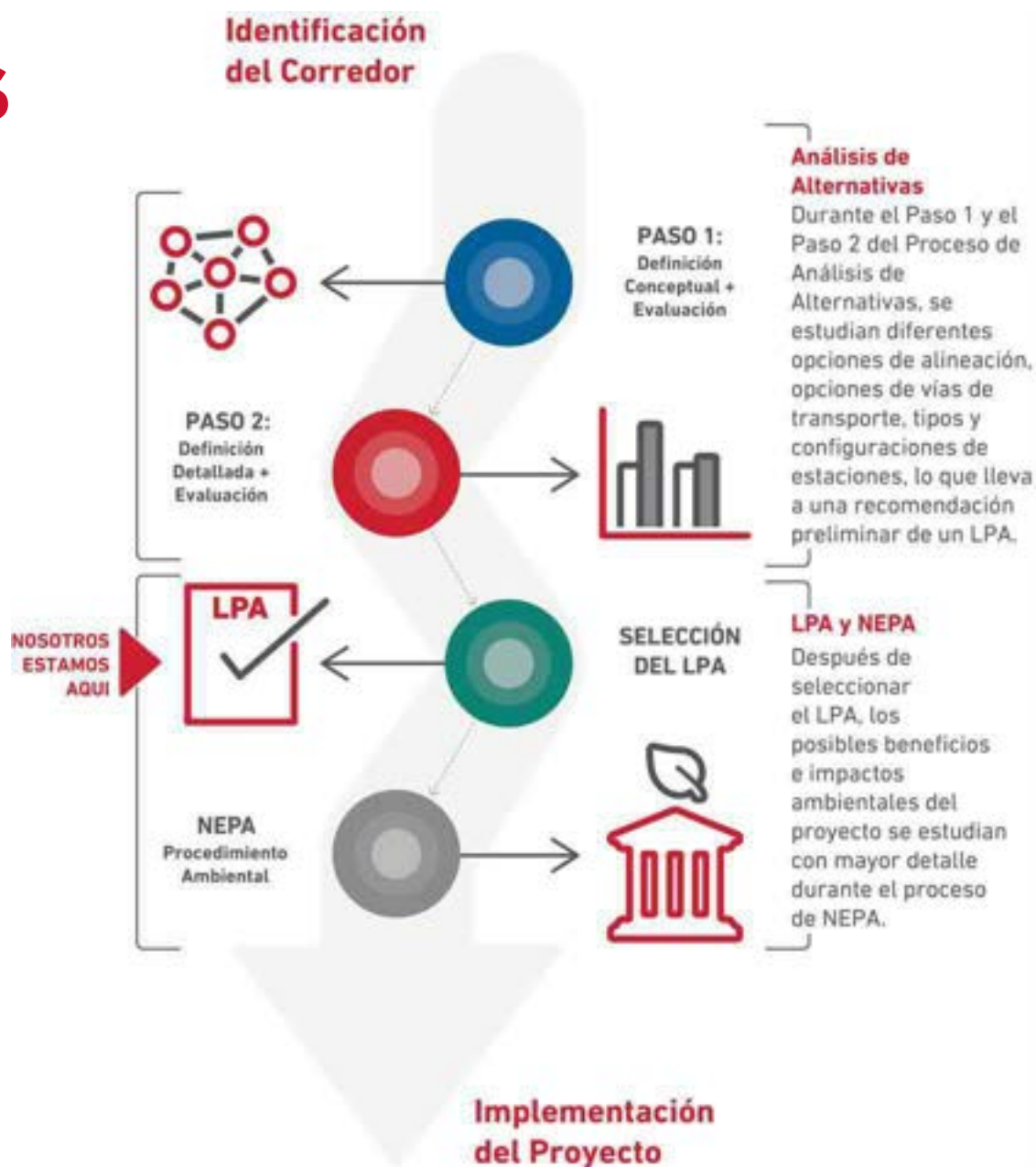
LPA es el término técnico que la Administración Federal de Tránsito (FTA por sus siglas en inglés) usa para describir una inversión de tránsito seleccionada por la comunidad que busca fondos de capital federal. Project Connect buscará fondos federales en línea con las tendencias recientes en las autorizaciones de Subvención de Inversión de Capital bajo el Programa New Starts. El programa considerará otorgar hasta un 50 por ciento. Un

LPA, o proyecto, se compone de una ruta, ruta de tránsito, vehículo, plan de servicio y cualquier infraestructura de soporte requerida (pistas, estaciones e instalaciones de mantenimiento). El LPA puede dividirse en fases para su implementación. Capital Metro está trabajando con grupos interesados en toda la región para identificar LPA individuales para cada una de las inversiones de tránsito de Project Connect que buscan fondos de capital del FTA.

CÓMO LLEGAMOS AQUÍ

» EL PROCESO

El Estudio del corredor de la Línea Azul y la Línea Dorada ha sido mediante un enfoque por fases, junto con las pautas establecidas por el FTA. El proceso está estructurado como una evaluación escalonada, donde las alternativas se definen, evalúan y refinan o se eliminan en cada paso del proceso. El resultado es un LPA propuesto que se refinará aún más en el proceso y las futuras fases del proyecto de la Ley Nacional de Política Ambiental (NEPA).



QUIENES ESTÁN INVOLUCRADOS



LÍDERES DE LA COMUNIDAD

La participación pública ha sido esencial para el desarrollo de la LPA. Capital Metro ha trabajado con la Red de Embajadores de Project Connect (PCAN), compuesta por más de 150 organizaciones y sujetos interesados de la comunidad en proporcionar información útil para el proyecto.



AGENCIAS ASOCIADAS

A lo largo del proceso, Capital Metro convocó regularmente un Comité Técnico Asesor (TAC) de miembros del personal de agencias públicas de ciudades locales, condados, agencias de transporte y otras entidades para proporcionar comentarios técnicos relacionados con el proyecto. Los miembros del TAC incluyeron:

- La Ayuntamiento y el Departamento de Transporte de Austin
- Departamento de Transporte de Texas (TxDOT)
- Organización de Planificación Metropolitana del Área Capital (CAMPO)
- Condado de Travis
- ...y muchos otros



USTEDES, LOS USUARIOS

A la fecha, Capital Metro ha llevado a cabo tres rondas de participación pública formal para recopilar información en puntos clave del proceso. Capital Metro hizo un esfuerzo especial para conocer a personas en sus comunidades: el equipo de Project Connect se presentó en eventos comunitarios, realizó actividades de divulgación en las paradas del transporte e implementó estrategias innovadoras que incluyeron jornadas en línea para miembros de la comunidad que no podían asistir a las reuniones públicas en persona.



ACCIONISTAS

Capital Metro realizó un gran acercamiento con los accionistas, incluyendo reuniones en vecindarios, grupos de trabajo y presentaciones en grupos pequeños. Los grupos de trabajo de las partes interesadas ayudaron a proporcionar comentarios centrados en los puntos críticos del corredor.



» ¿QUÉ ALTERNATIVAS FUERON CONSIDERADAS?

Alineación

El equipo de Project Connect evaluó dos alternativas de alineación para que el corredor cruce el Lago Lady Bird: un nuevo cruce conectado a Trinity Street o un cruce compartido con el Corredor Línea Naranja cerca del Puente de la Calle S. 1st.



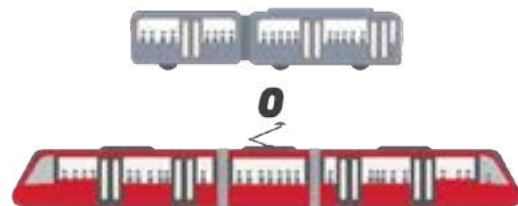
Carril de Tránsito

El equipo de Project Connect estudió si el corredor de la Línea Naranja operaría en un nivel de calle, elevado o subterráneo, tomando en consideración las restricciones del corredor.



Modalidad

Dos opciones fueron consideradas para el tipo de vehículo que operaría en el proyecto: **Autobús de Tránsito Rápido (BRT)** o **Tren Ligero (LRT)**.



» CÓMO ASEGURAR LA MAYOR FLEXIBILIDAD

La recomendación técnica para la Línea Naranja es el Tren Ligero (LRT). LRT permite mayor capacidad y flexibilidad operativa para manejar las necesidades de pasajeros estimados existentes y futuros.

Para Transportar 1,032 Personas Por Hora:



Para Transportar 2,064 Personas Por Hora:



Para Transportar 4,128 Personas Por Hora:



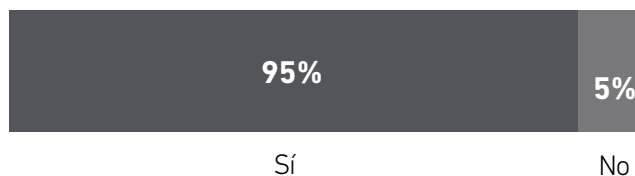
Nota: Las ilustraciones de capacidad son en una sola dirección. Las longitudes en las cuadras del centro (272 pies) pueden acomodar hasta tres vagones.

QUE HEMOS ESCUCHADO

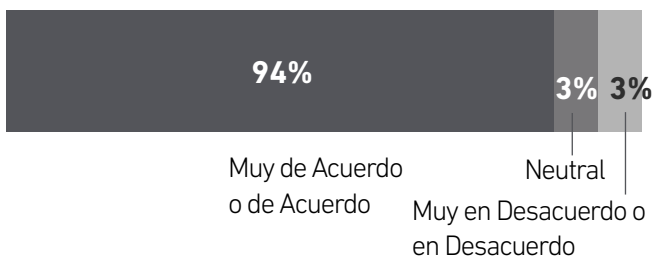


Existe un amplio apoyo para construir las vías dedicadas al corredor.

» **ESTA ALTERNATIVA CUMPLE CON EL PROPÓSITO Y LA NECESIDAD DEL PROYECTO**

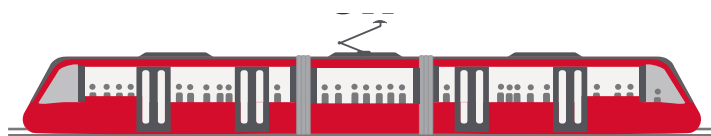
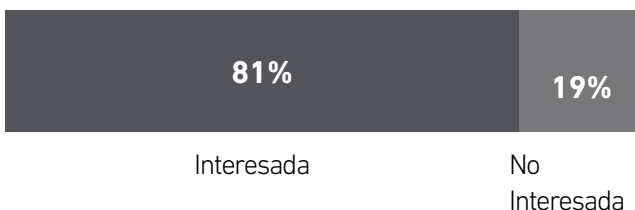


» **ESTA VÍA DE TRANSITO ES IMPORTANTE**



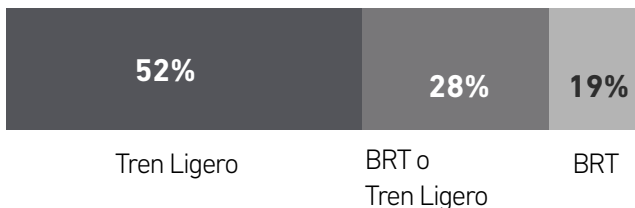
Hay un interés en profundizar el estudio de un túnel en el centro.

» **POBLACIÓN INTERESADA EN EL TÚNEL**



El tren ligero es el medio de transporte preferido por los encuestados.

» **TIPO DE TRANSPORTE**



La mayoría de las personas encuestadas prefieren cruzar el Lago Lady Bird en un nuevo puente usando la alineación de la Calle Trinity.

» **CRUCE DEL LAGO LADY BIRD**



Note: Las respuestas a las preguntas de la encuesta se basaron en la definición inicial del Corredor Línea Azul entero (ACC Highland al AUS Airport a través de Republic Square).

CÓMO PODRÍA SER IMPLEMENTADA

»» CORREDOR LPA Y VISIÓN A LARGO PLAZO



Las Líneas Azul, Dorada y Naranja trabajan en conjunto como un sistema de Servicios interconectados. El plan de financiación y construcción describirá cómo y cuándo cada parte del sistema es pagado, construido y operado.

»» CORREDORES DE PROJECT CONNECT

A medida que avanzan los corredores de Project Connect mediante el proceso federal, las siguientes definiciones serán utilizadas para clasificar proyectos por separado para fines de ingeniería. Estas definiciones son de mayor utilidad para el equipo técnico, pero puede ser útil entender cómo el equipo de Project Connect delineará los proyectos para el financiamiento Federal. Estas definiciones también son utilizadas en este informe para garantizar que las métricas, como el costo de capital y la cantidad de pasajeros, reflejen de la mejor manera los proyectos que se llevarán a cabo en el proceso ambiental federal.

CORREDOR NARANJA

Tech Ridge
a Slaughter



CORREDOR DORADO

Republic Square
a ACC Highland



CORREDOR AZUL

Aeropuerto Austin (AUS)
a Republic Square



LÍNEA AZUL *en un vistazo*

Modalidad *Tren Ligero* Alineación *Trinity St*



8.2 Millas & 11 Estaciones



42 conexiones con rutas del MetroBus

- 3 conexiones con rutas LRT
- 2 conexión con ruta del MetroRail
- 3 conexiones con rutas del MetroRapid



Tiempo de Recorrido

- Aeropuerto AUS ↔ Republic Square
- Riverside ↔ Downtown
- MACC/Rainey ↔ Metro Center



Costo

- Costo de Capital**
\$1.5 - \$1.8 mil millones
- Operaciones y Mantenimiento**
\$14.2 - \$17.5 millones anuales



Usuarios

- Usuarios en día hábil (2040)
16,000 - 19,000



Ambiental

- Reducción de Millas en Traslado de Vehículos**
16.7 millones de menos millas recorridas anualmente
- Reducción de Combustible Greenhouse**
6,600 toneladas menos anualmente



Demografía

- Hogares con cero automóviles en áreas de estaciones
3,000 | 10%
- Individuos en pobreza en áreas de estaciones
17,900 | 26%
- Minorías en áreas de estaciones
41,100 | 59%

» ¿CUÁL ES LA LPA DE LA LÍNEA AZUL PROPUESTA?

La Línea Azul propuesta es un tren ligero que operará en una vía de tránsito dedicada de 8.2 millas de largo desde Republic Square en la punta norte del corredor hasta el Aeropuerto Internacional Bergstrom de Austin (AUS) en la punta sur del corredor, usando la Calle Trinity para cruzar el Lago Lady Bird sobre un puente nuevo.

La vía de tránsito propuesta correrá a nivel de superficie (en el centro de la calle) a lo largo de la mayor parte del corredor, excepto un segmento elevado en la punta sur del corredor desde Metro Center hasta el Aeropuerto de Austin, a lo largo de la US 183. Pasando por el centro de la ciudad, hay dos opciones de vía de tránsito posibles: a nivel de superficie o túnel. La selección de la opción de tránsito preferida (o combinación de opciones de tránsito) entre Auditorium Shores y Hemphill Park Station (29th St) se realizará durante la siguiente fase del proyecto (Ingeniería Preliminar).

Se planean 11 estaciones a lo largo de la ruta. La ubicación de estas instalaciones se coordinará con la comunidad local durante la fase de diseño. El servicio ha sido diseñado para operar cada 10 a 15 minutos, siete días a la semana, de 5:00 a.m. a 3:50 a.m. (12:50 a.m. los domingos). La Línea Azul contará con tarifas fuera del tablero, estaciones más grandes con abordaje nivelado, accesibilidad ADA y priorización de la señal de intersección.

La Línea Azul se conectará con las Línea Naranja y Dorada en el centro de Austin; la ubicación de esa conexión (incluido el posible uso conjunto de un túnel) se determinará en Ingeniería Preliminar.

Nota: los datos presentados en la sección "De un vistazo" reflejan solo la Línea Azul como un proyecto independiente.

LÍNEA DORADA *en un vistazo*

Modalidad *Tren Ligero*



Tiempo de Recorrido



Costo

Costo de Capital
\$1.0 - \$1.2 mil millones

Operaciones y Mantenimiento
\$12.3 - \$15.5 millones anuales



Usuarios

Usuarios en día hábil (2040)
18,000 - 20,000



Ambiental

Reducción de Millas en Traslado de Vehículos
17.4 millones de menos millas recorridas anualmente

Reducción de Combustible Greenhouse
7,000 toneladas menos anualmente



Demografía

Hogares con cero automóviles en áreas de estaciones
3,000 | 11%

Individuos en pobreza en áreas de estaciones
11,400 | 20%

Minorías en áreas de estaciones
25,200 | 37%

» ¿CUÁL ES LA LPA DE LA LÍNEA DORADA PROPUESTA?

La propuesta Línea Dorada es un tren ligero que operará en una vía de tránsito dedicada de 6.4 millas de largo desde el campus Highland de Austin Community College en la punta norte del corredor hasta Republic Square en la punta sur del corredor.

La vía de tránsito propuesta operará a nivel de superficie (en el centro de la calle) a lo largo de la mayor parte del corredor, excepto dos segmentos elevados: donde la Línea Dorada se cruza sobre la Línea Roja al norte de la Estación Hancock, y por la Universidad de Texas, desde el sur de la Calle Dean Keeton hasta el Boulevard Martin Luther King. Pasando por el Centro de la Ciudad, hay dos opciones de vía de tránsito posibles: a nivel de superficie o túnel. La elección de la opción de vía de tránsito preferida (o la combinación de opciones de vías de tránsito) entre Republic Square y Capitol East Stations se hará en la próxima fase del proyecto (Ingeniería Preliminar).

Se planean 10 estaciones a lo largo de la ruta. La ubicación de estas instalaciones se coordinará con la comunidad local durante la fase de diseño. El servicio ha sido diseñado para operar cada 10 a 15 minutos, siete días a la semana, de 5:00 a.m. a 3:50 a.m. (12:50 a.m. los domingos). La Línea Dorada contará con tarifas fuera del tablero, estaciones más grandes con abordaje nivelado, accesibilidad ADA y priorización de la señal de intersección.

La Línea Dorada se conectará con la Línea Naranja y Azul en el centro de Austin; la ubicación de esa conexión (incluido el posible uso conjunto de un túnel) se determinará en Ingeniería Preliminar.

Nota: los datos presentados en la sección "De un vistazo" reflejan solo la Línea Dorada como un proyecto independiente.

QUÉ BENEFICIOS TE OFRECE

MAYOR CONFIABILIDAD

- La Línea Azul y la Línea Dorada operarán en vías de tránsito exclusivas (separadas del tráfico en general).
- Esto significa menos interrupciones en el servicio y con libertad para transitar sin congestión.
- Las vías de tránsito exclusivas dejan de lado conjeturas para la estimación en tiempos de viajes.

UNA RED MÁS FUERTE

- Inversiones en transporte a prueba de congestiones es un complemento necesario para otras inversiones en transporte, como mejorar la I-35 y 183, y la expansión del Aeropuerto Internacional Austin-Bergstrom.
- Cada una de estas inversiones es fundamental para mantener a Austin en movimiento.

MAYOR ACCESO A EMPLEOS

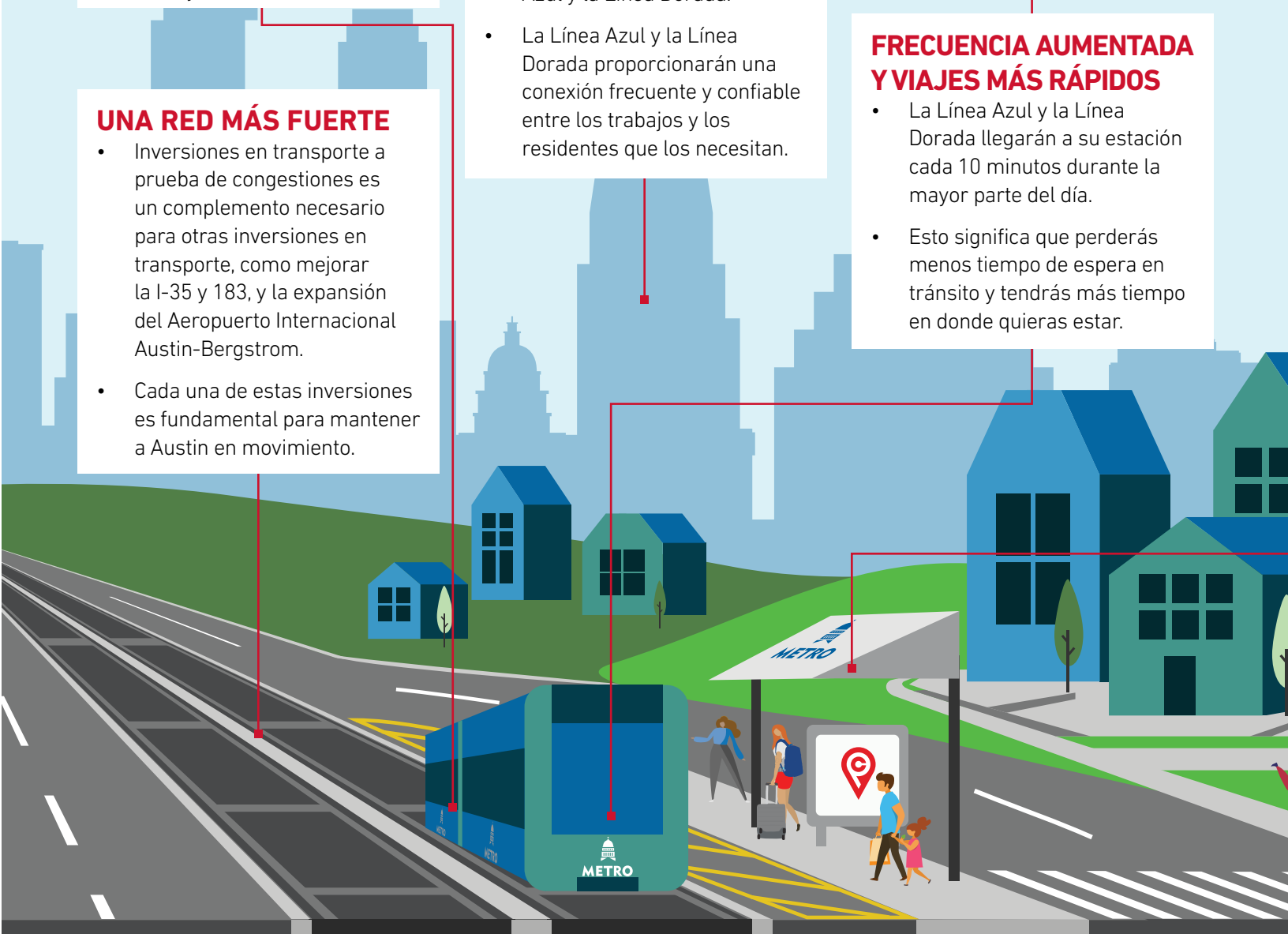
- 10% de los hogares cercanos al corredor de la Línea Azul y 11% de los hogares cercanos al corredor de la Línea Dorada no tienen acceso a un auto.
- 26% de las personas cercanas al corredor de la Línea Azul y 20% de las personas cercanas al corredor de la Línea Dorada viven bajo la línea de pobreza.
- 118,000 trabajos serán accesibles usando la Línea Azul y la Línea Dorada.
- La Línea Azul y la Línea Dorada proporcionarán una conexión frecuente y confiable entre los trabajos y los residentes que los necesitan.

AMPLIA VENTANA DE SERVICIO

- Se asume que el servicio de la Línea Azul y la Línea Dorada comenzará a las 5:00 a.m. y terminará a las 3:50 a.m. del día siguiente (los domingos a las 12:50 a.m.).
- Este servicio modelo de casi 24 horas, 7 días a la semana, significa que la Línea Azul y la Línea Dorada estarán lista para cuando usted las necesite.

FRECUENCIA AUMENTADA Y VIAJES MÁS RÁPIDOS

- La Línea Azul y la Línea Dorada llegarán a su estación cada 10 minutos durante la mayor parte del día.
- Esto significa que perderás menos tiempo de espera en tránsito y tendrás más tiempo en donde quieras estar.



APOYO PARA PLANES REGIONALES

- El plan de estrategias de movilidad de Austin prevé que para el 2039 el 16% de Austin utilizará el transporte para ir al trabajo.
- El transporte rápido, servicio confiable y frecuente (como el de la Línea Azul y la Línea Dorada) es necesario para que esto suceda.

MAS OPCIONES

- Los corredores de las Líneas Naranja, Azul y Dorada están siendo diseñados para maximizar conexiones hacia donde quieras ir.
- Tránsito a prueba de congestión te llevará allí sin el dolor de cabeza ocasionado por tráfico y estacionarse.
- Si eres conductor, habrá menos autos frente a ti.

COMUNIDADES PROSPERAS

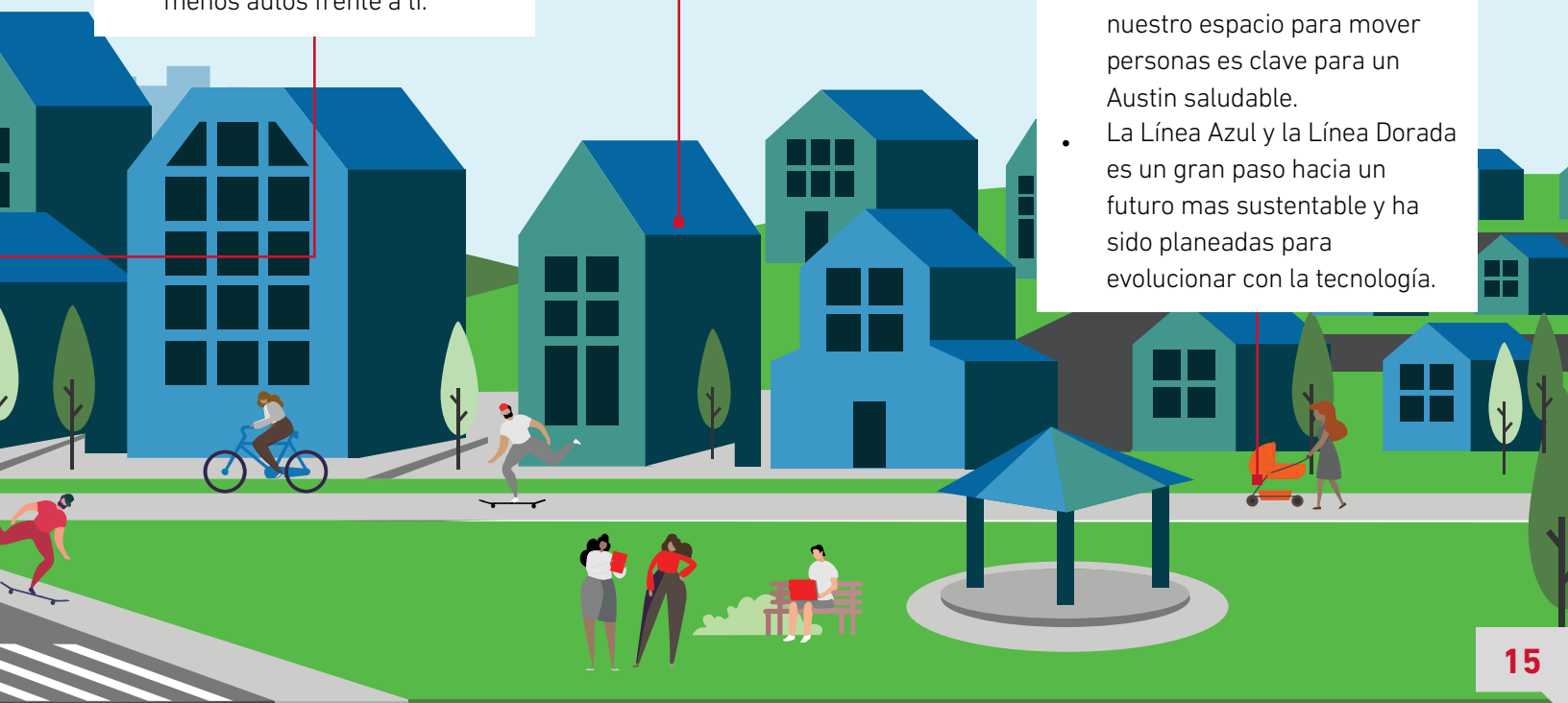
- Se espera que la población del centro de Texas casi se duplique en los próximos 20 años.
- La construcción de viviendas no esta cumpliendo con la demanda, que significa que los costos de vivienda seguirían aumentando.
- Las Líneas Naranja, Azul y Dorada pueden ser una buena herramienta para ayudar a preservar viviendas accesibles para todos los niveles de ingresos.

SUSTENTABILIDAD Y MEJOR CALIDAD DEL AIRE

- El transporte juega un papel importante en la confrontación de retos ambientales.
- Invertir en la Línea Azul y la Línea Dorada ayudará a Austina cumplir con normas nacionales de calidad del aire reduciendo las emisiones y contaminantes de vehículos en general.
- La Línea Azul y la Línea Dorada apoya los objetivos del Plan Climático Comunitario de la Ciudad de Austin al reducir los gases del efecto invernadero.

INVIRTIENDO EN EL FUTURO

- El corredor de la Línea Azul es importante para el crecimiento del aeropuerto y la región.
- Reconsiderar cómo usamos nuestro espacio para mover personas es clave para un Austin saludable.
- La Línea Azul y la Línea Dorada es un gran paso hacia un futuro mas sustentable y ha sido planeadas para evolucionar con la tecnología.



QUE SIGUE

Una vez que la Mesa Directiva de Capital Metro adopte el LPA de la Línea Azul y la Línea Dorada y que el Consejo de la Ciudad de Austin lo respalde, el proyecto estará listo para avanzar a través de los próximos pasos en el proceso de implementación. Los siguientes pasos incluyen: identificar un plan de implementación que incluya fondos, completar el proceso de revisión ambiental federal, completar el diseño final y comenzar con la construcción. Capital Metro continuará interactuando con la comunidad a medida que avance el proyecto de la Línea Azul y la Línea Dorada.

Línea Azul y Línea Dorada

Es tiempo de un transporte público regional en el que podemos confiar.

¡Es tiempo de dar partida!

» ¿CÓMO SERÁ FINANCIADO?

Una vez que se seleccione un LPA, la Línea Azul y la Línea Dorada serían elegibles para recibir fondos federales en línea con las tendencias recientes en las autorizaciones de Subvención de Inversión de Capital (CIG). El programa CIG puede otorgar hasta el 50%

del costo del capital total. Otros fondos provendrán principalmente de fuentes locales y la autorización de nuevos fondos locales para dirigirse a una parte o la totalidad de la Línea Azul y la Línea Dorada podría estar en la boleta electoral de noviembre de 2020.



Acciones del Consejo Directivo de Capital Metro sobre la LPA

- El Consejo Directivo de Capital Metro adopta la LPA del corredor independiente.
 - Paso necesario para la financiación federal
- El Consejo Directivo de Capital Metro adopta el Plan del Sistema

Acción de los socios locales sobre LPA

- El Ayuntamiento de Austin respalda la LPA
- CAMPO adopta la LPA en el Plan de Transporte de Largo Alcance (LRTP) en junio de 2020

Implementación

- Desarrollar un plan de implementación
- Definir proyectos para la construcción / financiamiento
- Finalizar el paquete de financiamiento



Inversiones

Trabajo Ambiental

Posibles impactos en el medioambiente natural, social y construido

Contratación

Ingeniería Preliminar

Diseño avanzado para apoyar el trabajo ambiental

Diseño Final

- Diseño para la construcción es finalizado
- Costos son finalizados
- Financiamiento es finalizado

Aprobación FTA y Construcción

- Fondos FTA
- Comienza la construcción

Implementación de la Líneas Azul y Dorada

2020

2025



METRO



*project***connect**

¿PREGUNTAS?



Visita la oficina de Project Connect localizada en 607 Congress Ave.

Hable con el personal del proyecto, haga preguntas y brinde comentarios entre las 9 a.m. y las 4 p.m.



Visita ProjectConnect.com

Valoramos su opinión! Regístrese para recibir actualizaciones u obtener información sobre las próximas reuniones.



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¡Únete a nosotros en Facebook.com/CapitalMetro!

Liderado por Capital Metro con el apoyo de la ciudad de Austin

AECOM **HR**

HNTB **N NELSON**
NYGAARD

LÍNEA NARANJA



» LA LÍNEA NARANJA DE UN VISTAZO

La línea Naranja es una conexión del tren ligero de aproximadamente 21 millas con 22 estaciones, que corre desde el Centro de Tránsito de North Lamar (183 & N. Lamar) a lo largo del corredor de North Lamar/Guadalupe, el campus de universidad UT, del centro al Lago Lady Bird y a lo largo de South Congress a Stassney Lane.

» TÚNEL DE TRÁNSITO DEL CENTRO

El Túnel de tránsito del centro puede separar a los vehículos del tren ligero del tráfico del centro de la ciudad; esto permite que el servicio se mueva de manera más rápida, segura y más confiable por el centro de la ciudad, beneficiando a todos los usuarios del sistema.

» MAYOR FRECUENCIA Y VIAJES MÁS RÁPIDOS

La línea Naranja operará cada 10 minutos a lo largo de la mayor parte del día.

Esto significa que usted pasará menos tiempo esperando al tránsito y más tiempo donde usted quiera ir.

» MÁS CONEXIONES

Los corredores de las línea Naranja, Azul y Dorada están siendo designados para maximizar las conexiones a dónde quiera ir.

La línea Naranja conectará con el sistema de tránsito más grande, que incluye a las líneas Roja, Azul y Dorada, así como a las rutas de MetroRapid y MetroBus.



Consulte al reverso para un **MAPA DE LA LÍNEA NARANJA DETALLADO**



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¡Valoramos su opinión! Suscríbese para recibir actualizaciones o para enterarse de las próximas reuniones.



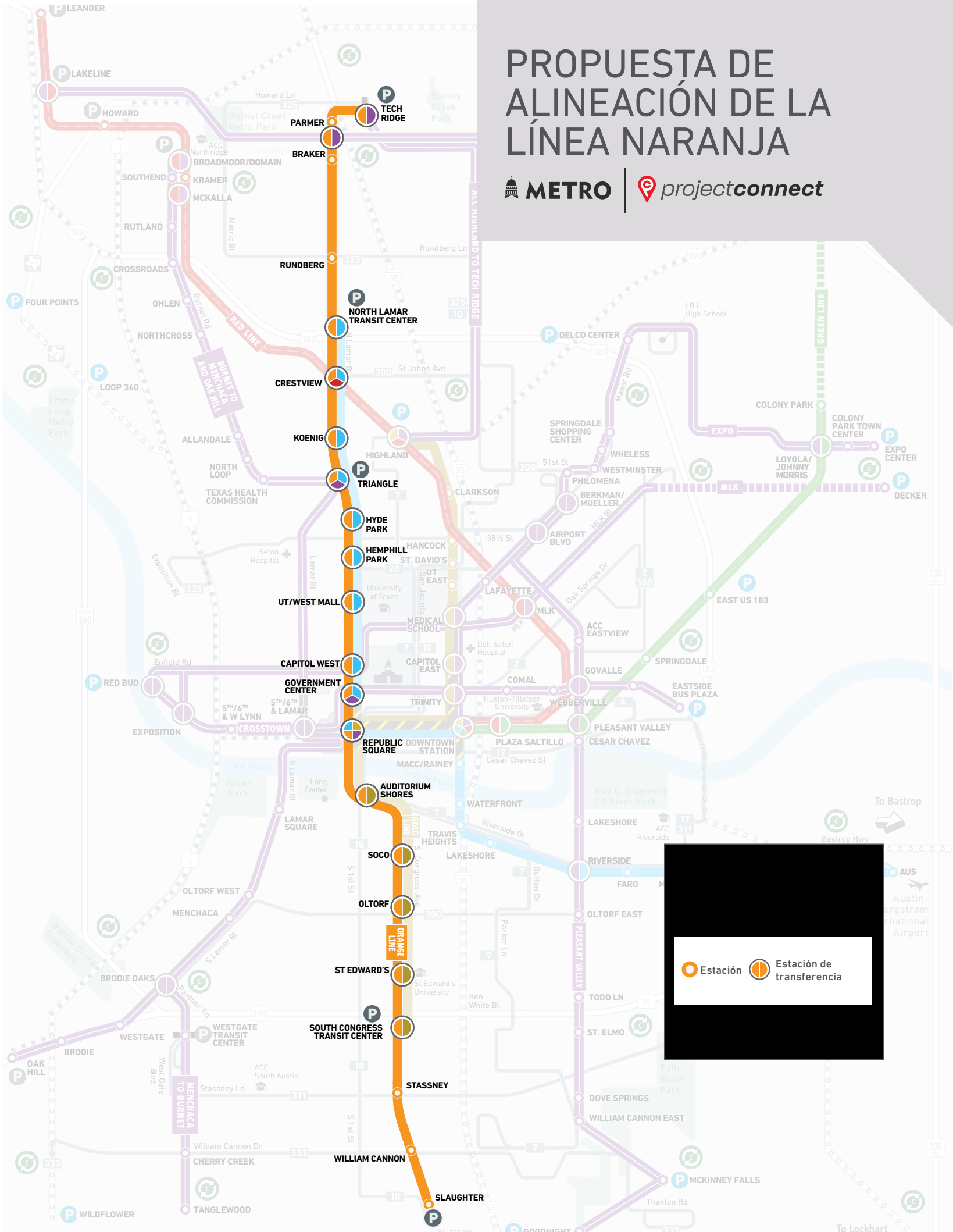
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PROPUESTA DE ALINEACIÓN DE LA LÍNEA NARANJA



 Estación

 Estación de transferencia

LÍNEA AZUL



» LA LÍNEA AZUL DE UN VISTAZO

La Línea Azul operaría por aproximadamente 15 millas conectando 20 estaciones, y corre desde el Aeropuerto Internacional Austin-Bergstrom, y proporciona servicio a lo largo de East Riverside Drive, cruza el Lago Lady Bird al Centro de Convenciones y hacia el oeste a lo largo de la Calle 4 a la plaza Republic Square. Entonces opera a lo largo de la Línea Naranja a la U.S. 183 y North Lamar.

» TÚNEL DE TRÁNSITO DEL CENTRO

El Túnel de Tránsito del Centro (Downtown Transit Tunnel) puede separar a los vehículos del tren ligero del tráfico del centro de la ciudad; esto permite que el servicio se mueva de manera más rápida, segura y más confiable por el centro de la ciudad, beneficiando a todos los usuarios del sistema.

» MAYOR FRECUENCIA Y VIAJES MÁS RÁPIDOS

La línea Azul operará cada 10 minutos a lo largo de la mayor parte del día.

Esto significa que usted pasará menos tiempo esperando al tránsito y más tiempo donde usted quiera ir.

» MÁS CONEXIONES

Los corredores de las líneas Naranja, Azul y Dorada están siendo designados para maximizar las conexiones a dónde quiera ir. Llegue a su destino sin el dolor de cabeza del tráfico y el estacionamiento, gracias al tránsito a prueba de congestiones.

La línea Azul conectará con el sistema de tránsito más grande, que incluye a las líneas Roja, Verde, Naranja y Dorada, así como a las rutas de MetroRapid y MetroBus.



Consulte al reverso para un **MAPA DE LA LÍNEA AZUL DETALLADO**



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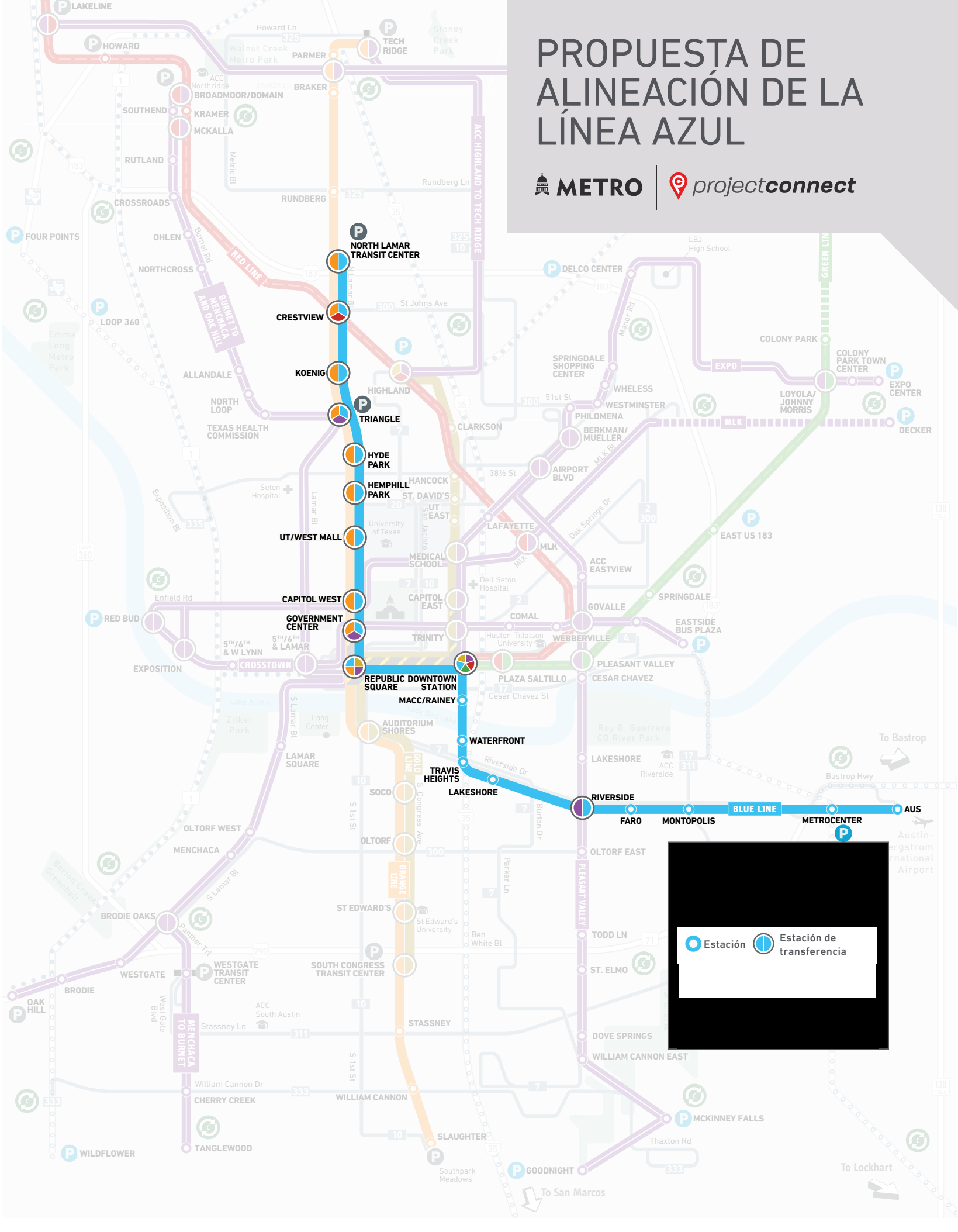


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PROPUESTA DE ALINEACIÓN DE LA LÍNEA AZUL



- Estación
- Estación de transferencia

LÍNEA DORADA



» LA LÍNEA DORADA DE UN VISTAZO

La línea Dorada es un servicio de tren ligero que operaría por aproximadamente 9.5 millas conectando 15 estaciones desde el campus Highland de Austin Community College a través del centro de la ciudad al Centro de Convenciones y Republic Square. La Línea Dorada puede ser inicialmente MetroRapid con una conversión posterior al servicio de tren ligero. Después de la conversión al servicio de tren ligero, la Línea Dorada puede operar a lo largo de la Línea Naranja hasta el South Congress Transit Center.

Se ajusta al crecimiento futuro.

Se espera que la población crezca a lo largo del corredor propuesto de la línea Dorada, y este servicio de tren ligero respaldaría ese crecimiento y aseguraría su sostenibilidad.

» TÚNEL DE TRÁNSITO DEL CENTRO

El Túnel de Tránsito del Centro (Downtown Transit Tunnel) puede separar a los vehículos del tren ligero del tráfico del centro de la ciudad; esto permite que el servicio se mueva de manera más rápida, segura y más confiable por el centro de la ciudad, beneficiando a todos los usuarios del sistema.

» MAYOR FRECUENCIA Y VIAJES MÁS RÁPIDOS

La línea Dorada operará cada 10 minutos a lo largo de la mayor parte del día. Esto significa que usted pasará menos tiempo esperando al tránsito y más tiempo donde usted quiera ir.

» MÁS CONEXIONES

Los corredores de las líneas Naranja, Azul y Dorada están siendo designados para maximizar las conexiones a dónde quiera ir.

La línea Naranja conectará con el sistema de tránsito más grande, que incluye a las líneas Roja, Azul y Dorada, así como a las rutas de MetroRapid y MetroBus.



Consulte al reverso para un **MAPA DE LA LÍNEA DORADA DETALLADO**



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¡Valoramos su opinión! Suscríbase para recibir actualizaciones o para enterarse de las próximas reuniones.



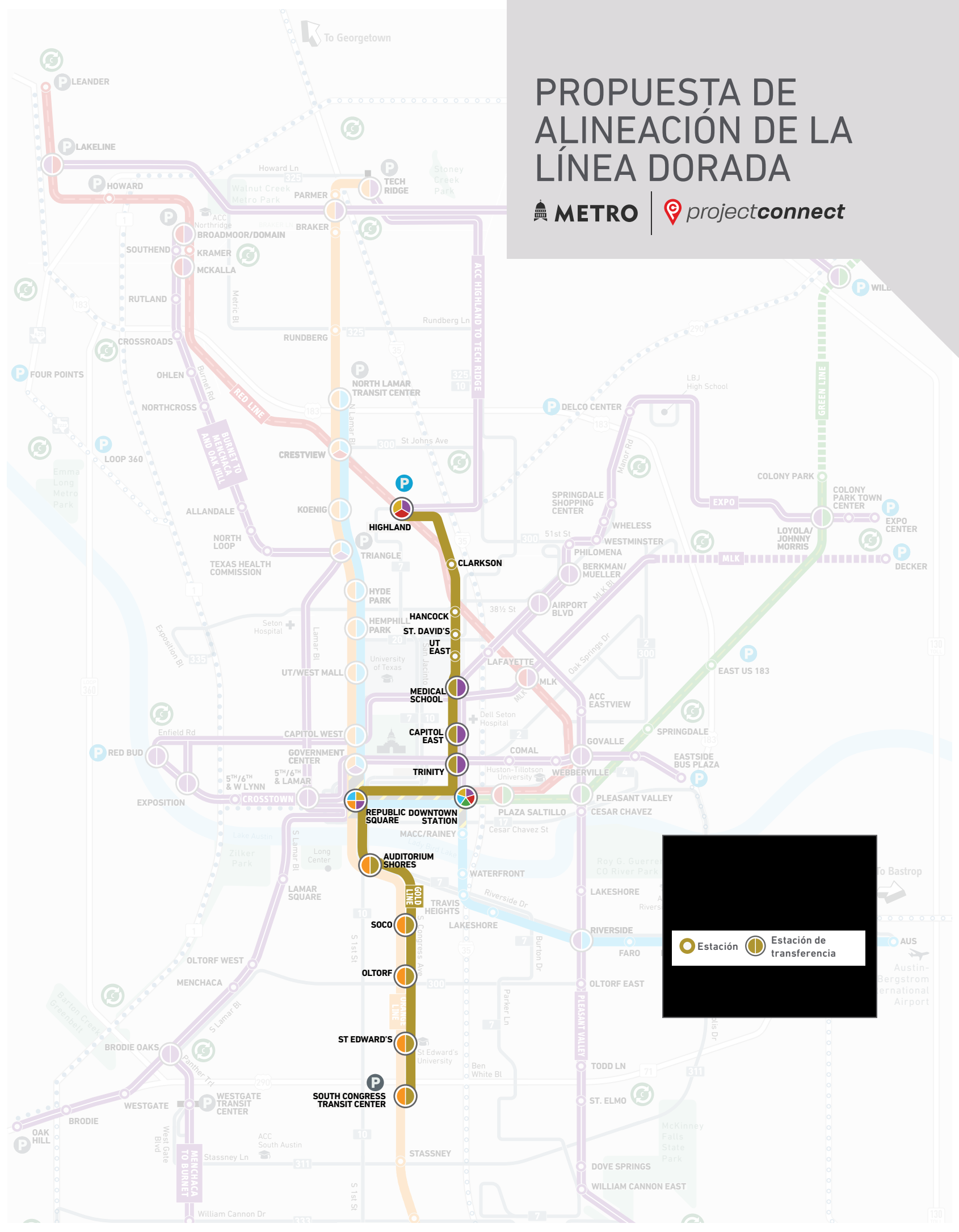
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PROPUESTA DE ALINEACIÓN DE LA LÍNEA DORADA



 Estación

 Estación de transferencia

To Bastrop

AUS

Austin-Bergstrom International Airport

METRORAPID



» LA AMPLIACIÓN Y LAS MEJORAS DE METRORAPID DE UN VISTAZO

Provee servicio frecuente con un número limitado de paradas y tiempos de viaje más rápidos. Entre las características de MetroRapid están los Carriles prioritarios, prioridad de señales de tránsito, saltos en la fila, más y mejores paradas de autobús con una mayor frecuencia.

Con servicio a todas las áreas de la ciudad: Burnet a Menchaca y Oak Hill, ACC Highland a Tech Ridge, Parmer, Expo Center, MLK, Crosstown y Pleasant Valley.

» BENEFICIOS DE METRORAPID

Confiabilidad mejorada.

Tiempos de viaje más rápidos, eficientes y predecibles a lo largo del día comparados con el actual servicio de autobuses.

Proporciona un sistema confiable que lo lleva a donde quiere ir, rápidamente y a tiempo.

Aumento de Conexiones.

Las rutas de MetroRapid conectarán al sistema de tránsito más grande, que incluye a las líneas Roja, Verde, Azul, Naranja y Dorada, así como las rutas de MetroBus. Mejora de conexiones de movilidad a Park & Rides, mejores banquetas, carriles para bicicletas y más.

Aumento de opciones.

Conexiones frecuentes, confiables y convenientes para llevarlo a dónde quiere ir sin el dolor de cabeza del tráfico y el estacionamiento.

Características y calidad de servicio.

- Abordaje por varias puertas
- Centros de información digital
- Carga por USB
- Escáner de boleto inteligente
- Wi-Fi gratuito
- Autobuses eléctricos



Consulte al reverso para un **MAPA DE METRORAPID DETALLADO**



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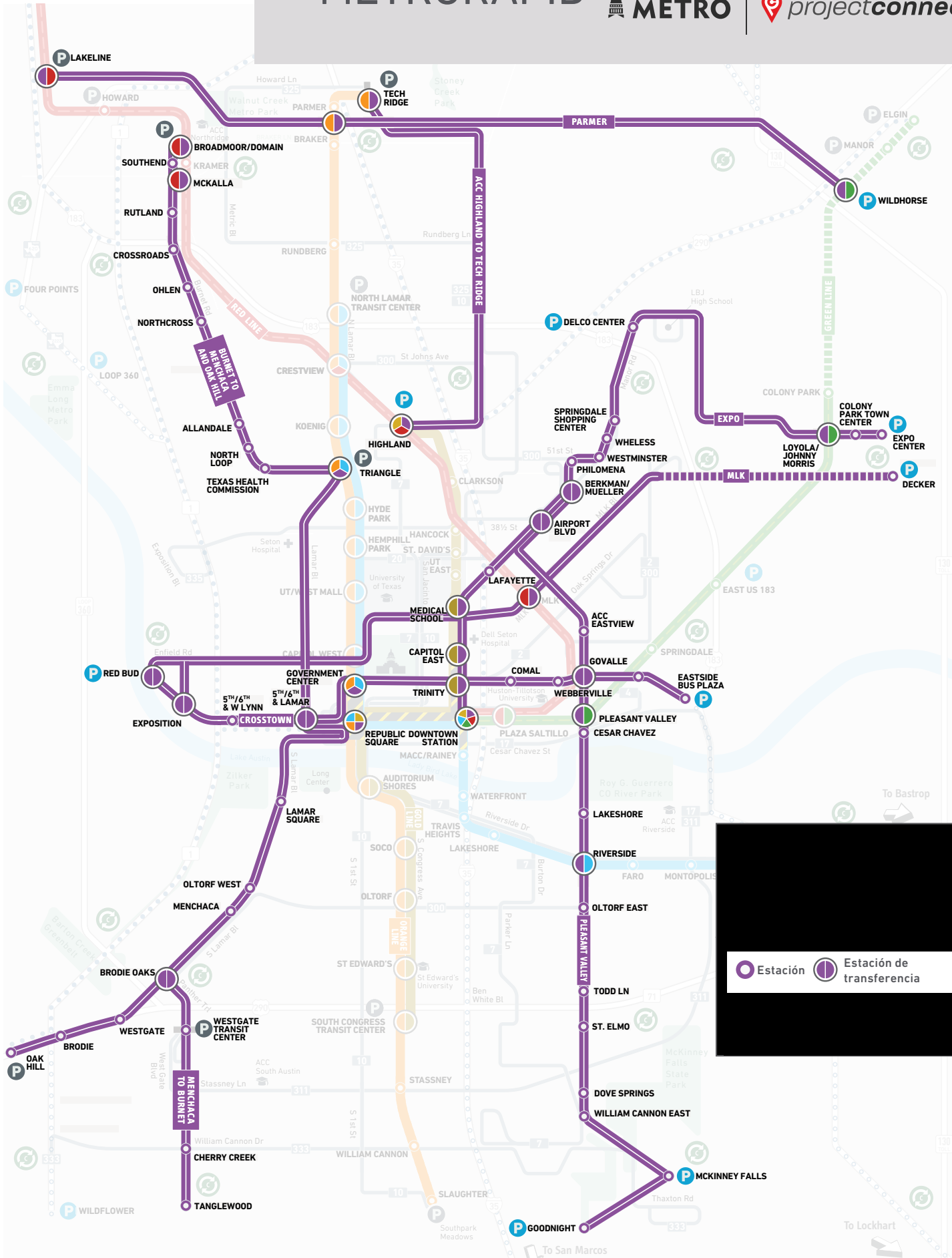
LÍNEAS PROPUESTAS DE METRORAPID



METRO



projectconnect



 Estación
 Estación de transferencia

LÍNEA ROJA



» LAS MEJORAS DE LA LÍNEA ROJA DE UN VISTAZO

La línea Roja es un servicio de tren suburbano que opera desde el centro de Austin, a través del centro y el noroeste de Austin y la ciudad de Leander. La primera fase de las mejoras incluirá la construcción de dos estaciones nuevas y doble vía para aumentar la frecuencia y la capacidad. La segunda fase incluye el incremento de la longitud de las estaciones, dobles vías adicionales y actualizaciones de instalaciones de mantenimiento para dar soporte a más vehículos.

» DATOS DE LA LÍNEA ROJA

Proporcionará capacidad adicional tanto para las operaciones del tren suburbano como de carga. La línea actualmente da servicio a nueve estaciones a lo largo de una vía de 32 millas. El servicio de la línea Roja ya excede su capacidad durante la hora pico y continúa aumentando el número de pasajeros.

» BENEFICIOS DE LA LÍNEA ROJA

Conecta a los usuarios con los principales centros de actividades.

El tren suburbano operaría con más frecuencia, lo que significa más espacio para los pasajeros. Los centros de actividades claves a lo largo de la línea Roja incluyen al Centro de Convenciones, Plaza Saltillo y vecindarios como Crestview, junto con conexiones a Park & Rides en Howard, Lakeline y Leander. Las estaciones nuevas incluirían Broadmoor/Domain y McKalla cerca del estadio de fútbol de Austin FC.

Se ajusta al crecimiento futuro.

Se espera que la población siga creciendo a lo largo del corredor de la línea Roja. Las oportunidades de empleo siguen creciendo a lo largo del corredor de la línea Roja y a sus costados, como el Desarrollo orientado al Tránsito de Northline en Leander.

La línea Roja conectará con el sistema de tránsito más grande, que incluye a las líneas Verde, Azul, Naranja y Dorada, así como a las rutas de MetroRapid y MetroBus.



Consulte al reverso para un

MAPA DE LA LÍNEA ROJA DETALLADO



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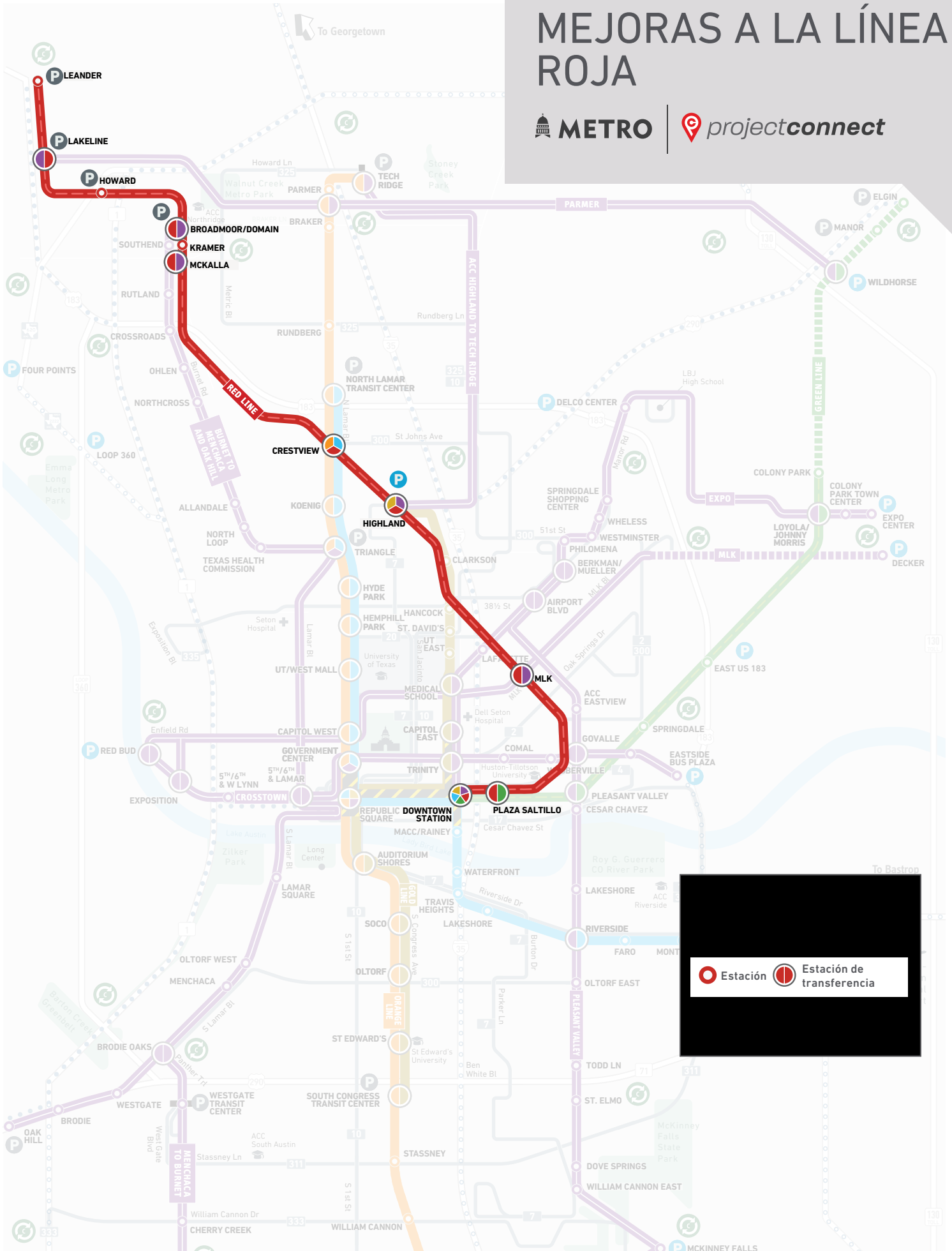


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MEJORAS A LA LÍNEA ROJA



 Estación  Estación de transferencia

LÍNEA VERDE



» LA LÍNEA VERDE DE UN VISTAZO

Una nueva línea de tren suburbano que funcione sobre la vía de carga existente de Capital Metro, la línea Verde conectará vecindarios a lo largo del este de Austin. La primera fase será del Centro a Colony Park. Las fases siguientes correrán más al este hacia Manor y Elgin.

» DATOS DE LA LÍNEA VERDE

La primera fase tendrá una longitud de ocho millas a Colony Park e incluye siete estaciones. Las siguientes fases podrían agregar 17 millas adicionales y tres estaciones más.

El tren suburbano operará con más frecuencia y moverá a la gente de manera más eficiente y rápida.

» BENEFICIOS DE LA LÍNEA VERDE

Oportunidades únicas de viviendas y desarrollo. El corredor propuesto para la línea Verde podría brindar oportunidades únicas para acceder a opciones de viviendas asequibles a lo largo del corredor. Este podría ser una parte integral del Plan Maestro de Colony Park.

Mayor acceso a empleos y servicios.

La línea Verde propuesta podría ofrecer a más familias una opción de transporte de gran capacidad para poder ir a trabajar y acceder a servicios de cuidados de la salud y educación.

La línea Verde conectará con el sistema de tránsito más grande, que incluye a las líneas Roja, Azul y Dorada, así como a las rutas de MetroRapid y MetroBus.



Consulte al reverso para un **MAPA DE LA LÍNEA VERDE DETALLADO**



Visite **ProjectConnect.com**

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PARK & RIDES



»» LOS PARK & RIDES DE UN VISTAZO

La visión de Project Connect es agregar nuevos Park & Rides y elevar nuestros servicios con comodidades que formen espacios y mejores opciones de conexión; todo personalizado para cada vecindario.

- Park & Rides servirán como centros de movilidad para conectar con tránsito frecuente y confiable.
- Capital Metro cuenta con 16 Park & Rides y Project Connect agregará 24 más (10 que están fuera del área de servicio).

»» LAS MEJORAS GENERALES PUEDEN INCLUIR:

- Paisajes e iluminación únicos
- Más estacionamientos
- Cámaras de seguridad
- Conexiones para peatones, bicicletas y motocicletas
- Estaciones de carga para vehículos eléctricos

»» BENEFICIOS GENERALES

Mayor acceso al tránsito

Park & Rides facilitará conexiones seguras, fáciles y eficientes entre modos de viaje.

Ambientes acogedores

Ambientes disfrutables y seductores para usuarios de tránsito que incluyen servicios y recursos de información para generar una experiencia amigable con el usuario.

Más opciones de transporte

Park & Rides se ubicará en áreas óptimas para hacer conexiones con las diversas líneas de tránsito y estará equipada con diferentes modos de transporte, como estaciones de bicicletas.



Consulte al reverso para un **MAPA DE PARK & RIDES DETALLADO**



Visite ProjectConnect.com

¡Valoramos su opinión! Suscríbese para recibir actualizaciones o para enterarse de las próximas reuniones.

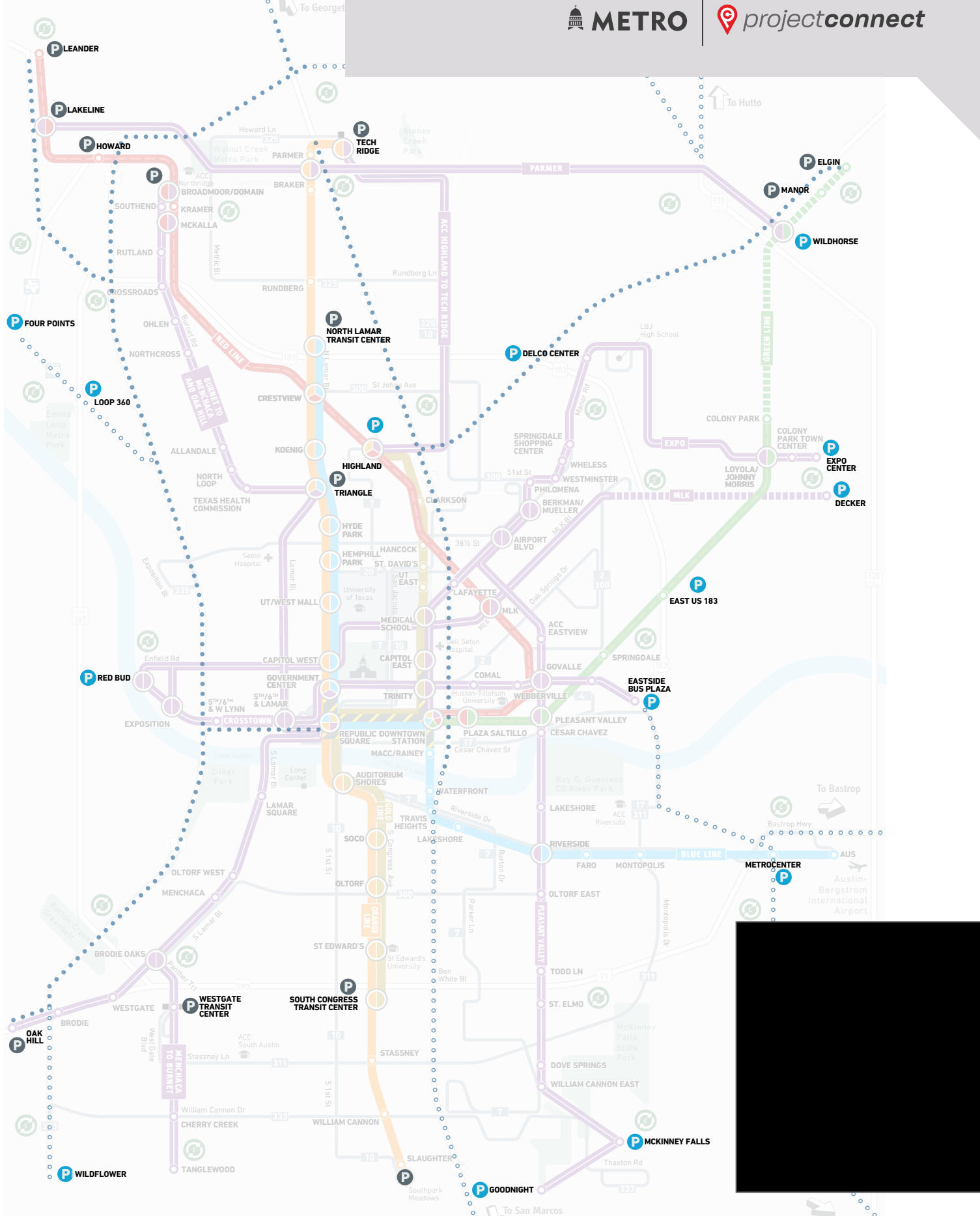


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PARK & RIDES PROPUUESTOS



METROBUS & METROACCESS



» EL METROBUS DE UN VISTAZO

El servicio de MetroBus es la médula del sistema de Capital Metro. En el último año, la agencia ha invertido mucho para mejorar la experiencia del cliente. Esto incluye los primeros autobuses eléctricos del centro de Texas, 125 nuevas paradas de autobús y habrá más; se añadió iluminación con paneles solares para mejorar la seguridad y se invirtió en tecnología que ofrece a los clientes información más precisa de la Próxima Salida.

DATOS BÁSICOS:

- Más de 60 rutas
- 14 rutas de alta frecuencia
- Servicio de autobuses de enlace de la universidad UT
- Servicio de E-Bus y servicio nocturno Night Owl
- Área de servicio de 544 millas cuadradas
- Con servicio a una población de 1.3 millones
- 368 MetroBuses totalmente accesibles
- Aplicación de tránsito galardonada
- Incremento en el número de pasajeros durante 17 meses consecutivos

» METROACCESS DE UN VISTAZO

MetroAccess es un servicio de paratransito de viajes compartidos para clientes inscritos con capacidades diferentes. La disponibilidad del servicio de MetroAccess se amplía conforme crece el sistema de CapMetro.

DATOS BÁSICOS:

- 108 vehículos de paratransito de MetroAccess
- Capacitación de viaje gratuita para clientes que estén aprendiendo a usar el tránsito
- Project Connect incluye servicios mejorados de MetroAccess



Los servicios de MetroBus y MetroAccess son integrales a Project Connect.

CÓMO APOYAR PROJECT CONNECT

Todas las inversiones y mejoras recientes a nuestro servicio de MetroBus están alineadas con Project Connect.

Las mejoras futuras de MetroBus incluirán lo siguiente:

- Se añadirán a la flota más vehículos de cero emisiones, totalmente eléctricos
- Patio de autobuses eléctricos con estaciones de carga para más de 200 autobuses
- Mejoras a las comodidades de los autobuses, como puertos de carga USB
- Conexiones futuras con las líneas Naranja, Azul, Roja, Verde y Dorada, así como a las estaciones MetroRapid y Park & Rides



Visite [ProjectConnect.com](https://www.projectconnect.com)

¡Valoramos su opinión! Suscríbese para recibir actualizaciones o para enterarse de las próximas reuniones.



Visite la oficina comunitaria de la iniciativa Project Connect (Project Connect Community Office) ubicada en 607 Congress Ave.

Visítenos a cualquier hora entre las 9 a. m. y las 4 p. m. Hable con el equipo del proyecto, haga preguntas y comentarios.



PROJECT CONNECT TECNOLOGÍA DEL CLIENTE MEJORADA



» PLANEAR, PAGAR Y MOVERSE ES MÁS FÁCIL QUE NUNCA!

Capital Metro reúne la tecnología y la movilidad en Project Connect con la siguiente evolución en la planeación inteligente de viajes, pagos e integración multimodal.

Al observar las mejores prácticas que lideran el sector en Europa y Asia, crearemos la movilidad-como-servicio, haciendo que el transporte sea sencillo y sin fricciones.

Los clientes tendrán la opción de acceder un nuevo sistema de tarifas basado en cuentas en su teléfono celular o su tarjeta física inteligente. Un programa nuevo, llamado Límite de tarifas, ofrecerá tarifas de pago por uso, una solución de equidad innovadora al prepago de pases semanales o mensuales.

Puede usar su tarjeta inteligente o su teléfono inteligente para pagar y usar todo tipo de transporte. Toque o escanee para validar los boletos en el autobús o el tren y... ¡se pondrá en camino! Con la misma cuenta gestione estacionamientos, renta de scooters eléctricos, bicicletas y más, para mejorar sus opciones en la primera o la última milla del traslado. ¡La tecnología basada en cuentas permite a CapMetro y a la ciudad de Austin asociarse para integrar a la aplicación otros servicios de la ciudad y servicios asociados para crear una verdadera ciudad inteligente!

LA EXPERIENCIA DE TECNOLOGÍA DEL CLIENTE SE HACE POSIBLE MEDIANTE UN PROJECT CONNECT TOTALMENTE FINANCIADO.



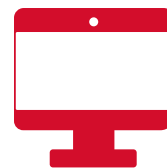
APLICACIÓN MÓVIL

- » Úsela para planear los viajes
- » Compre sus boletos con anticipación
- » Con la tecnología basada en cuentas puede consultar y rastrear el uso, además las agencias asociadas pueden ofrecer recompensas por lealtad
- » Apple y Google Pay



TARJETA INTELIGENTE

- » Solo toque y vaya cuando aborde el autobús
- » Es una integración recargable y reutilizable de eventos especiales y servicios comunitarios



PLANIFICACIÓN INTELIGENTE DE VIAJES

- » Realice y gestione planes de viaje
- » Rastree su viaje con localizaciones en tiempo real
- » Entérese de los desvíos y afectaciones al servicio y elija su viaje de manera informada

Appendix 2: Virtual Community Meetings Materials and Video Links



Virtual Community Meetings


Project Connect Overview

MAY 2020

1

AGENDA

- WELCOME & INTRODUCTIONS
- COMMUNITY UPDATES
 - CENTRAL TEXAS FOOD BANK
 - WORKFORCE SOLUTIONS CAPITAL AREA
- PROJECT CONNECT OVERVIEW
- MODERATED DISCUSSION



2


COMMUNITY UPDATES






3

SUBMITTING QUESTIONS




- **IN ZOOM:** CLICK ON Q&A AT THE BOTTOM OF YOUR SCREEN
- **IN FACEBOOK:** SUBMIT YOUR QUESTIONS IN THE COMMENTS
- **BY PHONE:** ((IN ENGLISH OR SPANISH) 512-662-1750



4

WELCOME & INTRODUCTIONS




5

SERVING OUR COMMUNITY DURING COVID-19



6

TRANSIT IS ESSENTIAL IN AUSTIN



Throughout the first 40 days of the COVID-19 crisis, CapMetro delivered **more than 1.3 million trips** for frontline workers and those who needed essential services.

Now more than ever, we understand how vital public transportation is to keep our city moving.

METRO | projectconnect

COVID RESPONSE BY THE NUMBERS



Over 1.3 Million Trips Delivered
1.3 million Trips Delivered for Frontline Workers and Essential Services

200,000+ Meals
Meals Delivered through the City of Austin's Food Bank and Community Kitchens

6,000+ Hours
Volunteer Hours Contributed to Support the City of Austin's COVID-19 Response


Over 24,000 Trips Delivered
1.3 million Trips Delivered for Frontline Workers and Essential Services

Going the Extra Mile for Safety
Extra measures improve our staff, customers and protect public health.

METRO | projectconnect

Report as of 5/13/2020

SUPPORTING OUR STAFF



18,260 Masks for Operating Staff

10,000 Gloves

100s of Gallons of Hand Sanitizer

PLUS, SERVICE RECOGNITION BONUS & EXTENDED SICK LEAVE

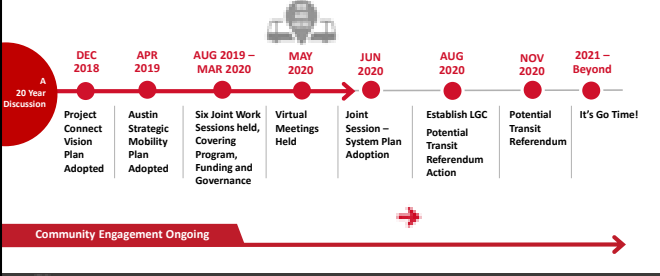
METRO | projectconnect

Report as of 5/13/2020

PROJECT CONNECT COMMUNITY ENGAGEMENT

METRO | projectconnect

PROJECT CONNECT TIMELINE



DEC 2018 Project Connect Vision Plan Adopted

APR 2019 Austin Strategic Mobility Plan Adopted

AUG 2019 – MAR 2020 Six Joint Work Sessions held, Covering Program, Funding and Governance

MAY 2020 Virtual Meetings Held

JUN 2020 Joint Session – System Plan Adoption

AUG 2020 Establish LGC Potential Transit Referendum Action

NOV 2020 Potential Transit Referendum

2021 – Beyond It's Go Time!

Community Engagement Ongoing

METRO | projectconnect

LEARNING, LISTENING & COLLABORATING

LOCAL OUTREACH More than 40,000 community members engaged through outreach programs IN ADDITION TO ALL ENGAGEMENTS & OUTREACH COMPLETED WITH AUSTIN STRATEGIC MOBILITY PLAN (ASMP)

ENGAGEMENTS BY THE NUMBERS

- Street team outreach 11,621 engaged
- Community outreach events 16,380 engaged
- Live open houses 591 engaged
- Virtual open houses 5,154 engaged

STAKEHOLDER GROUPS ENGAGED

- Technical Advisory Committee (TAC)
- Project Connect Ambassador Network (PCAN)

Corridors Program Coordination
 Technical Group Reviews

City Council & CapMetro Joint Meetings

AUG 6	NOV 28	MAR 4
OCT 30	JAN 14	MAR 9
JUN 10	JULY TBD	AUG TBD

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PROJECT CONNECT RECOMMENDED SYSTEM PLAN

METRO projectconnect

RECOMMENDED SYSTEM PLAN MAP

A SYSTEM BUILT ON CONNECTIONS.

METRO projectconnect

PROJECT CONNECT SYSTEM PLAN RECOMMENDATION

<p>Light Rail</p> <ul style="list-style-type: none"> Light Rail Transit in 8 additional neighborhoods for Orange, Blue and Gold Lines - 36 Miles, 40 Stations incl. Downtown Transit Tunnel 	<p>Commuter Rail</p> <ul style="list-style-type: none"> New Commuter Rail Service to Connect Downtown to Colony Park with potential extension to Manor and Elgin 	<p>Plaza</p> <ul style="list-style-type: none"> Zero Emissions Improved Customer Tech New Connector Lines (Pilot) Enhance Facility Requirements
<p>High Frequency Bus with Priority Treatments</p> <ul style="list-style-type: none"> 7 New Routes - 74 Miles, 193 Stations 	<p>Station and Operational Improvements</p> <ul style="list-style-type: none"> 8 New Routes - 5 outside service area 24 New Park & Rides - 10 outside the service area 	
	<p>Better bus service and enhanced demand response service</p>	

METRO projectconnect

HIGH-FREQUENCY AND HIGH-CAPACITY ROUTES

TODAY VS. FUTURE

Project Connect creates an expanded regional transit network to benefit us all.

METRO projectconnect






PROJECT CONNECT
COMMUNITY BENEFITS

A METRO | projectconnect

SYSTEM BENEFITS



- ✓ Easing traffic in our city and region
- ✓ More transit options for all
- ✓ Improved quality of life
- ✓ Cleaner air
- ✓ Increased frequency and reliability
- ✓ Stronger transportation network
- ✓ Create more access to jobs, healthcare and education
- ✓ An investment for today and future generations

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INVESTING IN OUR LOCAL ECONOMY



- Capital investments create a robust mix of local job opportunities
- Significant program opportunities for Disadvantaged Business Enterprises (DBE)

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ACTIVE TRANSPORTATION INVESTMENTS



APPROXIMATELY \$195,000,000 IN ACTIVE TRANSPORTATION MOBILITY INVESTMENTS

A METRO | projectconnect

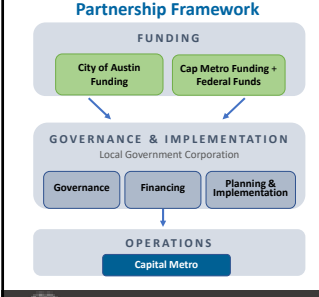
PROJECT CONNECT

THE PATH FORWARD

A METRO | projectconnect

JOINT TRANSIT PARTNERSHIP

Partnership Framework



Guiding Principles

- Transparency
- Single entity vested with authority and resources to construct and implement Project Connect
- A new independent board
- City Council and Capital Metro Board oversight

A METRO | projectconnect

PROGRAM COST ESTIMATES

Project Connect Program Components	Cost
Orange Line	\$4.2B
Blue Line	\$1.3B
Gold Line	\$700M
Downtown Tunnel	\$2.5B
MetroRapid	\$170M
MetroRail – Green	\$370M
MetroRail – Red	\$25M
MetroExpress and Park & Rides	\$100M
Neighborhood Circulators	\$3M
Maintenance Facility Improvements	\$300M
Fare Collection Systems	\$30M
Total	\$9.8B
40% Federal	-\$3.9B
Recommended System Plan Local Commitment	\$5.9B

A METRO | projectconnect

POTENTIAL INVESTMENT PARTNERSHIPS

Federal Funding

- Up to Half of Program Funding Secured by Capital Metro

Capital Metro

- Capital Expansion Fund; Project Connect Planning & Development
- Ongoing Operations & Maintenance Funding

City of Austin

- Property Tax Rate Election (Capital, Operations and Maintenance)



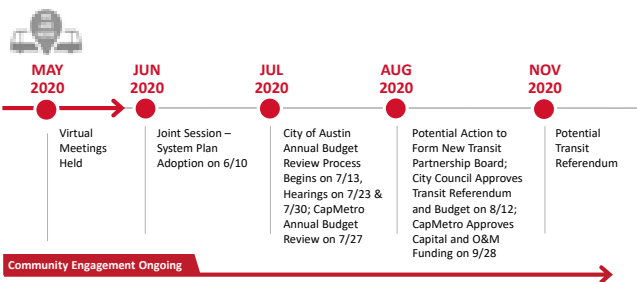
PROGRAM SEQUENCING & FUNDING: Scenarios

- Preliminary scenarios from Integrated Revenue & Cost Model

	A	B	C	D
Years to Build-Out	15 years	25 years	30 years	30 Years
Project Connect Program Components	All	All	All	All with no tunnel
Additional Tax Rate in Year 1	12.5 to 13.5 cents	10 to 11 cents	9 to 10 cents	6.5 to 7.5 cents
Estimated impact on Tax Bill for Median Taxable Home	\$34 to \$37 / month	\$27 to \$30 / month	\$24 to \$27 / month	\$18 to \$20 / month

*Estimated at \$325,000 for FY21

UPCOMING DECISION POINTS



SUBMITTING QUESTIONS



- **IN ZOOM:** CLICK ON Q&A AT THE BOTTOM OF YOUR SCREEN
- **IN FACEBOOK:** SUBMIT YOUR QUESTIONS IN THE COMMENTS
- **BY PHONE:** (IN ENGLISH OR SPANISH) 512-662-1750

UPCOMING MEETINGS

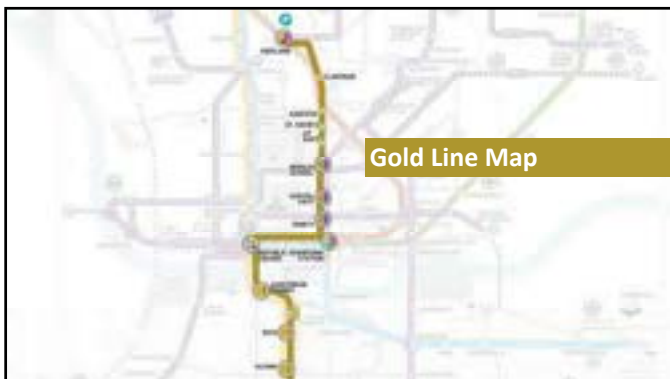


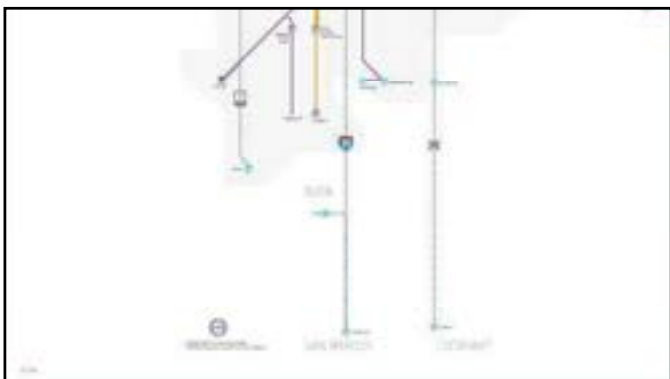
- May 19 | 5 PM** Kathie Tovo (Dist 9)
Wade Cooper (CapMetroBoard Chair)
- May 20 | 11 AM** Jimmy Flannigan (Dist 6)
Troy Hill (CapMetro Board)
Eric Stratton (CapMetro Board Secretary)
- May 20 | 5 PM** Alison Alter (Dist 10)
Terry Mitchell (CapMetro Board)
- May 26 | 11 AM** Steve Adler (Austin Mayor)
Wade Cooper (CapMetro Board Chair)
- May 28 | 6 PM** Ann Kitchen (Dist 5, CapMetro Board)
Paige Ellis (Dist 8)
- May 29 | 2PM** Delia Garza (Dist 2, CapMetro Board)
Sabino "Pio" Renteria (Dist 3, CapMetro Board)



NEXT MEETING: Tuesday, May 19 at 5 p.m.

Thanks for joining us!





Virtual Community Meeting Video Links

May 15 - Virtual Community Meeting District 4 & 7:

https://www.youtube.com/watch?v=EXkd8M0V_I0&feature=youtu.be

May 18 - Virtual Community Meeting District 1:

<https://www.youtube.com/watch?v=VvRwF9O2VTc&feature=youtu.be>

May 19 - Virtual Community Meeting District 9:

<https://www.youtube.com/watch?v=BXsT7yYXceM&feature=youtu.be>

May 20 - Virtual Community Meeting: District 6:

<https://www.youtube.com/watch?v=KgBYNvbLRDQ&feature=youtu.be>

May 20 - Virtual Community Meeting District 10

May 21 - Spanish Language Virtual Community Meeting:

<https://www.youtube.com/watch?v=6p3GaExaoHY&feature=youtu.be>

May 26 - Citywide Virtual Community Meeting:

<https://www.youtube.com/watch?v=Gb9cHKLxFpl&feature=youtu.be>

May 28 - Virtual Community Meeting: District 5 & 8

<https://www.youtube.com/watch?v=XhtqiPnsr58&t=2s>

May 29 - Virtual Community Meeting: District 2 & 3

<https://www.youtube.com/watch?v=H686cBpiw4s&t=2s>

Appendix 3: Zip Codes Engaged

Virtual Open House: Survey Submissions per Zip Code	
Zip Code	Number of Submissions
78702	52
78757	41
78723	33
78751	31
78704	26
78731	26
78741	23
78758	21
78701	20
78705	18
78660	17
78748	17
78752	16
78681	15
78653	12
78745	12
78753	10
78759	9
78640	8
78721	8
78734	8
78744	8
78703	6
78622	5
78628	5
78727	4
78130	3
78737	3
78746	3
78613	2
78621	2
78722	2
78724	2
78749	2
78750	2
78203	1
78626	1
78633	1
78641	1
78665	1
78666	1
78717	1
78725	1
78728	1
78729	1
78733	1
78735	1
78738	1
78756	1

Virtual Community Meetings: Zoom Participants per Zip Code	
Zip Code	Number of Participants
78701	64
78702	52
78704	50
78745	44
78751	31
78749	23
78705	22
78703	19
78757	18
78723	17
78731	17
78758	17
78741	16
78752	16
78748	14
78753	11
78721	9
78722	9
78613	8
78717	8
78756	8
78759	8
78747	7
78660	6
78750	6
78641	5
78754	5
78610	4
78724	4
78739	4
78746	4
76017	3
78725	3
78728	3
78737	3
78738	3
78744	3
78640	2
78730	2
78736	2
78755	2
2116	1
10023	1
44565	1
59404	1
60640	1
75075	1
78216	1
78621	1
78626	1
78645	1
78664	1
78681	1
78700	1
78714	1
78726	1
78727	1
78729	1
78734	1
78735	1
78761	1
K2G5S4	1

Appendix 4: Notification and Media

1. Facebook



Capital Metro posted a video to playlist Project Connect

May 7 at 5:27 PM



We've launched the #ProjectConnect Virtual Open House! Learn more about the project and our vision for the future of transit in Austin. Virtual community meetings are in the works and will be announced soon!

Attend the Virtual Open House: <https://bit.ly/2Weqq5i>



Project Connect - Virtual open House

17

11 Shares



Capital Metro

May 19 at 1:22 PM



The #ProjectConnect Virtual Open House is now online! Take the tour, choose your own path & learn about our plan for the future of transit in Austin. The experience is designed for everyone!

The Virtual Open House and upcoming virtual community meetings are in preparation for the upcoming joint work session in June.

Tour the Virtual Open House: <https://bit.ly/2Weqq5i>



3

1 Share



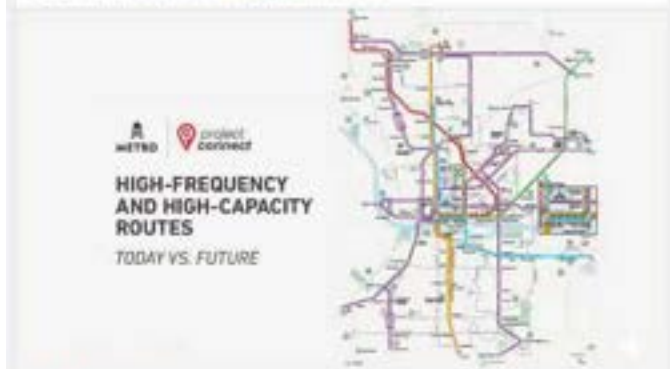
Capital Metro

May 20 at 12:58 PM



Want to learn more about our vision for the future of transit in Austin? Visit the #ProjectConnect Virtual Open House! You can also attend a virtual community meeting throughout the rest of May.

Learn more: capmetro.org/get-involved/



9



Capital Metro

May 22 at 3:12 PM



We update the #ProjectConnect plan based on YOUR feedback! Participate in the #ProjectConnect Virtual Open House and complete the engagement surveys throughout the tour.

Tour the Virtual Open House: <https://bit.ly/2Weqq5i>



5

2 Shares

Capital Metro
Yesterday at 1:21 PM

#ProjectConnect is our opportunity to move beyond the gridlock, improve air quality and strengthen connections to our communities.
Tour the Virtual Open House: <https://bit.ly/2Weqq5i>



A METRO | projectconnect

Virtual Open House

NOW OPEN!

9 4 Comments

Capital Metro added an event.
May 12 at 10:35 AM



A METRO | projectconnect

Virtual Meeting

5/18, 1pm

Natasha Harper-Madison
District 1

Jeffrey Travillion
Board Member

MON, MAY 18

Project Connect - BM Jeff Travillion + Natasha Harper-Madison D1

Austin
Other - 143 people

Interested

10

Capital Metro added an event.
May 12 at 10:36 AM



A METRO | projectconnect

Virtual Meeting

5/15, 2pm

Greg Casar
District 4

Leslie Pool
District 7

FRI, MAY 15

Project Connect Virtual Meeting - Greg Casar D4 + Leslie Pool D7

Other - 124 people

Interested

1

Capital Metro added an event.
May 12 at 10:37 AM



A METRO | projectconnect

Virtual Meeting

5/20, 5pm

Alison Alter
District 10

Terry Mitchell
Board Member

WED, MAY 20

Project Connect Virtual - BM Terry Mitchell + Alison Alter D10

Other

Interested

1

Capital Metro added an event.
May 12 at 10:37 AM · 🌐




Virtual Meeting

5/28, 6pm

Ann Kitchen
District 5

Paige Ellis
District 8

THIS THURSDAY AT 6 PM

Project Connect Virtual Meeting - Kitchen
D5 + Ellis D8

Other

Interested

1

Capital Metro added an event.
May 12 at 10:37 AM · 🌐




Virtual Meeting

5/26, 11am

Steve Adler
Mayor of Austin

Wade Cooper
Board Chair

TUE, MAY 26

Project Connect Virtual - Board Chair Wade
Cooper + Mayor Adler

Other

Interested

Capital Metro added an event.
May 12 at 10:36 AM · 🌐





Virtual Meeting

5/19, 5pm

Kathie Tovo
District 9

Wade Cooper
Board Chair

TUE, MAY 19

Project Connect Virtual - Board Chair Wade
Cooper + Tovo D9

Other

Interested

2

1 Comment

Capital Metro added an event.
May 12 at 10:37 AM · 🌐




Virtual Meeting

5/29, 2pm

Delia Garza
Board Vice Chair,
District 2

Sabino Renteria
Board Member,
District 3

THIS FRIDAY AT 2 PM

Project Connect Virtual - BM Vice Chair
Garza + BM Renteria

Other

Interested

Share

Capital Metro
May 16 at 12:28 PM

The next #ProjectConnect virtual meeting is Monday May 18, w/ Council Member Natasha Harper-Madison & #CapMetro Board Member Jeffrey Travillion. #atxcouncil

Project Connect - BM Jeff Travillion + Natasha Harper-Madison D1
Zoom meeting: <https://bit.ly/2zyUhfU>... See More



A METRO | projectconnect
Virtual Meeting
5/18, 1pm

Natasha Harper-Madison
District 1

Jeffrey Travillion
Board Member

MON, MAY 18
Project Connect - BM Jeff Travillion + Natasha Harper-Madison D1
Austin
Other - 143 people

Interested

9

Capital Metro
May 18 at 3:44 PM

The next #ProjectConnect virtual meeting is tomorrow evening, 5 p.m. CST, w/ Council Member Kathie Tovo & #CapMetro Board Chair Wade Cooper. #atxcouncil

Project Connect Virtual - Board Chair Wade Cooper + Tovo D9
Zoom meeting: <https://bit.ly/3cE8c3j>... See More



A METRO | projectconnect
Virtual Meeting
5/19, 5pm

Kathie Tovo
District 9

Wade Cooper
Board Chair

TUE, MAY 19
Project Connect Virtual - Board Chair Wade Cooper + Tovo D9
Other

Interested

8

Capital Metro
May 18 at 12:12 PM

Join us today at 1 p.m. CST for #ProjectConnect virtual community meeting w/ Council Member Natasha Harper-Madison & #CapMetro Board Member Jeffrey Travillion. #atxcouncil

Project Connect - BM Jeff Travillion + Natasha Harper-Madison D1
Zoom meeting: <https://bit.ly/2zyUhfU>... See More



A METRO | projectconnect
Virtual Meeting
5/18, 1pm

Natasha Harper-Madison
District 1

Jeffrey Travillion
Board Member

MON, MAY 18
Project Connect - BM Jeff Travillion + Natasha Harper-Madison D1
Austin
Other - 143 people

Interested

6

Capital Metro was live.
May 18 at 1:04 PM



A METRO | projectconnect

Virtual Community Meetings
Project Connect Overview

MAY 2020

13

7 Comments 1 Share 593 Views

Capital Metro
May 19 at 9:29 AM · 🌐

Jueves 21 de Mayo a las 6 de la tarde Univision Austin y #CapMetro te presentan un foro digital en Facebook Live brindando información de Project Connect. Acompáñanos!




Univision 62
May 18 at 12:10 PM · 🌐

Jueves 21 de Mayo a las 6 de la tarde Univision Austin y Capital Metro te presentan un foro digital en Facebook Live brindando información de Project Connect. H... [See More](#)

👍❤️👍 5 1 Comment 1 Share

Capital Metro was live.
May 19 at 5:00 PM · 🌐



👍❤️👍 14 10 Comments 2 Shares 696 Views

Capital Metro
23 hrs · 🌐

Join us tomorrow at 11 a.m. CST for a #ProjectConnect virtual community meeting w/ Austin Mayor Steve Adler & #CapMetro Board Chair Wade Cooper.

Project Connect Virtual - Board Chair Wade Cooper + Mayor Adler
Zoom: <https://bit.ly/3fN1vhh...> [See More](#)



TUE, MAY 26
Project Connect Virtual - Board Chair Wade Cooper + Mayor Adler
Other

👍 11

Capital Metro
May 20 at 4:12 PM · 🌐

Join us at 5 p.m. CST this evening for a #ProjectConnect virtual community meeting w/ Alison Alter for Austin (D10) & #CapMetro Board Member Terry Mitchell.

Project Connect Virtual - BM Terry Mitchell + Alison Alter D10
Zoom meeting: <https://bit.ly/2zxGEH9...> [See More](#)



WED, MAY 20
Project Connect Virtual - BM Terry Mitchell + Alison Alter D10
Other

👍 3

Capital Metro
May 23 at 12:57 PM

Gracias a **Univision 62** por la oportunidad para hablar sobre los detalles de Project Connect. Nuestros colegas Jackie Nirenberg y Melissa Ortiz de Capital Metro discutaron este tema con Blanca Gaytán de Univision.



En breve comenzamos nuestra transmisión

Univision 62 was live.
May 21 at 5:58 PM

Acompáñanos en este foro digital con Capital Metro para hablar en detalle de Project Connect. Tendremos a Jackie Nirenberg y Melissa Ortiz de Capital Metro, pr... [See More](#)

7 2 Shares

Capital Metro
May 28 at 5:22 PM

Join us tonight at 6 p.m. CST for a #ProjectConnect virtual community meeting w/ City Council Members Ann Kitchen, District 5 & Paige Ellis - City Council District 8. #abxcouncil

Project Connect Virtual Meeting - Kitchen D5 + Ellis D8
Zoom meeting: <https://bit.ly/2T4V2F...> See More



A METRO | **projectconnect**

Virtual Meeting
5/28, 6pm

Ann Kitchen District 5 | **Paige Ellis** District 8

2

Like Comment Share

Capital Metro
May 27 at 4:20 PM

Join us tomorrow evening for a #ProjectConnect virtual community meeting w/ City Council Members Ann Kitchen, District 5 & Paige Ellis - City Council District 8. #abxcouncil

Project Connect Virtual Meeting - Kitchen D5 + Ellis D8
Zoom meeting: <https://bit.ly/2T4V2F...> See More

Capital Metro
May 29 at 9:11 AM

Join us this afternoon at 2 p.m. for a #ProjectConnect virtual community meeting w/ #CapMetro Board Vice Chair Delia Garza & Board Member Council Member Pio Renteria, District 3. #abxcouncil

Project Connect Virtual - BM Vice Chair Garza + BM Renteria
Zoom meeting: <https://bit.ly/2zCr7MY...> See More



A METRO | **projectconnect**

Virtual Meeting
5/28, 6pm

Ann Kitchen District 5 | **Paige Ellis** District 8

THU, MAY 28
Project Connect Virtual Meeting - Kitchen D5 + Ellis D8

Interested

Other

5 1 Comment



A METRO | **projectconnect**

Virtual Meeting
5/28, 6pm

Ann Kitchen District 5 | **Paige Ellis** District 8

THU, MAY 28
Project Connect Virtual Meeting - Kitchen D5 + Ellis D8

Interested

Other

Like Comment



Capital Metro

May 29 at 1:18 PM · 🌐

...

Join us at 2 p.m. for the final #ProjectConnect virtual community meeting w/ #CapMetro Board Vice Chair Delia Garza & Board Member Council Member Pio Renteria, District 3. #atxcouncil

Project Connect Virtual - BM Vice Chair Garza + BM Renteria

Zoom meeting: <https://bit.ly/2zCr7MY>... See More

METRO | **projectconnect**
It's go time.

ZOOM US
WHAT'S PROJECT CONNECT? Learn all about it at Capital Metro's Virtual Community Meeting with Delia Garza + Pio...

1 Comment

2. Twitter

Capital Metro @CapMetroATX

We've launched the #ProjectConnect Virtual Open House! Learn more about the project and our vision for the future of transit in Austin. Virtual community meetings are in the works and will be announced soon!

Attend the Virtual Open House: bit.ly/2Weqq5i



3:26 PM · May 7, 2020 · Twitter Web App

8 Retweets 12 Likes

Capital Metro @CapMetroATX

We've launched the #ProjectConnect Virtual Open House! Visitors will see there have been updates to the plan since our last work session with @austintexasgov.

Choose your path & participate in integrated surveys—anyone can participate: bit.ly/2Weqq5i

10:44 AM · May 11, 2020 · Metwater Social

6 Retweets 5 Likes

Capital Metro @CapMetroATX

"#ProjectConnect is an integrated transit system that will bring jobs to our region, improve the environment and better connect people so everyone can thrive in our community."

The future of Transit in Austin is bright! Visit the Virtual Open House: bit.ly/2Weqq5i



4:03 PM · May 13, 2020 · Metwater Social

3 Retweets 5 Likes

Capital Metro @CapMetroATX

#ProjectConnect is a plan to improve transit in Austin & surrounding areas. Attend the Virtual Open House and then join us for a virtual community meeting this afternoon.

Tour the Virtual Open house: bit.ly/2Weqq5i

FB event for virtual meeting: bit.ly/2xXfgc7



9:40 AM · May 15, 2020 · Metwater Social

2 Retweets 6 Likes



Capital Metro
@CapMetroATX

Make no mistake, traffic will be back!

We are listening to our community on how to best prepare for the future of transit in Austin. We've engaged over 40,000 people so far and we still want to hear from YOU!

Tour the Virtual Open House: bit.ly/2Weqq5i



3:00 PM · May 17, 2020 · Meltwater Social

3 Retweets · 7 Likes



Capital Metro
@CapMetroATX

Want to learn more about our vision for the future of transit in Austin? Visit the [#ProjectConnect](https://bit.ly/2Weqq5i) Virtual Open House! You can also attend a virtual community meeting throughout the rest of May.

Learn more: capmetro.org/get-involved/



12:57 PM · May 20, 2020 · Twitter Web App

2 Retweets · 2 Likes



Capital Metro
@CapMetroATX

[#ProjectConnect](https://bit.ly/2Weqq5i) will expand transit capacity & offer more choices, better connecting the entire Central Texas region. The vision goes beyond how we move people from A to Z; great cities are built to take care of their people.

Tour the Virtual Open House: bit.ly/2Weqq5i



9:57 AM · May 21, 2020 · Meltwater Social

5 Retweets · 7 Likes



Capital Metro
@CapMetroATX

Take a tour this weekend! The [#ProjectConnect](https://bit.ly/2Weqq5i) Virtual Open House experience is designed for everyone! We're preparing for the upcoming joint work session with [@austintexasgov](https://twitter.com/austintexasgov) & want to hear from YOU!

Tour the Virtual Open House: bit.ly/2Weqq5i



12:00 PM · May 24, 2020 · Meltwater Social

7 Retweets · 7 Likes



Capital Metro
@CapMetroATX

The #ProjectConnect Virtual Open House will allow visitors to learn more about the entire plan. From quick looks to deep dives on the system features, the online experience is designed for everyone to learn more!

Tour the Virtual Open house: bit.ly/2Weqq5i



10:23 AM · May 25, 2020 · Meltwater Social

3 Retweets 2 Likes



Capital Metro
@CapMetroATX

The #ProjectConnect Virtual Open House will allow visitors to learn more about the entire plan. From quick looks to deep dives on the system features, the online experience is designed for everyone to learn more!

Tour the Virtual Open house: bit.ly/2Weqq5i



10:23 AM · May 25, 2020 · Meltwater Social

3 Retweets 2 Likes



Capital Metro
@CapMetroATX

Join us today at 2 p.m. CST for the first #ProjectConnect virtual community meeting w/ @GregCasar and @LesliePoolATX. @austintxgov #atxcouncil

FB Event: bit.ly/2xXfgc7

Zoom meeting: bit.ly/2WorO5l

Full meeting schedule: capmetro.org/get-involved/



1:26 PM · May 15, 2020 · Meltwater Social

6 Retweets 3 Likes



Capital Metro
@CapMetroATX

We invite you to attend this #ProjectConnect Virtual Community Meeting w/ @GregCasar and @LesliePoolATX.

Questions and comments will be fielded through the #CapMetro FB page.



Project Connect Community Meeting
Capital Metro was live.
📺 facebook.com

2:18 PM · May 15, 2020 · Twitter Web App

1 Like



Capital Metro
@CapMetroATX

The next #ProjectConnect virtual meeting is Monday May 18, w/ @NatashaD1atx & #CapMetro Board Member Jeffrey Travillion. @austintxgov #atxcouncil

FB Event: bit.ly/3fKbMuA

Zoom meeting: bit.ly/2zyUhfU

Meeting schedule: capmetro.org/get-involved/



4:00 PM · May 15, 2020 · Metwater Social

7 Retweets 10 Likes



Capital Metro
@CapMetroATX

Join us today at 1 p.m. CST for the next #ProjectConnect virtual meeting w/ @NatashaD1atx & #CapMetro Board Member Jeffrey Travillion. @austintxgov #atxcouncil

FB Event: bit.ly/3fKbMuA

Zoom meeting: bit.ly/2zyUhfU

Meeting schedule: capmetro.org/get-involved/



12:12 PM · May 18, 2020 · Metwater Social

2 Retweets 3 Likes



Capital Metro
@CapMetroATX

Attend the #ProjectConnect virtual community meeting with #atxcouncil member @NatashaD1atx and #CapMetro Board Member Jeffrey Travillion here:



Project Connect Virtual Meeting - Natasha Harper-Madison [...] Capital Metro was live. facebook.com

1:25 PM · May 18, 2020 · Twitter Web App

1 Retweet 5 Likes



Capital Metro
@CapMetroATX

The next #ProjectConnect virtual community meeting is TOMORROW at 5 p.m. CST w/ @kathietovo (D9) & #CapMetro Board Chair Wade Cooper. @austintxgov #atxcouncil

FB Event: bit.ly/2WpFQUr

Zoom meeting: bit.ly/3cE8c3j

Full meeting schedule: capmetro.org/get-involved/



4:02 PM · May 18, 2020 · Metwater Social

5 Retweets 4 Likes



Capital Metro
@CapMetroATX

Join us tonight at 5 p.m. CST for the next #ProjectConnect virtual meeting w/ @kathietovo (D9) & #CapMetro Board Chair Wade Cooper. @austintxgov #atxcouncil

FB Event: bit.ly/2WpFQUr

Zoom meeting: bit.ly/3cE8c3j

Full meeting schedule: capmetro.org/get-involved/



4:36 PM · May 19, 2020 · Melwater Social

1 Retweet · 2 Likes



Capital Metro
@CapMetroATX

The #ProjectConnect virtual community meeting with #CapMetro Board Chair Wade Cooper & #atxcouncil @kathietovo (D9) is live!

Follow along right here...



Project Connect Virtual Meeting - Kathie Tovo + Wade Cooper
Capital Metro is live now.
📍 facebook.com

5:12 PM · May 19, 2020 · Twitter Web App

2 Retweets · 2 Likes



Capital Metro
@CapMetroATX

Two #ProjectConnect virtual community meetings tomorrow at 11 a.m. & 5 p.m. @austintexasgov #atxcouncil

11 a.m. FB event: bit.ly/2LmlpS9

5 p.m. FB event: bit.ly/3fNE8Uu

Full meeting schedule: capmetro.org/get-involved/



6:47 PM · May 19, 2020 · Melwater Social

4 Retweets · 3 Likes



Capital Metro
@CapMetroATX

Rise. Shine. #ProjectConnect! 11 a.m. this morning w/ #CapMetro Board Secretary @EricStrattonRN, BM Hill, & @JimmyFlannigan (D6). @austintexasgov #atxcouncil

FB event: bit.ly/2LmlpS9

Zoom meeting: bit.ly/2WoBcGI

Full meeting schedule: capmetro.org/get-involved/



10:11 AM · May 20, 2020 · Melwater Social

4 Retweets · 2 Likes



Capital Metro
@CapMetroATX

The #ProjectConnect virtual meeting with #CapMetro Board secretary @EricStrattonRN, #atxcouncil Member @JimmyFlannigan & BM Hill is live! @austintexasgov

Follow along here:



PROJECT CONNECT VIRTUAL MEETING - Jimmy Flannigan, Tro...
Capital Metro is live now.
@ facebook.com

11:12 AM · May 20, 2020 · Twitter Web App

1 Retweet 5 Likes



Capital Metro
@CapMetroATX

The #ProjectConnect virtual community meeting w/ #CapMetro Board Member Terry Mitchell & #atxcouncil Member @ALTERforATX (D10) is live! @austintexasgov

Follow along here:



PROJECT CONNECT VIRTUAL MEETING - Alison Alter + Terry ...
Capital Metro is live now.
@ facebook.com

5:07 PM · May 20, 2020 · Twitter Web App

3 Retweets 5 Likes



Capital Metro
@CapMetroATX

Join us at 5 p.m. CST this evening for a #ProjectConnect virtual community meeting w/ @ALTERforATX (D10) & #CapMetro Board Member Terry Mitchell.

FB event: bit.ly/3fNE8Uu

Zoom meeting: bit.ly/2zxGEh9

Full meeting schedule: capmetro.org/get-involved/

A METRO | projectconnect

Virtual Meeting

5/20, 5pm

Alison Alter
District 10

Terry Mitchell
Board Member

4:04 PM · May 20, 2020 · Meltwater Social

3 Retweets 5 Likes



Capital Metro
@CapMetroATX

Jueves 21 de Mayo a las 6 de la tarde @univision 62 Austin y #CapMetro te presentan un foro digital en Facebook Live brindando informacion de Project Connect. Acompáñanos!



6:26 PM · May 20, 2020 · Meltwater Social

2 Retweets 2 Likes



Capital Metro
@CapMetroATX

Tomorrow at 11 a.m.! Join us for the next #ProjectConnect virtual community meeting w/ @MayorAdler & #CapMetro Board Chair Wade Cooper.

Zoom: bit.ly/3fN1vhh

FB event: bit.ly/3fM77bu

Full meetings schedule: capmetro.org/get-involved/



3:48 PM · May 25, 2020 · Melwater Social

2 Retweets · 3 Likes



Capital Metro
@CapMetroATX

Grab that late morning coffee and join us for the next #ProjectConnect community meeting w/ @MayorAdler & #CapMetro Board Chair Wade Cooper. @austintexasgov

Zoom: bit.ly/3fN1vhh

FB event: bit.ly/3fM77bu

Full meetings schedule: capmetro.org/get-involved/



10:16 AM · May 26, 2020 · Melwater Social

2 Retweets · 1 Like



Capital Metro · @CapMetroATX · May 29

The #ProjectConnect virtual community meeting w/ #CapMetro Board Vice Chair @DGarzaforTX & Board Member @CM_Renteria is live!

Follow along here, or hop over to our FB page and leave a question or comment.



Project Connect Virtual Meeting - Delia Garza + Rio...
Capital Metro is live now.
[facebook.com](https://www.facebook.com)

0 Comments · 1 Like · 0 Shares



Capital Metro · @CapMetroATX · May 29

Join us at 2 p.m. CST for our last #ProjectConnect virtual community meeting w/ #CapMetro Board Vice Chair @DGarzaforTX & Board Member @CM_Renteria. @austintexasgov

FB event: bit.ly/2oGx0aw

Zoom: bit.ly/2zCr7MY

Full meeting schedule: capmetro.org/get-involved/



0 Comments · 0 Likes · 0 Shares

Capital Metro @CapMetroATX · May 28

The #ProjectConnect virtual community meeting w/ #CapMetro Board Member @DSKitchen & City Council Member @PaigeForAustin (D8) is live! @austintexasgov #atxcouncil

Follow along here, or on FB live!



Project Connect Virtual Meeting – Ann Kitchen + Pa...
Capital Metro is live now.
@facebook.com

0 1 3 0

Capital Metro @CapMetroATX · May 28

Join us tonight at 6 p.m. for a #ProjectConnect virtual community meeting w/ City Council Members @DSKitchen & @PaigeForAustin (D8). @austintexasgov #atxcouncil

FB event: bit.ly/2K0F1sb

Zoom meeting: bit.ly/214V2F

Meetings schedule: capmetro.org/get-involved/



A METRO | projectconnect
Virtual Meeting
5/28, 6pm

Ann Kitchen
District 3

Paige Ellis
District 8

0 2 1 0

Capital Metro @CapMetroATX · May 28

En caso de que se lo perdió, aquí tiene una repetición de la Casa Abierta Virtual de #ProjectConnect a cortesía de @Univision63 Austin.



En vivo con Capital Metro Project Connect
@youtube.com

0 2 1 0

Capital Metro @CapMetroATX

The #ProjectConnect virtual community meeting with #CapMetro Board Chair Wade Cooper and @MayorAdler is live! @austintexasgov #atxcouncil

Follow along here, or head over to our FB page & leave questions in the comments!



Project Connect Virtual Meeting – Mayor Steve Adler + Wade ...
Project Connect Virtual Meeting – Mayor Steve Adler + Wade Cooper
@facebook.com

11:12 AM · May 28, 2020 · Twitter Web App

4 Retweets 5 Likes

Capital Metro @CapMetroATX · May 27

Join us tomorrow evening for a #ProjectConnect virtual community meeting w/ City Council Members @DKitchen & @PaigeEllisAustin (D8), @AustinInfoMagov #atxconnect

FB event: bit.ly/2R0Fsb

Zoom meeting: bit.ly/2T4V2F

Meetings schedule: capmetro.org/get-involved/

A METRO | projectconnect
Virtual Meeting
 5/28, 6pm
 Ann Kitchen
 District 1 | Paige Ellis
 District 8

Capital Metro @CapMetroATX · May 28

We update the #ProjectConnect plan based on YOUR feedback! Complete the engagement surveys throughout the Virtual Open House. This is our opportunity to move beyond the gridlock & strengthen connections to our communities.

Tour the Virtual Open House: bit.ly/2Wwq5i

A METRO | projectconnect
Virtual Open House
 NOW OPEN!

Capital Metro @CapMetroATX · May 29

Join us this afternoon for our last #ProjectConnect virtual community meeting w/ #CapMetro Board Vice Chair @DGarzaforD8 & Board Member @GCM_Renteria. @AustinInfoMagov

FB event: bit.ly/3cGx0aw

Zoom: bit.ly/2zCr7Mf

Full meeting schedule: capmetro.org/get-involved/

A METRO | projectconnect
Virtual Meeting
 5/29, 2pm
 Delia Garza
 Board Vice Chair, District 1 | Sabino Renteria
 Board Member, District 1

Capital Metro @CapMetroATX · May 29

The #ProjectConnect Virtual Open House is live through May 31. Learn about the bold new plan for public transit in Austin & leave us your feedback on how we can make it even better!

Visit the virtual open house today: bit.ly/2Wwq5i

3. Instagram

A METRO | projectconnect

HIGH-FREQUENCY AND HIGH-CAPACITY ROUTES

TODAY VS. FUTURE

capmetroatx • Following

capmetroatx We've launched the #ProjectConnect Virtual Open House! Learn more about the project and our vision for the future of transit in Austin. Virtual community meetings are in the works and will be announced soon! Virtual Open House link in bio!

254 views

20 likes

Mar 13

Add a comment... Post

A METRO | projectconnect

Virtual Meeting

5/18, 1pm

Natasha Harper-Madison
District 1

Jeffrey Travillion
Board Member

capmetroatx • Follow

capmetroatx Join us today at 1 p.m. on FB live for the next #ProjectConnect virtual meeting w/ Council Member @natashadistrict1 & #CapMetro Board Member Jeffrey Travillion. #fbxcouncil

18 likes

Mar 18

Add a comment... Post

A METRO | projectconnect

Virtual Meeting

5/19, 5pm

Kathie Tovo
District 9

Wade Cooper
Board Chair

capmetrotx • Follow

capmetrotx Join us this evening for a #ProjectConnect virtual community with #CapMetro Board Chair Wade Cooper and #aticouncil City Council Member Kathie Tovo (D9). You can attend live on the CapMetro FB page and leave questions in the comments.

14 likes

ADD TO YOUR PAGE

Add a comment... Post

capmetrotx • Follow

capmetrotx A las 6 de la tarde @unvision2 Austin y #CapMetro te presentan un foro digital en Facebook Live brindando información de #ProjectConnect. Hablaremos de los proyectos que se están llevando a cabo en nuestra área. Además, Capital Metro está aquí para escuchar tu opinión y contestar tus preguntas. ACOMPAÑANOS!

147 views

ADD TO YOUR PAGE

Add a comment... Post



A METRO | *projectconnect*

Virtual Meeting

5/29, 2pm

Delia Garza
Board Vice Chair,
District 2

Sabino Renteria
Board Member,
District 3

capmetrotx • Following

capmetrotx Join us at 2 p.m. CST for our last #ProjectConnect virtual community meeting w/ #CapMetro Board Vice Chair @mayorprotemgarza & #CapMetro Board Member @piorenteria. #atxcouncil @austintexasgov

18 likes
3 DAYS AGO

Add a comment... Post



A METRO | *projectconnect*

Virtual Meeting

5/28, 6pm

Ann Kitchen
District 5

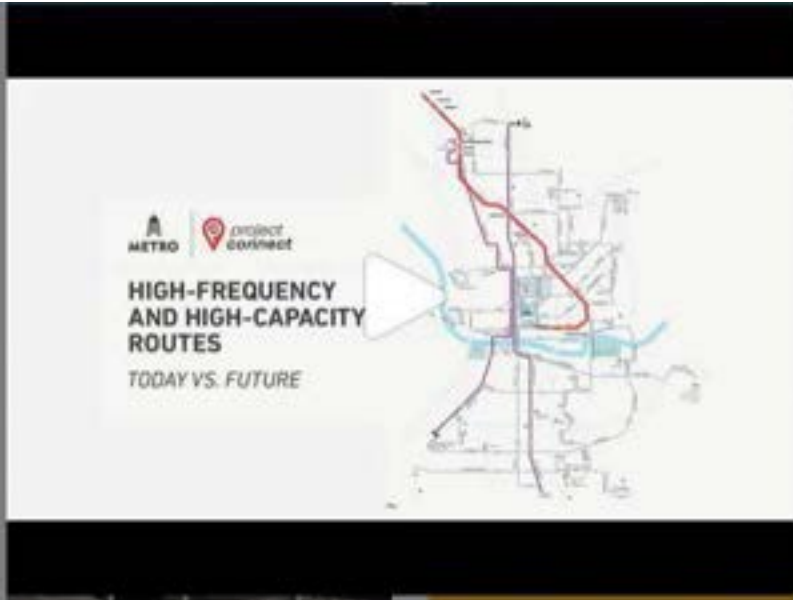
Paige Ellis
District 8

capmetrotx • Following

capmetrotx Join us this evening at 6 p.m. on FB live for the next #ProjectConnect virtual meeting w/ #CapMetro Board Member Ann Kitchen & Council Member @paigejellis (D8). @austintexasgov #atxcouncil

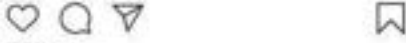
14 likes
3 DAYS AGO

Add a comment... Post



capmetrotx • Following

capmetrotx Want to learn more about our vision for the future of transit in Austin? Visit the #ProjectConnect Virtual Open House! You can also attend a virtual community meeting throughout the rest of May. Learn more at the link in bio.



149 views

MAY 20

Add a comment... Post



capmetrotx • Following

capmetrotx Join us for our first #ProjectConnect virtual community meeting w/ @austintexasgov Council Members @gregcasar (D4) and Leslie Pool (D7). Follow along on the #CapMetro FB page & leave questions/comments.



20 likes

MAY 15

Add a comment... Post

4. E-Blast



METRO



projectconnect

Take part in the future of Austin transit!

Learn the latest project news and participate in a virtual meeting



Join us for a Virtual Open House

Preview the future of Austin transit at ProjectConnect.com. There you can find our Virtual Open House to review the recommended system plan and provide direct feedback through May.

Or join a Virtual Community Meeting, May 15-29.

We'll also be hosting a [series of community meetings online](#) that speak directly to your part of Austin. Get the latest project news directly from your city council member, or attend any of the meetings as you're free.

This is your opportunity to learn more about the project, and have your questions answered by city leaders.



Visit ProjectConnect.com for more info .

Follow us on social media





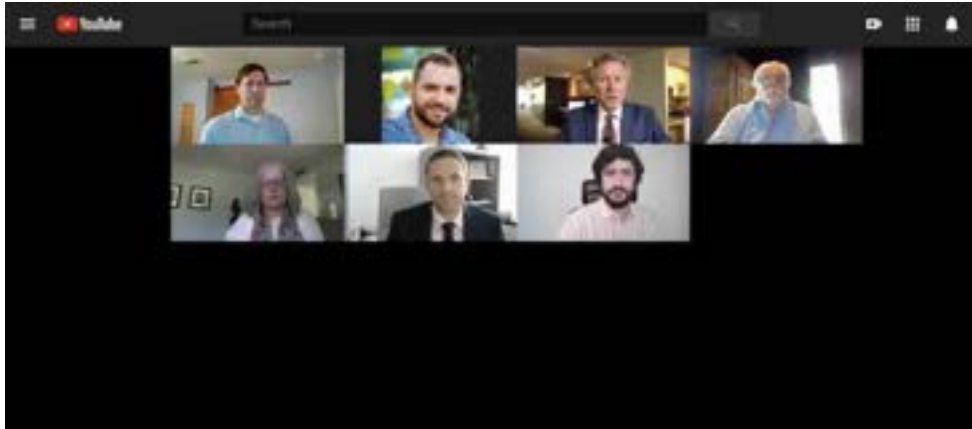
METRO



projectconnect

Project Connect Virtual Community Meetings

You still have time to join!



Take a guided tour of the Project Connect System Plan led by the Capital Metro team and leadership, as well as Austin City Council Members. Austin's own Ron Oliveira hosts the online conversation and participants can ask questions directly to those presenting.

So far hundreds of community members have participated in the Virtual Community Meetings, and there are more meetings coming up soon.

Get a front-row seat for a lively discussion with Austin elected leaders! If you can't join, visit ProjectConnect.com to view a [Virtual Open House](#) and check out our [FAQs](#).

The next meetings are:

May 20, 5 p.m.

Alison Alter, City Council Member, Dist. 10
Terry Mitchell, Capital Metro Board Member
[Zoom Webinar Link](#), Passcode: 305808

May 26, 11 a.m.

Steve Adler, Mayor of Austin
Wade Cooper, Capital Metro Board Chair
[Zoom Webinar Link](#), Passcode: 765980

May 28, 6 p.m.

Ann Kitchen, Capital Metro Board Member; City Council Member, Dist. 5
Paige Ellis, City Council Member, Dist. 8
[Zoom Webinar Link](#), Passcode: 975382

May 29, 2 p.m.

Delia Garza, Capital Metro Board Vice Chair and Mayor Pro Tem, Dist. 2
Sabino "Pio" Renteria, Capital Metro Board Member; City Council Member, Dist. 3
[Zoom Webinar Link](#), Passcode: 635088

This is your opportunity to learn more about the project, and have your questions answered by city leaders.



Visit ProjectConnect.com for more info .

Follow us on social media



Visit the Project Connect Community Office

607 Congress Avenue, 78701 Austin TX

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5. Newsletter



METRO



projectconnect

Project Connect Monthly

Stay Resilient, Austin

Capital Metro sends our thanks to all frontline workers for protecting public health and providing essential services to those who need it most. Ridership has decreased by 64 percent, and we appreciate our loyal community for staying home during this critical time.

To the health care professionals, grocery store employees, pharmacists, transit workers and many others who are part of the essential team of people helping us all — across Austin, across Texas, and across the globe — you are our heroes.

Transit Keeps Austin Moving Forward

Project Connect, Capital Metro's long-term transit plan, remains at the forefront of our mission to further serve our communities. It's a bold transit plan that provides our region the opportunity to rebuild, reconnect and invest in an essential service that we need now and in the future. Our community has called for this expanded and improved transit system, and it will provide immediate economic and community-building benefits as we move ahead.

May Virtual Open House and Community Meetings

Virtual Open House

Capital Metro will launch a self-guided online experience that walks visitors through Project Connect's details and provides an opportunity to give feedback. This virtual open house will be open to the public from May 7 through May 31. Walk through the full plan along with updates that have been made since the March 9 recommendations.

[Learn more >](#)

Virtual Community Meetings

Also through May 31, Capital Metro will continue engaging the public through a series of one-hour virtual community meetings. These will include an update on the COVID-19 response followed by a presentation on the Project Connect recommended system plan, then a moderated roundtable and public discussions with Austin City Council members and Capital Metro's board and staff.

[Get additional information about scheduling and participation>](#)

Capital Metro and COVID-19

Fare Free Services Continue through May

CapMetro will continue to implement free fares for all customers throughout May. Fare-free service helps social distancing by eliminating the need for customers to show their pass, pay the operator or use the farebox. It also speeds boarding and reduces crowding at vehicle entrances. The goal is to protect operators and customers from close physical proximity and to support customers that use our service to perform essential duties.

Safety Measures in Place

On April 23, Capital Metro President and CEO Randy Clarke joined the Opening Central Texas for Business Task Force, a group of elected officials and community leaders teaming up to evaluate a safe and thoughtful approach to reopening the economy in Austin.

Face Coverings for Customers

Capital Metro is providing face coverings to customers who don't have their own and intend to use transit. As part of a pilot program, Capital Metro received a 40,000-mask donation from Jonathan Coons at the Austin Emergency Supply Foundation with support from Saucedo Industries LLC, plus mask donations from Bike Texas and other organizations in Texas.

Delivering Food to Those in Need

Partnering with H-E-B, Central Texas Food Bank, Good Apple and Farmshare Austin, Capital Metro has helped deliver "Help-at-Home" meal kits to Austin's most vulnerable residents — senior adults and people with disabilities or health conditions that limit them from using public transit. Help-at-Home kits include enough vegetables and shelf-stable food for up to 23 meals — about a week's worth of food. Capital Metro has delivered more than 150,000 meals to Austin's at-risk population.



[Visit ProjectConnect.com](https://www.projectconnect.com) for more information

Follow us on social media



Visit the Project Connect Community Office

607 Congress Avenue, 78701 Austin TX

Stop by any time between 9 a.m. and 4 p.m.

6. Newspaper Ads

Kim ends absence amid health rumors

By Kim Tong-Hyung
The Associated Press

SEOUL, South Korea — North Korean leader Kim Jong Un made his first public appearance in 20 days as he celebrated the completion of a fertilizer factory near Pyongyang, state media said Saturday, ending an absence that had triggered global rumors that he may be seriously ill.

The North's official Korean Central News Agency, or KCNA, reported that Kim attended the ceremony Friday in Suncheon with other senior officials, including his sister Kim Yo Jong, who many analysts predict would take over if her brother is suddenly unable to rule.

State media showed videos and photos of Kim wearing a black Mao suit and constantly smiling, walking around facilities, applauding, cutting a huge red ribbon with a scissor handed by his sister, and



North Korean leader Kim Jong Un, center, cuts a tape, watched by his sister Kim Yo Jong, during his visit to a fertilizer factory Friday in Suncheon, South Pyongan province, near Pyongyang, North Korea. [KOREAN CENTRAL NEWS AGENCY/KOREA NEWS SERVICE VIA THE ASSOCIATED PRESS]

smoking inside and outside of buildings while talking with other officials.

Seemingly thousands of workers, many of them masked, stood in lines at the massive complex, roaring in celebration and releasing balloons into the air. A sign

installed on a stage where Kim sat with other senior officials read: "Suncheon Phosphatic Fertilizer Factory; Completion Ceremony; May 1, 2020."

There was no definite sign that Kim was in discomfort, although there were moments where his walking looked a bit

stiff. He was shown moving without a walking stick, like the one he used in 2014 when he was recovering from a presumed ankle surgery. However, he was also seen riding a green electric cart, which appeared similar to a vehicle he used in 2014.

It was Kim's first public appearance since April 11, when he presided over a ruling Workers' Party meeting to discuss the coronavirus and reappoint his sister as an alternate member of the powerful decision-making Political Bureau of the party's Central Committee. That move confirmed her substantial role in the government.

North Korea has said it hasn't had a single virus case, but the claim is questioned by many outside experts.

It wasn't immediately clear what had caused Kim's absence.

Speculation about his health swirled after he missed the

April 15 birthday celebration for his late grandfather Kim Il Sung, the country's most important holiday, for the first time since taking power in 2011.

The possibility of high-level instability raised troubling questions about the future of the secretive, nuclear-armed country that has been steadily building an arsenal meant to threaten the U.S. mainland while diplomacy between Kim and President Donald Trump has stalled.

"I, for one, am glad to see he is back, and well!" Trump tweeted Saturday.

Some experts say South Korea, as well as its regional neighbors and ally Washington, must begin preparing for the possible chaos that could come if Kim is sidelined by health problems or even dies. Worst-case scenarios include North Korean refugees flooding South Korea or China, or military hard-liners letting loose nuclear weapons.

Moving forward together.



Review Austin's Future Transit Plan Online Today

Join us for a Virtual Open House to learn more about Project Connect's Recommended System Plan.

Fill out the online survey at ProjectConnect.com and leave comments.

Take part in our Virtual Open House and additional Virtual Meetings May 7 - 31.

This information will be available in English and Spanish.



Serving Austin for 36 Years

Now Seeking Consignments!

- 30 Native American Arrowheads, Spear Points **SOLD \$17,000**
- Porfirio Salinas (d. 1973) **SOLD \$35,000**
- Steinway & Sons Custom Art Case **SOLD \$13,000**
- Carved Black Forest Clock **SOLD \$6,500**
- Edouard Cortes (1882-1969) **SOLD \$15,000**
- Italian Walnut Carved Refectory Table **SOLD \$10,000**
- Native American Beaded Cruppers **SOLD \$4,750**
- Theophile Blanchard (1820-1849) **SOLD \$17,000**
- Charles Umlauf (1911-1994) Bronze **SOLD \$9,500**
- G. Harvey (1933-2017) **SOLD \$15,000**
- Charles Umlauf Farrah Fawcett Bust **SOLD \$47,000**
- Reed & Barton Francis I Sterling 274 Piece **SOLD \$5,000**
- R.J. Horner Grandfather Clock **SOLD \$9,500**
- Lalque **SOLD \$4,000**
- Genevieve Claisse (b.1935) **SOLD \$45,000**
- Vintage Rolex **SOLD \$6,000**
- Emil Filla - Cubist Still Life **SOLD \$90,000**
- Frank Vacit Zuni Silver Cuff **SOLD \$7,500**
- Frank Patania Sr. Sterling & Turquoise Necklace **SOLD \$6,000**
- Dave McGary (1958-2013) Bronze **SOLD \$9,500**

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by **Thomas Wyatt**
VILLAGER Co-Editor

(AUSTIN, TX) - This week, I was exceptionally proud of our Mayor for the national interviews he gave regarding **City vs. State** on re-opening guidelines set by Texas Gov. **Greg Abbott**.

Mayor **Steve Adler** gets it. **COVID-19** is not a political thing. In fact, you may call it a morbidly politically incorrect thing. Meaning: the backlash that Mayor Adler may face because of his resistance to re-open Austin is worth the "political" risk to **save countless lives**. So, imagine my disappointment with my newfound heroic mayor after the event that took place in **Lake Austin at Commons Ford Metropolitan Park** within the same week.

A disturbing video, shot and posted on **Reddit**, shows a **Park Ranger** being pushed into the lake by a man, while doing his job instructing visitors to maintain social distancing (among other things). The video further shows the **Park Ranger** fishing himself out of the lake while the man who pushed him into it runs away down the dirt path. The **Park Ranger's** walk away from the group was probably the saddest shot in the video. I truly felt what he felt; and I feel for him still.

The man who pushed the **Park Ranger** was arrested. An affidavit states,

Brandon Hicks, 25, forcefully pushed the **Park Ranger** into **Lake Austin**. Now listen to this next part very carefully as it states a "possible" repercussion of **Hicks' reckless exploit**. The affidavit states **Hicks** could have "caused the **Ranger** to strike his head on the dock as he was falling, and render himself unconscious in at least three feet of water where he could have drowned to death."

How severe does that sound to you? It sounds pretty severe to me. And judging by the **Ranger's** gait after fishing himself out of the lake, I'm more than sure he was possibly thinking the same thing. But **Hicks** was charged with **attempted assault**. Attempted Assault? After what that affidavit read? After what that video showed? Attempted Assault? Really?

Travis County Sheriff's Office fully states the charge as "attempted assault on a public servant, a **state jail felony**."

I'm sorry. That's not nearly enough of a charge for what **Hicks** did. Furthermore, Mayor **Steve Adler** should **refocus** his attention on this matter and make a public statement further **admonishing** this behavior; and I'll tell you why.

At press time, the United States has over **72,000** deaths from **COVID-19**. Mayor **Steve Adler** realizes this. Regarding **COVID-19** and the city of **Austin's** current **shutdown**, **Adler** said, "It's not like we have cured the virus, because we have not. It is as **infectious** and as **deadly** as it was a **month ago**." **Adler** also stated he wants **Austinites** "to **minimize** the contact as

best we possibly can."

Mayor **Adler**, you can not justify attempting to save this city from the spread, the harm, and the death of this virus while allowing such **irrepressible** behavior run **incautiously** without the firmest **denouncement** allotted to your office. Furthermore, how dare you make those statements and witness the action of a person who clearly goes against everything you stand for while willingly putting an innocent **health advocate** in harm's way.

Mr. **Hicks** made "contact" with this **Park Ranger**. Mr. **Hicks** could've easily hurt or even killed this **Park Ranger**. **And for what?** Across this nation, you can't turn on the television without seeing commercials, stories, or talk show segments on **every channel**, of **healthcare workers** being praised for putting themselves in harm's way. Nonetheless, within your own city, a **Park Ranger** could contract this deadly disease from someone who thought it was funny to push him into three feet of water; back-first? The **ranger** is a public servant who could die from **COVID-19** while his assailant **could** receive up to 180 days in jail? Mr. **Hicks** **should be facing attempted manslaughter** charges at the high-end and **aggravated assault** at the low, with **COVID-19** as the weapon in question. Or maybe I'm wrong, Mayor **Adler**? Perhaps you don't get it...at all. You want to send a message? Then send a message. Otherwise stay off **CNN** - because your "**leadership**" is needed elsewhere.



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DINING

Local restaurants remaining open for takeout and delivery

FOOD & DRINK DELIVERY OPTIONS

Each restaurant has one location listed. Beverages, coffee shops, ice cream and juice spots were not included due to space. This list is non-comprehensive. For more, visit communityimpact.com.

Home Delivery Takeout Drive-thru / Allocated curbside



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24 Beer
512-472-0400 | www.24beer.com

The Backspace
512-474-9899
www.thebackspace-austin.com

Better Half Coffee and Cocktails
512-445-0196 | www.betterhalfof.com

Brooklyn Pie Co.
512-957-8145 | www.brooklynpie.com

Chicago
512-519-2544 | www.chicagosaints.com

Cooper's Old Time Pit BBQ
512-474-4227
www.coopersbbq.com

El Arroyo
512-474-1232 | www.elarroyo.com

Emmer and Rye/TIV
512-366-0520 | www.emmerandrye.com

Epicure at The Contemporary
512-420-9440 | www.epicureaustin.com

Fortis/Merbit
512-371-6843 | www.fortisaustin.com

Holy Boiler
512-502-5191 | www.holyboiler.com

i Fratelli Pizzeria
512-514-1114 | www.ifratellipizza.com

Italic
512-550-5290 | www.italicaustin.com

Jeffrey's
512-477-5584 | www.jeffreysaustin.com

Lenoxa's Diner
512-271-2474
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Malibu Patis
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Maudie's
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Parkside
512-474-9898 | www.parkside-austin.com

Perry's Steakhouse and Grille
512-478-6300
www.perryssteakhouse.com

Pool Burger
512-314-9147 | www.poolburger.com

Rappola's Pizzeria
512-476-1690 | www.rappolas.com

Schola Garten
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Swedish Hill
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TanTan
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Vaquero Tacos
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Via 313 Pizzeria
512-258-5793 | www.via313.com

Z'Z'z
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Community Impact Newspaper staff compiled each delivery information as available by press time. Additional restaurants may be offering delivery through third-party apps. Please check with the restaurant before ordering.

For the most up-to-date listing of takeout options, visit communityimpact.com

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CITY & COUNTY

Dripping Springs extends its disaster declaration into May

BY NICHOLAS DOYLE

DRIPPING SPRINGS The coronavirus outbreak in Drips and Travis counties, which began March 11, has resulted in four confirmed cases in Dripping Springs, according to Drips County officials.

Dripping Springs City Council officially extended its ongoing disaster declaration through at least May at its April 14 council meeting.

"I am very proud of our local citizens. I know we had a rough go getting started, but I'm seeing the social distancing, I'm seeing the masks, I'm

seeing the gloves," Mayor Todd Percell said at the meeting. "I think we should applaud our folks every chance we get who are working under extreme circumstances. I think we're doing what we can to flatten the curve that everyone is talking about."

Percell said a concern is a lack of testing and treatment sites locally and that most residents have been traveling to medical facilities in South Austin and Kyle with related inquiries.

According to the city's latest emergency management report, the city received 10 gallons of hand sanitizer produced and donated by Deep Tilly Vodka on April 8. Deep Tilly had previously donated sanitizer to the city to use during its weekly farmers market.

City staff also removed basketball and volleyball nets from city parks.



CommUnityCare offering free drive-up coronavirus testing

BY IAN OLINER

TRAVIS COUNTY Nonprofit health care provider CommUnityCare Health Centers on April 15 announced it is opening drive-up coronavirus testing sites.

Beginning April 16 at Southeast Metropolitan Park in Del Valle, CommUnityCare—which is funded by Travis County's health care district,

Central Health—started offering drive-up testing on a rotating basis at sites across eastern Travis County from Monday through Friday.

April 18, the nonprofit announced it is opening its additional locations on a rotating basis at Meador, Colony Park, Another Colony and Thornley Road, Del Valle, Pflugerville and Dove Springs.

The drive-up site at CommUnityCare's Hancock Center clinic, located at 1000 E. 41st St., Ste. 305, Austin, will remain open six days a week, according to CommUnityCare.

Health care professionals at the drive-up sites will initially screen patients for coronavirus symptoms, such as high fever, coughing and respiratory issues. If patients meet a certain criteria, they are administered a test on-site.

According to CommUnityCare, no appointment, insurance or payment is required for drive-up testing, but daily testing kit availability is limited.

News from Travis County and the cities of Austin, Dripping Springs & Sunset Valley

Officials: Face masks necessary to reopen society

BY CHRISTOPHER NEELY

TRAVIS COUNTY Wearing cloth face coverings over the nose and mouth when performing most activities away from home has evolved from a recommendation into a legal obligation under new coronavirus mitigation orders issued by Austin-Travis County officials April 15. Now mandatory, face masks combined with social distancing measures will become part of the new normal as officials weigh options to reopening society from a near complete shutdown due to the coronavirus, top local health officials said during an April 14 news conference.

Dr. Mark Evers, Austin-Travis County interim health authority, acknowledged it will take time for residents throughout the Austin area to become comfortable wearing face coverings, but he also stated that the act is a crucial step in beginning to restore normalcy in Austin and across the globe while the world



works toward developing a cure or vaccine for the highly contagious upper respiratory virus.

"Over time, wearing face masks is going to become part of our culture, at least in the short and medium terms," Evers said. "Combined with social distancing, it gives us a greater chance to start opening the world back up a little bit. ... The requirement for facial coverings is likely to be a longstanding

requirement." Officials are discussing a slow and measured approach to reopen society, but consistency on use of face masks and social distancing is crucial to that strategy, Austin Mayor Steve Adler said. Adler said in a statement that he was impressed by the "resilience and spirit" of the community and urged everyone to "take care of each other."

CITY HIGHLIGHTS

AUSTIN The city has leased three hotels to serve as isolation centers for coronavirus individuals and other coronavirus patients who cannot safely isolate on their own. The locations are the Crowne Plaza hotel and Hotel C in North Austin and the La Quinta Inn in South Austin. All three hotels are located on frontage roads along I-25. The total package for the hotel leases will cost \$3.7 million. The price includes the cost of meals the city will provide patients and staff staying and working at the hotel. According to city documents, the city will provide breakfast, lunch, dinner, a snack and a night shift meal for employees each day.

SUNSET VALLEY Due to the financial impact of the coronavirus on local sales tax revenue, City Council directed staff April 7 to make more than \$400,000 in cuts to the current fiscal year's budget, including staffing cuts and cuts to city events and organized activities. Without cuts to the budget, the city estimates a \$1.17 million shortfall for the 2019-20 fiscal year. Council will be meeting throughout the summer to make additional cuts as well as develop the budget for next year.

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BUSINESS & DINING INNOVATIONS

Tso Chinese Delivery projects to feed 1,000 teachers through May

BY IAN OLEMAN

Following a food donation campaign in April that saw his restaurant distribute more than \$4,000 of free meals to local students in need, Mia Chow, the co-founder and CEO of Tso Chinese Delivery, said the restaurant was looking to pivot efforts to continue serving communities in need.

With schools statewide closing campuses due to the coronavirus pandemic, Chow said he and his wife have been forced to partially home-school their children. All of the founding partners of Tso Chinese have elementary school-aged children, Chow said, and the closures have been an eye-opening experience for the restaurateurs.

"As a result of this pandemic and our need to home-school children, we realized—now more than ever before—that we really do appreciate how much work and time our teachers spend with our children," Chow said.

Throughout May, Tso Chinese aimed to provide \$20 in free food from its restaurants to a total of 1,000 Austin-area teachers through an initiative called *yoKforTeachers*.

Tso Chinese will continue with charitable meal donations after May concludes through its *TsoGiving* campaign. According to the company, the community has already donated more than \$25,000 to the restaurant's charitable arm.

"Tso Chinese is now looking into ways to help Austin's homeless community by providing meals, Chow said, and is also working to help

provide meals to Austin families with children who may depend on schools to provide meals during the day.

"For every \$1 we receive, we're distributing \$3 worth of food," Chow said. "We're in a fortunate position to feed people a lot of food."

Tso Chinese Delivery
9813 Research Blvd., Bldg. E, Ste. 802, Austin
512-774-4876
www.tsochinese.com

TSGIVING: BY THE NUMBERS

Tso Chinese Delivery's charitable arm, *TsoGiving*, has provided thousands of meals to Austin families since its creation in partnership for Austin.

TsoGiving has donated **\$45,000** worth of food to those impacted by COVID-19.

The restaurant sought to provide **\$20** in meals to **1,000** local teachers in May.

The Austin community has donated **\$25,000** to *TsoGiving*.

100% of those payments go to charity.

SHARE YOUR OWN CHARITABLE SERVICES

Pinballz tilts business model: begins renting its arcade games

BY IAN OLEMAN

After Pinballz Arcade in March was forced to temporarily close its locations in Austin and India, the team at the local arcade chain began to float some ideas on how to keep a revenue stream coming in to keep employees on the payroll, Pinballz Marketing Manager Deb Lovett said.

Soon, Pinballz staffers thought of opening its game rentals to the general public under stay-at-home orders. Previously reserved for corporate events and conferences, Pinballz in early April began offering weekday rentals of its arcade cabinets and pinball machines.

"It was like the perfect product fit the perfect moment in time," Lovett said.

Pinballz has already sent out machines for rent, Lovett said, and continues to offer four-week

discounts for avid gamers under Travis County's stay-at-home order.

The Pinballz Lake Creek location in May reopened as bar and restaurant areas to the public. The Original Pinballz Arcade in North Austin is closed, but customers may still rent machines.

Lovett said the cost per machine starts at \$300 per week, and the company makes sure every machine sent out is sanitized and in top working condition.

Every transaction is contactless, Lovett said, and each machine is cleaned, sanitized and handled by workers wearing protective gear.

Pinballz Arcade

8940 Research Blvd., Austin
512-420-8458

12720 Research Blvd., Austin
512-527-8737

www.pinballzarcade.com



NEW SERVICES AT PINBALLZ

Pinballz Arcade began offering new services in the wake of having to close its arcades to customers in March.

GAME RENTAL

Customers can now rent full arcade game cabinets to play at home, beginning at \$300 per week.



GROCERY SERVICE

Pinballz launched a grocery pickup service that sells essential life-line ingredients, paper products and more like...



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BUSINESS & DINING INNOVATIONS

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BY IAN GLIMAN

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(512) 774-4876

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100% of these proceeds go to charity.

SHARE: TSO CHINESE DELIVERY COMMUNITY MARKET SERVICES

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GAME RENTAL

Customers can now rent full arcade game cabinets to play at home, beginning at \$200 per week.

GROCERY SERVICE

Pinballz launched a grocery pickup service that includes everything from fresh ingredients, paper products and much more.

SHARE: PINBALLZ ARCADE COMMUNITY MARKET SERVICES



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DEVELOPMENT UPDATES

Projects underway in your community

COMPILED BY MICHAEL CALK



AC MARRIOTT SOUTHWEST ON SCHEDULE TO OPEN IN 2021

SOUTHWEST AUSTIN: AC Marriott Southwest, the hotel under construction at the center of the Lantana Plaza mixed-use development in Southwest Austin, is on schedule to open in the first half of 2021.

According to Austin-based Merriam Pitt Anderson, which is overseeing the hotel project, the 72,300-square-foot building will be five stories tall and have 135 rooms.

Other hotel features will include a pool and outdoor patio area with a sky lounge. The hotel will also have food service, a bar, a fitness center and meeting rooms for guests.

Overall, Lantana Plaza includes an additional 140,000 square feet of office space and 60,000 square feet of retail on a 25-acre property along Southwest Parkway. Stratus Properties, the mixed-use center's developer, also owns land across the street from the project but has not yet released plans or a timeline for its future development.

Address: 145 Southwest Parkway, Austin
Timeline: 2019 first half of 2021



FITZHUGH BREWING CONSTRUCTION AIMS FOR SUMMER COMPLETION

DRIPPING SPRINGS: A new brewpub, Fitzhugh Brewing, is under construction and planning to open in the Dripping Springs area this summer.

Located at 15425 Fitzhugh Road, Dripping Springs, the brewery is a project by the group behind Southwest Austin event venue Pecan Springs Ranch, Dale Smith and daughter Karley Smith. According to a news release by the group, the brewery will have outdoor seating, a playspace and two mezzanine decks on the property.

Fitzhugh Brewing will also include a restaurant by PL1 Kitchens, which is affiliated with Austin-based barbecue chain Pub E-Joe's Smokehouse.

Nathan Rice, who has previously worked with New Brewpubs Brewing Co., J Stars Brewing Co. and Maverick Winery, will be the business's head brewer.

Address: 15425 Fitzhugh Road, Dripping Springs
Timeline: 2019 summer 2020



BARANOFF ELEMENTARY SCHOOL TO RECEIVE ROOF IMPROVEMENTS THIS SUMMER

SOUTH AUSTIN: South Austin's Baranoff Elementary School will see an estimated \$651,900 of work to improve the campus's roof over the summer.

Austin ISD trustees ordered the district to negotiate a contract with Premier Metalworks for the project, which was approved as a renovation in the district's 2017 bond program. Premier Metalworks was one of eight companies to place bids on the project.

While the project was originally budgeted for \$1.1 million, the reduction in estimated cost is due to "the refinement of the project scope" to accurately reflect current needs, according to district documents. Work will include improvements to school gutters and downspouts as well as the installation of a reflective coating that will extend the roof's lifespan and the building's energy efficiency, according to the district.

Baranoff Elementary was one of three ASD campuses to have bids for roof improvements selected by the board during the district's April 27 meeting consent agenda. Trustees did not discuss the actions during the meeting other than for approval.

Address: 12009 Buckingham Gate Road, Austin
Timeline: May-August 2020



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7. Press Release

Capital Metro Launches Project Connect Virtual Open House

AUSTIN, Texas - Capital Metro invites Austin residents to attend the Project Connect Virtual Open House. The virtual open house is designed to welcome a new round of feedback to the Project Connect plan; a plan that has been 20 years in the making and since 2016, has engaged more than 40,000 people.

The virtual open house will allow visitors to choose their own path to learn more about the project. From a quick high-level look at the overall plan for those with limited time, to in-depth sections about the system features with integrated engagement surveys to collect feedback, the online experience is designed for anyone to be able to partake. It and upcoming virtual community meetings are in preparation for the Capital Metro Board of Directors and Austin City Council joint session on June 10.

Visitors to the open house will see the plan has some updates due to recent technical analysis and public input. In the latest Draft System Plan, the Gold Line was updated from bus rapid transit to a light rail service, extending from ACC Highland to South Congress Transit Center.

"We are listening to the community and hear that people want to improve mobility in Austin and our surrounding areas. It will not get substantially better without a significant investment in transit," said CapMetro President and CEO Randy Clark. "Project Connect is an integrated transit system that will bring jobs to our region, improve the environment and better connect people so everyone can thrive in our community."

Project Connect will expand transit capacity and offer more choices, better connecting the entire Central Texas region. The vision goes beyond how we move people from A to Z, great cities are built to take care of their people.

In the context of COVID-19, economic growth and job opportunity have become even more relevant to Central Texans. Construction of Project Connect as planned is likely to generate 200,000 direct and indirect jobs over the build-out of the plan. The consistent stream of phased project construction can provide people with steady paychecks for years to come.

Traffic in Austin dropped by nearly half when the COVID-19 crisis began. When the community returns to work, traffic will be back too. Project Connect is our opportunity to move beyond the gridlock, improve air quality and strengthen connections to our communities.

The virtual open house, as well as technical documentation and details of previous community engagement, are available at ProjectConnect.com.

###

MEDIA CONTACT:

Jenna Maxfield, 512-592-2171

CCR-Communications@capmetro.org

Capital Metro to Host Series of Virtual Community Meetings

AUSTIN, Texas - Capital Metro will host a series of virtual community meetings with Capital Metro board members and Austin City Council members, as an alternative to in-person meetings that were planned for this spring.

Anyone can join the community meetings via Zoom links published to ProjectConnect.com or view live streams on Capital Metro's [Facebook page](#). There will be opportunities to participate in polling surveys and ask questions during a roundtable discussion.

During the meetings, participants can expect to discuss the [Project Connect Recommended System Plan](#) and how it could benefit the Austin community.

All meetings will be close-captioned for the hearing impaired.

This series of community meetings is in addition to the virtual open house that will stay live 24/7 on the [Project Connect website](#) until May 31.

WHAT: Capital Metro to host a series of Virtual Community Meetings with the City of Austin.

WHEN:

- Friday, May 15 at 2 p.m. with Greg Cesar, City Council Member, Dist. 4; and Leslie Pool, City Council member, Dist. 7
- Monday, May 18 at 1 p.m. with Natasha Harper-Madison, City Council Member, Dist. 1; and Jeffrey Travillion, Capital Metro Board Member and Travis County Commissioner, Precinct 1
- Tuesday, May 19 at 5 p.m. with Kathie Tovo, City Council Member, Dist. 9; and Wade Cooper, Capital Metro Board Chair
- Wednesday, May 20 at 11 a.m. with Jimmy Flannigan, City Council Member, Dist. 6; Troy Hill, Capital Metro Board Member and Mayor of Leander; and Eric Stratton, Capital Metro Board Secretary
- Wednesday, May 20 at 5 p.m. with Alison Alter, City Council Member, Dist. 10; and Terry Mitchell, Capital Metro Board Member
- Tuesday, May 25 at 11 a.m. with Steve Adler, Austin Mayor; and Wade Cooper, Capital Metro Board Chair
- Thursday, May 28 at 6 p.m. with Ann Kitchen, Capital Metro Board Member and City Council Member, Dist. 5; and Paige Ellis, City Council Member, Dist. 8
- Friday, May 29 at 2 p.m. with Della Garza, Capital Metro Board Vice Chair and Mayor Pro Tem, Dist. 2; and Sabino "Plo" Renteria, Capital Metro Board Member and City Council Member, Dist. 3

WHERE: Meetings can be joined through Facebook Live or Zoom links published to ProjectConnect.com.

MEDIA CONTACT:

Jenna Maxwell, 512-592-2171

CCR-Communications@capmetro.org

8. Earned Media

CapMetro, City of Austin continue education efforts for Project Connect traffic initiative

by Fred Cantu

Tuesday, May 26th 2020



AUSTIN, Texas — COVID-19 is all anyone has talked about for the past few months. But, now, as we now talk about getting things back to normal that means addressing the traffic nightmare we had before stay home-- stay safe.

Before coronavirus came along local leaders were touting [Project Connect](#) and leaning toward asking voters to approve a tax hike to support it.

We still need a traffic solution in Austin, and that could be Project Connect

If you're new to Austin, we've been flirting with the idea of light rail for decades. Our present Metrorail is just a repurposed freight line. Capital Metro and city leaders want to see a citywide network of dedicated pathways where trains and buses could avoid traffic to move people around town more efficiently.

[RELATED: CapMetro to resume fares on June 1st, but free rides for unemployed to continue](#)

But to do so would require quite an expenditure: The 30-year plan could total \$6 billion to \$10 billion. At the high end the city's share could be \$5.6 billion so they need to get voter approval to raise the city's property tax cap beyond 3.5%.

If voters approve the move that would raise property taxes for the average Austin homeowner by about \$300 a year, but unlike previous efforts this money would fund a citywide transit plan. "We are talking about one vote," says Austin District 6 Representative Jimmy Flannigan, "One transit referendum that could build a citywide transit system. It is not one line that serves one part of town. It is an actual system to address our future challenges."

You can attend the Virtual Community Meeting May 26, 11:00 AM by clicking here: <https://capmetro.org/projectconnect/get-involved/>

By SAMUEL KING | KUT • MAY 15, 2020

Samuel King | Kut

Capital Metro Opens New Round Of Public Meetings On Project Connect Plan

Capital Metro [unveiled plans](#) in early March for transit expansion in Austin, with additional rail and bus lines, along with a downtown subway-like tunnel. The plan was intended to help congestion stay manageable as the region was projected to double in population over the next 25 years.



RECOMMENDED SYSTEM PLAN

LEGEND

- LEAST RAIL**
 - Orange Line
 - Blue Line
 - Red Line
- METROFAST**
 - Red Line
 - Green Line
 - Potential Future Extension
- METROBIPO**
 - Enhanced Metrolink Route
 - Potential Future Extension

- METROBUS**
 - Current Frequent Local Routes
- METROEXPRESS**
 - Current Metrolink Express
 - Future Metrolink Express
- METROACCESS**
 - Available within 1/4 mile of station
 - Current Park & Ride
 - Proposed Park & Ride
 - Station
 - Transfer



4/21/2020

Then, just days later, the threat of the coronavirus forced leaders to order people to stay at home. Roads are less congested right now and the number of passengers on Cap Metro services has dropped by around 60%, as many people are working from home or have lost jobs.

But Cap Metro officials say it's still important to plan for life after the pandemic, when traffic could once again be an issue. They're moving ahead with Project Connect, contending the plan would help grow the economy and address issues like equity and climate change.

“We're not going to have significant improvement in our mobility as a city and as a region unless we have a significant investment in transit,” Cap Metro President and CEO Randy Clarke said earlier this month.

“It's literally and physically and mathematically impossible. So, we're going to have to decide what city we want to be in the future. And this is going to be a key decision point for our community.”

To help with those decisions, Cap Metro is hosting a series of virtual community meetings to present the latest Project Connect plan and get feedback from the public. To join, go [here](#) and register for the Zoom meeting you wish to attend.

- Friday, May 15, at 2 p.m. with District 4 City Council Member Greg Casar and District 7 City Council Member Leslie Pool
- Monday, May 18, at 1 p.m. with District 1 City Council Member Natasha Harper-Madison and Jeffrey Travillion, Capital Metro board member and Precinct 1 Travis County commissioner
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- Thursday, May 28, at 6 p.m. with District 5 City Council Member Ann Kitchen, a Capital Metro board member; and District 8 City Council Member Paige Ellis

- Friday, May 29, at 2 p.m. with District 2 City Council Member and Mayor Pro Tem Delia Garza, Capital Metro board vice Chair; and District 3 City Council Member Sabino “Pio” Renteria, a Capital Metro board member

There’s also [a virtual open house](#), where people can review the plans on their own time.

The plan has been adjusted slightly since the last joint work session between the Austin City Council and Capital Metro board in March. The new plan converts the Gold Line from a Bus Rapid Transit line (dedicated lanes that don’t mix with traffic) to a light rail line. Modeling showed the potential of increased demand could not be carried by buses, according to a memo released earlier this month.

The Gold Line would join the Blue and Orange Lines as new rail lines in Austin. Leaders are also proposing to spend \$385 million less on upgrades to the existing Red Line, because they said the added cost to adjust platforms was not worth it.

Travis Albrecht, with the architecture and planning firm Gensler's Austin office, said he predicts the Project Connect plan may not need to change that much – despite potential changes in commuting patterns in the aftermath of the pandemic.

"There's focuses on transit-oriented development, like The Domain and in some other pockets of town that would be near a station," Albrecht said. "So I don't think a lot of those physical patterns are going to change."

What might change, he said, are "some of the secondary modes from those centers, so like trying to boost that last mile offering with more bike paths or even walking paths."

Estimates from March say the plan could cost as much as \$9.6 billion over 30 years. Federal grants could pay for 40% of the funding, or around \$4 billion.

That leaves another \$5.6 billion that would have to be funded locally.

The final staff-recommended plan is expected to be presented June 10. The board and City Council have to decide on a locally preferred plan, a key step for federal funding.

As for local funding, leaders will make those decisions later in the summer ahead of a referendum. Options could include asking voters to borrow money to build the lines, as well as asking for a tax increase to help operate the lines once they are built.

Got a tip? Email Samuel King at samuel@kut.org. Follow him [@SamuelKingNews](https://twitter.com/SamuelKingNews).

If you found the reporting above valuable, please [consider making a donation](#) to support it. Your gift pays for everything you find on KUT.org. Thanks for donating today.

Light-rail line in North Austin added to Project Connect plan

In March, Capital Metro staff presented its \$9.6 billion Project Connect plan to revamp Austin's public transportation network to Austin City Council and the public transit agency's board of directors.

The plan would add two light-rail lines connecting downtown to the Austin-Bergstrom International Airport and areas of North Austin and South Austin, among other expansions.

Capital Metro President and CEO Randy Clarke and Assistant City Manager Gina Fiandaca said in a May 5 memo to City Council and the transit agency's board of directors that Capital Metro staff have tweaked that initial plan.

The plan now includes a third light-rail line, which would run between downtown and the Austin Community College Highland Campus, passing by St. David's Medical Center, the east side of the University of Texas campus and the Texas Capitol.

Capital Metro calls this 5-mile route the Gold Line. It was included in Capital Metro's March presentation to city council and the board, but initially, staff envisioned it as a bus line in a dedicated lane.

In the memo, Clarke and Fiandaca said the adjustment was made due to new population projections along the Gold Line corridor.

Capital Metro staff also adjusted plans along the existing commuter rail line, the Red Line, which runs between Leander and downtown Austin. According to the memo, \$380 million of planned work was scrapped because it did not lead to enough additional ridership to justify the cost over 30 years.

GOLDEN OPPORTUNITY

Capital Metro added a new light-rail line—the Gold Line—to its Project Connect plan. The new light-rail line is represented on this map as a dotted line.

LEGEND

- Orange Line*
- Blue Line**
- - - Gold Line



*CENTRAL AND NORTH COMMUTER RAIL LINE AND NORTH SIDE STATION PLANS
 **COMMUTER RAIL LINE
 SOURCE: CAPITAL METRO COMMUNITY DEVELOPMENT DEPARTMENT

Mobility upgrades coming to two North Austin intersections

New improvement projects designed to increase mobility and pedestrian and cyclist safety will break ground the first week of June.

Both projects, located at the intersection of West Braker Lane and Stonelake Boulevard and the intersection of North Lamar Boulevard and Payton Gin Road, will take approximately six months to complete, according to the Austin Transportation Department.

These intersection improvements, totaling a combined \$2.45 million, are funded as part of the city of Austin's 2016 Mobility Bond.

Work at the intersection of North Lamar and Payton Gin, located approximately 1 mile north of the North Lamar Transit Center, will substantially change sidewalks and crossing paths for pedestrians and cyclists.

"This intersection particularly has a record of a lot of pedestrian crashes, including fatalities," said Amica Bose, project leader for the Austin Transportation Department.

High-visibility crosswalks with reflective striping will be added at this intersection across each roadway.

Improvements at the intersection of West Braker and Stonelake in North Austin will widen a shared-use path along West Braker, and existing bicycle-only lanes will be merged onto the shared-use path.



Improvements at North Austin intersections begin in June.



Work continues at US 183 and I-35 in North Austin.

LATEST UPDATES



I-35 flyover construction
 TxDOT crews in April set 72 support beams and poured five deck spans for three flyovers. Work continues on the new flyovers and the U-turn on St. John's Avenue bridge throughout May and June.

Timeline: January 2018-mid-2021



Patmore Lane diverging diamond
 Crews completed widening of lanes along the westbound Patmore Lane bridge. In May, similar work began along the westbound Patmore bridge. New bridge beams were installed in late May.

Timeline: July 2019-mid-2021

ALL INFORMATION ON THIS PAGE WAS UPDATED AS OF MAY 13. NEWS OR QUESTIONS ABOUT THESE OR OTHER LOCAL TRANSPORTATION PROJECTS? MAIL US AT: NWA@WSJ.COM OR 512.416.1224.

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Capital Metro seeks community feedback on Project Connect at virtual open house



article

AUSTIN, Texas - [Capital Metro](#) is inviting Austin residents to attend a virtual open house for Project Connect.

According to CapMetro, the virtual open house is intended to welcome a new round of feedback on the Project Connect plan. The virtual open house is designed to allow visitors to choose "their own path" when it comes to learning about Project Connect.

"From a quick high-level look at the overall plan for those with limited time, to in-depth sections about the system features with integrated engagement surveys to collect feedback, the online experience is designed for anyone to be able to partake. It and upcoming virtual community meetings are in preparation for the Capital Metro Board of Directors and City of Austin Council joint session on June 10," the company said in a press release.

RELATED: [Capital Metro free fares to continue through May](#)

The company says the plan has been 20 years in the making and has engaged more than 40,000 people since 2018.

Project Connect is designed to expand transit capacity and offer more choices while better connecting the entire Central Texas region, the company mentions.

“We are listening to the community and hear that people want to improve mobility in Austin and our surrounding areas. It will not get substantially better without a significant investment in transit,” said CapMetro President and CEO Randy Clarke. "Project Connect is an integrated transit system that will bring jobs to our region, improve the environment, and better connect people so everyone can thrive in our community."

[Visit the virtual open house by following the link.](#)

FOX 7 Discussion: CapMetro releases revisions to Project Connect

Capital Metro CEO Randy Clarke joins FOX 7 Austin's Marcel Clarke to talk about changes to the services Project Connect plan.



NEWS

Civics 101

Thursday 21

HERITAGE GRANT APPLICATIONS FOR HISTORIC PRESERVATION The city's Economic Development Department is now accepting applications for the Heritage Grant Program, which aims to honor and preserve Austin as a place of personal heritage to promote tourism through the preservation of historic buildings, sites or (contributing) districts. *Through July 10 Online.* www.austintexas.gov.

PROJECT CONNECT VIRTUAL OPEN HOUSE The virtual open house is designed to welcome a new round of feedback on Austin's high-capacity transit plan. *Online. Free.* www.capmetro.org/projectconnect.

"HIGH SIGNS & BEACONS" OPEN CALL The George Washington Carver Museum, Six Square, the African American Heritage Facility, and the city's Equity Office are calling on artists, poets, scholars, and writers of African descent to join a public art project that will be displayed throughout the African American Cultural Heritage District. 8-12 creative teams (one visual artists; one writer/poet/scholar) will be chosen to develop a large outdoor sign with text-based artwork. *Deadline: Fri., May 22 Online.* www.austintexas.gov.

NORTH LAMAR BOULEVARD VIRTUAL PUBLIC HEARING Austin's Corridor Program Office, along with TxDOT, hosts a virtual public hearing on the bond-funded improvements to North Lamar from U.S. 183 to Howard Lane. *Through May 30. Daily, 9am-5pm Online.* www.austintexas.gov/northlamarenv.

BURNET ROAD VIRTUAL PUBLIC HEARING Austin's Corridor Program Office, along with TxDOT, hosts a virtual public hearing on the bond-funded improvements to Burnet Road from U.S. 183 to MoPac's frontage road. *Through June 5. Daily, 9am-5pm Online.* www.austintexas.gov/burnetenv.

PARKFIELD DRIVE VIRTUAL OPEN HOUSE Austin Transportation is proposing changes on Parkfield Drive and near Woolridge Elementary School to enhance safety and mobility for everyone. A survey to leave feedback on the proposal, as well as an interactive map of the proposed changes is included. *Through June 14 Online.* www.austintexas.gov/parkfielddrive.

CITY COUNCIL MEETING See agenda for details. *10am. Online.* www.austintexas.gov/page/watch-atxn-live.

AUSTIN HOUSING FINANCE CORPORATION BOARD OF DIRECTORS MEETING See agenda for details. *10:30am. Online.* www.austintexas.gov/page/watch-atxn-live.

HOUSING AUTHORITY OF THE CITY OF AUSTIN COMMITTEE MEETING See agenda for details. *11am. Teleconference (access code: 694-384-877).* www.austintexas.gov.

HOUSING AUTHORITY OF THE CITY OF AUSTIN MEETING See agenda for details. *Noon. Teleconference (access code: 694-384-877).* www.austintexas.gov.

Friday 22

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AUSTIN ROSEWOOD COMMUNITY DEVELOPMENT CORPORATION SPECIAL CALLED MEETING See agenda for details. *10am. Online.* sammi.curless@austintexas.gov, www.austintexas.gov/page/watch-atxn-live.

RONNA MCDANIEL: LIVE WITH THE 19TH Conversation between the 19th's Amanda Becker and Republican National Committee Chair Ronna McDaniel. *Noon. Online.* www.19thnews.org.

ECONOMIC PROSPERITY COMMISSION MEETING See agenda for details. *1pm. Online.* michelle.clemons@austintexas.gov, www.austintexas.gov/page/watch-atxn-live.

Saturday 23

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TRUTH, RACIAL HEALING & TRANSFORMATION VIRTUAL CIRCLES A virtual event designed to bring folks together, promote dialogue, and find common ground to help overcome racism. *1:30-5pm. Online. Free.* www.austinyymca.org.

RANKED-CHOICE VOTING AND MORE: ELECTORAL REFORM FOR THE 21ST CENTURY Ranked-choice voting (RCV) lets voters specify, on one ballot, who their second and third choices are, in case their first choice is defeated. Candidates have to win a majority of votes to be elected. In this Zoom meeting, Common Ground for Texans board members Joanne Richards and Dan Eckam will review how RCV works; its history, current usage, and benefits; and how you can help pursue this reform. Related reforms will be discussed if there's time. Log-on details will be posted in the Facebook event prior to the meeting. *2-4pm. Online via Zoom. Free.* www.cg4tx.org.

Sunday 24

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PARKFIELD DRIVE VIRTUAL OPEN HOUSE Austin Transportation is proposing changes on Parkfield Drive and near Woolridge Elementary School to enhance safety and mobility for everyone. A survey to leave feedback on the proposal, as well as an interactive map of the proposed changes is included. *Through June 14 Online.* www.austintexas.gov/parkfielddrive.

Tuesday 26

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TCDP NOW HIRING ELECTION WORKERS Travis County Democratic Party is seeking election workers for the July 14 election. No prior experience is needed; you will receive three hours of paid training by Travis County Elections and guidance from veteran workers. On election day, you will be paid for working the full day: \$12/hour for judges, and \$10/hour for clerks and ballot board members. Your safety is a serious priority; all workers will be provided PPE, hand sanitizers, and hand washing stations, and you will be trained for sanitary procedures with voters. Get more info on what the role entails at TexasDemocrats.org. *Apply now for July 14 election Countywide.* www.texasdemocrats.org.

HERITAGE GRANT APPLICATIONS FOR HISTORIC PRESERVATION The city's Economic Development Department is now accepting applications for the Heritage Grant Program, which aims to honor and preserve

Austin as a place of personal heritage to promote tourism through the preservation of historic buildings, sites or (contributing) districts. *Through July 10 Online.* www.austintexas.gov.

SXSW EDU ONLINE SXSW EDU 2020 goes virtual with weekly programming featuring live sessions, Q&As, and film screenings. *Select dates through June 2 Online. 2020 registrants only.* www.sxswedu.com.

PROJECT CONNECT VIRTUAL OPEN HOUSE The virtual open house is designed to welcome a new round of feedback on Austin's high-capacity transit plan. *Online. Free.* www.capmetro.org/projectconnect.

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HEALTH AND HUMAN SERVICES COMMITTEE SPECIAL CALLED MEETING See agenda for details. *10am. Online.* www.austintexas.gov/page/watch-atxn-live.

BIZAID BUSINESS ORIENTATION WEBINAR A general overview of opening a small business or re-evaluating an existing business during its growth. *10-11:30am. Online. Free.* www.austintexas.gov/smallbiz.

PROJECT CONNECT CITYWIDE VIRTUAL COMMUNITY MEETING Hosted by Mayor Steve Adler and Capital Metro Board Chair Wade Cooper. *11am. Online.* www.projectconnect.com.

Wednesday 27

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AUDIT AND FINANCE COMMITTEE MEETING See agenda for details. *9:30am. Online.* www.austintexas.gov/page/watch-atxn-live.

BIZOPEN: COMMERCIAL PROPERTY REQUIREMENTS WEBINAR General overview of the potential steps in the city of Austin's development process. *10-11am. Online. Free.* www.austintexas.gov/smallbiz.

TEXAS LGBTQ CAUCUS VIRTUAL TOWN HALL The founding members discuss the upcoming 87th Texas Legislative Session, the LGBTQIA community, and more. *5-6pm. Facebook Live.* www.fb.com/txlgbtqcaucus.

CASA VOLUNTEER INFO SESSION CASA of Travis County speaks up for children who've been abused or neglected by empowering the community to volunteer as advocates for them in the court system. When the state steps in to protect a child's safety, a judge appoints a trained volunteer advocate to make independent and informed recommendations in the child's best interest. Join the info session to learn more about becoming a volunteer advocate and how you can train online right now. There will be time for questions with staff and current volunteer advocates during the presentation. *Tue., June 2, 11:30am-1pm Online via Zoom. Free.* volunteer@casatravis.org, <https://www.casatravis.org/infoession>.

TEXAS RAILROAD COMMISSION CANDIDATES FORUM Local and regional environmental orgs and residents of Texas meet candidates for Railroad Commission of Texas: Chrysta Castaneda and Roberto Alonzo. *7-8pm. Online.* www.texasenvironment.org.

Thursday 28

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MOBILITY COMMITTEE SPECIAL CALLED MEETING See agenda for details. *10am. Online.*
www.austintexas.gov/page/watch-atxn-live.

TITLE I ANNUAL PARENT & FAMILY CONSULTATION Parents from Austin ISD Title I schools are invited to hear a review of the Title I federal program for this year. *Thu., May 28, noon-1pm; Fri., May 29, 4:30-5:30pm Online.* www.austinisd.org.

ANNIE'S LIST PRESENTS: ROYCE BROOKS IN CONVERSATION WITH VALERIE JARRETT Annie's List Executive Director Royce Brooks and Obama Foundation Senior Advisor Valerie Jarrett discuss the political power of women across the U.S. *1-2pm. Online.* www.annieslist.com.

AIA AUSTIN'S "JURY CONVERSATIONS" WEBINAR Meet the industry professionals selected to judge this year's AIA Austin Design Awards competition. *5-7pm. Online. Free.* www.aiaaustin.org.

TCDP HAPPY HOUR & VIRTUAL PHONEBANK The Travis County Virtual Democratic Party joins the Blue Action Democrats for its weekly event, featuring state Rep. HD-48 Donna Howard and ACC Board of Trustee for Place 9, Julie Ann Nitsch. *5-6:30pm. Online.* www.traviscountymocrats.org.

PROJECT CONNECT DISTRICTS 5 & 8 VIRTUAL COMMUNITY MEETING Hosted by District 5 CM and Capital Metro Board Member Ann Kitchen and District 8 CM Paige Ellis. *6pm. Online.*
www.projectconnect.com.

8TH GRADE VIRTUAL BRIDGING CEREMONY Gus Garcia Young Men's Leadership Academy students and their families celebrate their accomplishments. Email for link to join the virtual ceremony. *6-7:30pm. Online.*
sandra.zachary@austinisd.org, www.austinisd.org.

2021-24 TRANSPORTATION IMPROVEMENT PROGRAM REMOTE OPEN HOUSE Visit the online open house to review the draft TIP project list and submit comments. Public commenting is open until Mon. June 1; the CAMPO Transportation Policy Board is scheduled to take action on the new TIP at its Mon., June 8, meeting. *Thu., May 28, 7pm; Fri., May 29, noon Online.* www.campotexas.org.

A note to readers: Bold and uncensored, *The Austin Chronicle* has been Austin's independent news source for almost 40 years, expressing the community's political and environmental concerns and supporting its active cultural scene. Now more than ever, we need your support to continue supplying Austin with independent, free press. If real news is important to you, please consider making a donation of \$5, \$10 or whatever you can afford, to help keep our journalism on stands.

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JULY 27, 2012

Statesman

Capital Metro hosts virtual meetings this month

Posted May 15, 2020 at 2:55 PM

AUSTIN

Cap Metro hosts

virtual meetings

Capital Metro is hosting a series of virtual community meetings with board members and Austin City Council members, as an alternative to in-person meetings that were planned for this spring.

Meetings will be at 1 p.m. Monday with Council Member Natasha Harper-Madison and Capital Metro board member and Travis County Commissioner Jeffrey Travillion; 5 p.m. Tuesday with Council Member Kathie Tovo and Capital Metro Board Chair Wade Cooper; 11 a.m. Wednesday with Council Member Jimmy Flannigan and Capital Metro board member and Leander Mayor Troy Hill and Capital Metro board secretary Eric Stratton; 5 p.m. Wednesday with Council Member Alison Alter and Capital Metro board member Terry Mitchell; 11 a.m. May 26 with Austin Mayor Steve Adler and Cooper; 6 p.m. May 28 with Capital Metro board member and Council Member Ann Kitchen and Council Member Paige Ellis; and 2 p.m. May 29 with Capital Metro board vice chair and Mayor Pro Tem Delia Garza and Capital Metro board member and Council Member Sabino “Pio” Renteria. The first meeting was Friday.

Anyone can join the community meetings via Zoom links published to ProjectConnect.com or view live streams on Capital Metro's Facebook page, facebook.com/capitalmetro. There will be opportunities to participate in polling questions and ask questions.

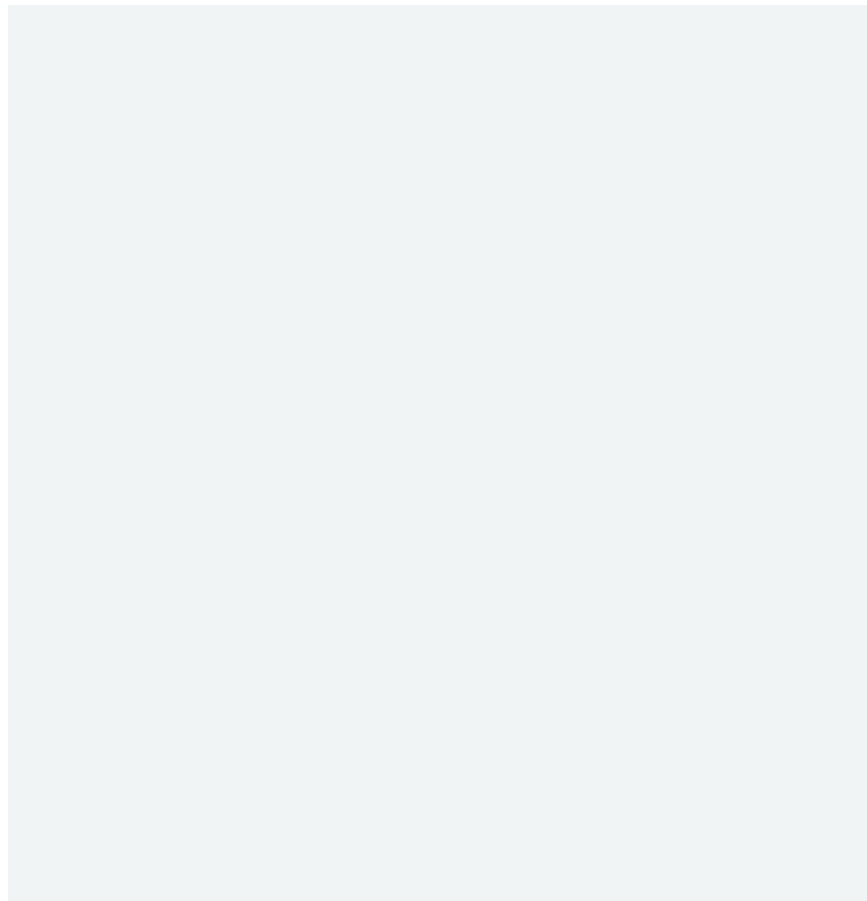
This series of meetings is in addition to the virtual open house that will stay live 24/7 on ProjectConnect.com until May 31.

AUSTIN

AIDS memorial

online Sunday

The 20th annual Virtual AIDS Candlelight Memorial will take place Sunday with the theme, "I Remember, I Take Action, I Live Beyond HIV!"



Due to COVID-19, in-person candlelight memorial events will not be held. However, participants can share their remembrance using photos, videos or text using social media at facebook.com/ATXAIDSCANDLELIGHT and Twitter using the hashtag #ATXAIDSCANDLELIGHT.

For more information: candlelightmemorial.org.

BUDA

City Hall, safety

building opens Monday

Buda City Hall and the Public Safety Building will open to the public with limited capacity Monday.

Visitors are recommended to wear masks, and social distancing practices will be in place. Phone and online methods of communication are encouraged. City-sponsored meetings will resume with strict social distancing practices in place. Room capacity is limited to 25% for City Council and boards and commissions meetings.

The Public Library remains closed to the public. The library is providing curbside service from 10 a.m. to noon and 3-5 p.m. Mondays through Thursdays.

For more information: ci.buda.tx.us.

American-Statesman staff

Unknown date

Unknown author

Public Notice: Cruz (Out of) Control: Whose well-being does the junior senator have at heart?



U.S. Senator **Ted Cruz** sent an official message to his constituents on Saturday afternoon, saying that as he and the Senate returned to Washington last week, "We have an [important job to do](#) in order to protect public health, get people safely back to work, and get the economy back on its feet.

"I've outlined four critical priorities that Congress should focus on in response to the three crises our country is facing – the public health crisis due to the coronavirus pandemic, the economic crisis, and an energy crisis that is greatly affecting Texas." And what are Cruz's four priorities?

"First, we need to **re-open our economy** and get Americans back to work. ...

"Second, we need to **push pause on spending** and not allow Speaker Pelosi to hijack discussions going forward. ...

"Third, we need grow our economy out of this crisis by cutting taxes and lifting regulations. ...

"Fourth, we need to recognize that **China** bears significant responsibility for the magnitude of this pandemic and must be held accountable."

Note that nowhere in there is anything about the "important job" of protecting public health. In fact, nowhere in the letter – nor among the 17 additional updates included at the bottom – is there a word about **testing**, or **research**, or **health care**, or what policies ought to be in place if we're going to "get Americans back to work" ... *safely*.

Instead, it's more of the same: cut taxes, cut spending, cut regulations on polluters, get workers back on the line, no matter the danger – and if anything goes wrong (what could go wrong?) make sure everyone blames China. This is what passes for health policy.

Virtual Transportation Policy

The **Project Connect Virtual Open House** is **Capital Metro's** online guide to the ambitious long-range transit plan that [may or may not be coming to a ballot box](#) near you in November. It's open through May, offering maps, descriptions of the proposed services, and a somewhat limited survey for providing feedback, at www.capmetroengage.org. Or see more on the plan at ProjectConnect.com.

CapMet is also holding a series of one-hour virtual **community meetings**, focused on specific Council districts, and hosted by the individual council members, and other Cap Metro board members. These will likely be your best chance to get your say in; see more info and register for a meeting at capmetro.org/get-involved.

D4 & D7: Fri., 5/15, 2pm

D1: Mon., 5/18, 1pm

D9: Tue., 5/19, 5pm

D6: Wed, 5/20, 11am

D10: Wed, 5/20, 5pm

Citywide: Tue., 5/26, 11am

D5 & D8: Thu, 5/28, 6pm

D2 & D3: Fri., 5/29, 2pm

The deadline for filing a **protest of your property valuation** with the **Travis Central Appraisal District** is this **Friday, May 15**. It's likely that these have fallen through the cracks in a lot of people's lives, but valuations are up again – despite what the pandemic is likely doing to actual values. Chief Appraiser **Marya Crigler** told the TCAD Board of Directors that through May 7, TCAD had gotten 42,970 protests – just 30% of the 143,231 filed in 2019. Unsurprisingly, the protest info and deadline aren't really prominent on TCAD's website; see www.traviscad.org for info on filing either a protest or a homestead exemption online.

The City of Austin Corridor Program Office, along with TxDOT, will host a **virtual public hearing** on the bond-funded improvements to **North Lamar** from US 183 to Howard Lane. See technical reports and other project info at AustinTexas.gov, where the public hearing presentation will be posted from 9am this Friday through Saturday, May 30, 5pm.



9. Radio Ads

15-Second Ad: KUT/KUTX

Support comes from Capital Metro's Project Connect. Transit moves Austin forward, and Project Connect includes light rail lines that run underground through downtown, more bus routes and new connections. More Info and virtual open houses at Project Connect dot com.

30-Second Ad: KOOP

Support comes from Capital Metro's Project Connect. Transit moves Austin forward, and Project Connect includes light rail lines that run underground through downtown and serve the city's most popular destinations, including the airport. Project Connect will also bring more Express and MetroRapid routes, and lots of new connections. Learn about the Project Connect plan online from the comfort of your own home through a virtual open house at ProjectConnect.com. Fill out the online survey and leave comments this month. Let's move forward together, Austin!

60-Second Ad: KAZI

Support comes from Project Connect. Transit moves Austin forward, and Project Connect includes light rail lines that run underground through downtown and serve the city's most popular destinations, including the airport. The plan will also bring more Express and MetroRapid routes, on-demand circulators serving more neighborhoods and lots of new connections everywhere. Project Connect offers more transit choices for everyone and can improve the way we all move around Austin. Learn about the Project Connect plan online from the comfort of your own home through a virtual open house at ProjectConnect.com. Fill out the online survey and leave comments this month. Let's move forward together, Austin!

Appendix 5: Questions and Comments Received

May 7 to May 31 - Virtual Open House

The only thing that concerns me now is that the new financial situation will adversely affect the chances that bond issues will pass.

I'm shocked to see the Gold Line is now a light rail. It was a terrible cost-per-rider equation in 2014, and it's little better today, even with development at Highland. Don't built a light rail that passes state parking garages, the football stadium, and low-density housing.

I am completely in favor of putting the full system as described with 3 LRT lines and a new river crossing and underground tunnel to a vote this November in what is likely to be a favorable electorate. I support red line and electric bus expansions however I am neutral on the need for the green line at this time. However on the whole, this is a good plan and I hope we can find a way to fund it.

What is the revised phasing plan for the light rail lines? The gold line should be a much lower priority than the orange line. Removing funding from the red line is a great call, but it really seems like this is morphing back into the failed 2014 bond.

If the orange line is not guaranteed to be in the first phase of construction, I'm not voting for this.

It is past time for Austin to do this. We are a large, international city and have been for years. This proposal is transformative and enduring. It will be be our legacy to future generations.

I like the plan very much, but I am concerned that with the coronavirus crisis and so many people out of work, a vote on the plan this November calling for a tax increase to pay for it may not pass. I suggest putting a plan for a vote this November that does not entail a tax increase. It may be that federal infrastructure grants could fund the project. If not, perhaps less expensive parts of the plan not requiring a tax increase, such as the Green Line and rapid bus lines, could be put on the ballot this year. Then in two or four years we could vote on the more expensive parts of the plan, which would be the two light rail lines and the underground tunnel. At that point, if we are past the virus crisis and everyone has returned to working full-time, then a vote involving a tax increase would have a better chance of passing.

I think this is a good plan. Austin needs a long term transit plan, even if everything doesn't get done at once. If the corona's economic impact is still big by November, I would suggest adding a 2 year delay on any increase in taxation on residents, that would relieve any concerns that people who are struggling with unemployment may have. So you we could get the project approved and delay the implementation accordingly to various conditions that may occur. I would also add implementing stations to neighborhood centers on the red line, such as West Anderson Lane. Extending sidewalks on both sides of Shoal Creek Blvd, between Steck Ave and 183.

I really like how the four different LRT segments coming from downtown can be pieced together in different ways to provide operational flexibility as needed.

I strongly support this plan. Austin desperately needs an attractive, safe alternative transportation system to improve quality of life for everyone and get drivers off our roads.

Project Connect is totally obsolete and ineffective with a huge increase in all Austin citizens' cost-of-living to subsidize less than 1% of the daily trips in the region. Public transit ridership is declining in the U.S. due to citizens making alternative decisions which better serve their greater-good.

Great, but would love to see some service to the west of Mopac. Seems like from Tarrytown up there isn't anything besides a circulator. Northwest hills/far west area up to the arboretum could really use improved service

We MUST move forward with this plan for our city to be sustainable long-term. Even with the COVID-19 pandemic, it is important we take the lead on making Austin a sustainable, livable city for the future. This is an excellent, well researched plan. Please move forward with it!! The addition of the Gold Line is particularly valuable.

Why is the gold line considered separate from the other city commuter (purple) lines if it were also expected to be a bus rapid transit line? And given the recent move to having the full gold line be a light rail line as well, is it really more trafficked than the Manor/Dean Keaton corridor nearby going to Mueller and along Cherrywood and Chestnut and to UT / Downtown / the airport? I am curious why there is no plans for any sort of light rail there, do the numbers just not back up the usage there? And if so any chance I could see those numbers?

Glad to see gold line has returned to a vision incorporating LRT, and excited to see that it has been extended

The 4/21/20 Longterm System map is a massive improvement over the 10/29/19 version and earlier versions; notably for the change on the Gold Line from BRT to LRT and for the realignment of the Blue Line to increase frequency on the Guadalupe/North Lamar corridors. I recommend CMTA consider an additional future LRT line that runs from Highland to ABIA (using the same route as the Gold/Blue lines) to provide two routes on all LRT lines (assumption being that headways between lines would alternate for greater frequency within the core).

I am less enthusiastic about the near-term ridership of the Red Line (I support the recent transfer of Red Line funding to the Gold Line) and the Green Line; however I do not object to these routes. Selfishly, a Hancock station on the Red Line would likely convince me to increase my use of the line. These are not a priority for me and I am concerned they would be expensive for CMTA to operate based on ridership projections.

Anecdotally, South Austin feels underrepresented in the MetroRapid plan; I'd recommend adding Dittmar to frequency coverage.

I maintain that TxDOT's IH-35 project should include high-capacity transit; however, I recognize that is beyond CMTA's power to control.

I am supportive of the downtown tunnel.

I hope that CMTA will seriously consider renaming the Downtown Station to "Brush Square/Convention Center"

This is truly exciting, and would be a massive step in the right direction for this city. I can't wait!

Please build it!

DO IT ALL!! DONT STOP!! DONT SETTLE!! WE NEED THIS AS A CITY AND AS A REGION WE NEED ALTERNATIVES TO DRIVING!!

I think this project is much less worthwhile without a downtown tunnel to alleviate surface interference. Maybe if Tesla moves to Austin we can get Elon and Boring Company to dig the tunnel...

After decades of poor planning and leadership, Austin finally has the chance to build the equitable transit system we have desperately needed. Anyone who drives our highways or understands basic planning knows that we can't build our way out of traffic (look at the "success" of Mopac Express or the projections for the Capital Express which still leave IH35 in the top of the most congested roadways in Texas for the scant price tag of \$10 billion - "According to Brian Barth, transportation program officer at TxDOT, the Capital Express project would likely move the corridor down to a spot in the 20s or 30s on the list of most congested roadways when the project is complete." Austin Monitor, May 1, 2020). As we continue to struggle with increasing unaffordability to live in the city and racial and socio-economic segregation, the city must make the investments in transit and density away from highway corridors that will allow for the richness of ideas and cultures that identify our city to all remain present. The downtown tunnel is a bold plan that seems to really allow for an interconnected and reliable system. I hope that CapMetro and the city will continue seeking ways to grade-separate more of the system outside of downtown throughout the urban core and beyond. The whole plan is beautifully thought out and highly detailed - thank you for all of your efforts and for the opportunity to provide feedback. For the sake of all Austinites today and in the future, let's get this done!

I'm glad to see the Gold Line light rail proposal added. Please keep moving ahead! It may take longer to get all the financing needed during the pandemic, but please don't let the current crisis stop us from moving toward the transit system we need for our city!

Thanks!

As a citizen living just off south Congress since 1998 and working near MoPac and Steck, I would love to have the ability to ride transit to work, to the airport, to the Hancock area where my sister lives; I'm really tired of being stuck in traffic and am very excited about this vision for Austin's transportation future.

Can't wait for the gold line. Please improve the bicycle infrastructure on 51st to help cyclists get across I35 more safely and all the way to Clarkson!

Is absolutely critical that we invest in more public transportation. Climate Changed will affect our lives so, so dramatically, and we need to keep in mind that it is super critical that we reduce in things that will reduce our use of fossil fuels. I know lots of NIMBYs who oppose money invested in public transportation, so we have to be strong and move forward with major investments in these things.

I think the proposed plan is the best option. It connects the city most efficiently. The question that remains is that of ticket prices and how accessible the rail lines will be from inner-city residential areas.

The plan should focus more on providing transit, bike and pedestrian connections to major transit lines, so that we rely less on park and rides.

The MetroRapid lines need bus lanes in busy areas so that they are faster. A number of the proposed lines would only save a few minutes over the times now, and I'm not sure it is worth the cost to implement them. Also, the current location and stops for the MetroRapids need revision to be the most effective for riders.

There should still be options for paying for fare cards with cash for people who are unbanked or prefer to do that.

<p>Some of the stop locations on the proposed light rail lines should be revised. For example, the Hancock shopping center should have a stop; the proposal has stops that are at least a 1/2 mile walk, which is too far.</p>
<p>The cost-effectiveness of different investments should be compared and the most efficient prioritized. In particular, the cost-effectiveness of circulators should be evaluated. The cost of building new stations for the Red Line should be compared with other expenditures that would provide more benefit. Similarly, expenditure on the Green Line should be delayed until ridership supports it.</p>
<p>Fares should be kept low and light rail fares should be the same as for buses, so that it is equitable.</p>
<p>I would rather not pay for all of those amenities in the downtown tunnel and instead use the money to improve transit services in other parts of the system. I support building the tunnel, but it should be built so that if there are delays, the rest of the system can open without the tunnel.</p>
<p>Improvements to local bus service like shelters, better access, and more frequency should be prioritized.</p>
<p>I fully support this plan and all of your efforts to make Austin more connected!!</p>
<p>Until this past month, I was a huge supporter of Project Connect. I was telling my neighbors and friends and anyone I could spread the word to that we NEED to vote yes on this in November.</p>
<p>However, now you have revived the idiotic idea of light rail to Highland. It is absolutely not needed, especially not at the cost of over a billion dollars! Did you not learn this lesson in 2012?? I am now on the fence and leaning towards a no on this bond. PLEASE remove this aspect of the project. Keep the rail to the important Blue and Orange lines, Green when ready. Gold line is a --- project of some short-sighted people that will benefit very few in Austin.</p>
<p>I am a professional engineer and work for a local engineering firm that specializes in underground construction and tunnel design. We are extremely familiar with the local geology and construction of the types of tunnels being proposed. We feel we could provide some good insight to the project. Where may we find any information on design pursuits and opportunities on how we may be able to get involved in the design side of this project? Has thought been given as to how this project is going to be delivered (ie. design-bid-buid, design-build, etc.)?</p>
<p>This is the plan we've needed all along. Let's get this done!</p>
<p>With the recent pandemic, even public health officials in NYC have said that the subway was a huge factor in transmitting the virus. Austin and the CenTex region have seen a massive reduction in traffic and commuting since the pandemic hit our area. The city and county have said that work from home will become the norm for a majority of employees as has Google, Facebook and Twitter.</p>
<p>Like the rest of us, Project Connect needs to take a breath and re-adjust its plans. Going forward now with this plan after seeing what happened in NYC demonstrates a failure by your organization to adapt to the new medical and fiscal circumstances. And holding "outreach" now via Zoom limits the elderly and those without internet access. I won't vote for this plan unless it is radically scaled back.</p>

I mean, this should have all been built years ago, but I can't complain about it too much on those grounds! Looks pretty darn good. Here's hoping us out in West Austin will get something next - we've been having hiring problems at local businesses for years since no one who wants those jobs can afford to live here, and no one wants to bother driving out here every day.

We need it fast. But we also really need bikeways for e-bikes that can avoid vehicle traffic like beside train tracks, vacant green fields, behind businesses, on elevated bikeways on busy street, in creeks and to have bridges and tunnels for bikes to go over and under traffic. Bike travel needs to be quick and safe by avoiding cars. It should be safe for children and older residents, as well as everyday commuters.

If I could cut through the back side of where I live at East Riverside and Hwy 71 through the empty green areas behind my subdivision and along power line ways, etc to Roy G. Guerrero Park and to the rest of Austin, I would. I also need to safely go to shopping on Riverside, but it's a very dangerous street where many bicyclists have been killed. We need bikeways next to and off the street.

Many of the parks and streams are not utilised like they could be such as Mabel Davis Park and connected streams. There are creeks behind neighbourhoods that could have trails on them so people could use bikes to go shopping, and students could ride to school. Country Club Greenbelt is also not utilised. Connect that to the Colorado River, and the Lady Bird Lake Hike and Bike trail. But with bike bridges and tunnels so we can avoid traffic, and prevent stopping the flow of vehicle traffic. Many bike bridges should also go over East Riverside for bike speed and the safety of residents. We also need bike bridges to go over IH 35 from neighbourhoods to neighbourhoods.

Work with businesses and apartment land owners so we can have trails behind and beside them so everyone has quick and easy access to a greatly expanded bike system, such as creating a trail from Wickershire Ln., straight west, bridging over IH 35 to Communities in School and on to Blunn Creek. Connect that behind houses along Blunn Creek to Travis Heights and down to the Hike and Bike trail. The same for along the train tracks of the Southern Pacific Railroad. We need a bike trail that goes all the way from downtown Austin to Buda along those train tracks.

There are many other opportunities like that that can connect all of Austin's neighbourhoods with safe bike routes.

Austin as needed a better rail system for years. I think this plan is a great idea and I would gladly vote for my taxes to help fund it. Thank you for all your hard work!

Cost too much, does too little. I'll vote NO.

WE can't afford it. Especially NOW! I'll be advising all my friends to also vote no. Say nothing of the fact that COVID has shown us telecommuting will be the wave of the future.

Invest in that, not this overinflated plan

Only by making transit free, fast, & functional can we unlock our potential.

the bus must be faster than the car.

This is the transit plan we've needed for a long time.

While I agree the plan is way better than what we have. More detailed plan maps would be even better because the quality of the PDF/pictures are not very good. Seeing a more concrete example would be best. But we need more transit like yesterday.

We need rail!!!!!!! Tell those idiots in city council that cars will never move people efficiently enough to reduce the traffic strain. Only rail can accommodate the future needs for the city; we already so far behind. Call SoundTransit and figure it out.

Bring back the lone star rail project!

I strongly approve the light rail proposal. However, I live approximately a mile away from the nearest proposed station (Braker & Lamar), and one aspect of this plan that I would like to see fleshed out a little more is potential changes to local routes. Based on the project map it does not appear a light rail station, circulator, or rapid bus route will be a short walk away. One of the most useful features of a fully-fleshed out transit system is the ability to walk to convenient transit, so I'm very interested in finding out how local bus routes would connect with the light rail and rapid bus routes. What would their frequency be and where would they go?

Related to that local comment, I think it also might be useful to have direct routes between the major commercial and dense residential areas of the city. Connections between downtown and the Domain and downtown and Mueller look good, but for someone who lives near the Domain and works or shops in Mueller (or vice-versa), the connection looks a little tricky.

I have recently attended the district 9 virtual town hall meeting. During that meeting a representative from the city was discussing financing options. The 30 year option should not be considered. We need this as quickly as possible. If Congress passes an infrastructure bill would that help speed up the process without costing local taxpayers more? In other words get the 15 year option at the price of the 30 year option?

Is Project Connect adequately orienting around managed lanes on IH-35 now that the state has almost entirely funded reconstruction on that corridor? Mopac lanes were called out in the commuter bus lines but not IH-35 so just checking. Everything else looks great.

I think this plan is very good and has focused on a lot of key goals like increasing frequency, broadening access to opportunities for marginalized populations, and adding elements to make transit reliable and dignified. I'd be curious what aspects are about walkability and what funding is allocated to implementing more sidewalks. I recently read Steven Higashide's Better Buses Better Cities book and want to participate in the transit reform in Austin as much as possible. He mentioned advocacy efforts and community outreach done by volunteers like surveys in target neighborhoods and at bus stops. I'd be interested if there's an outreach plan where agencies are going to the community rather than these forums where the community has to be informed enough to come to the agency.

Red Line needs station at Hancock to transfer to Gold Line.

It's unclear how many (if any) of the proposed light rail and commuter rail stops will be park and ride stations. I think the biggest failing of the current red line is lack of park and ride stations. For example, I live just 3/4 miles from highland station, but it's a walk on a busy road, so I don't take the rail. I WOULD, without question, if I could park there. I know others who feel the same way. We should maximize park and ride options to attract more riders

The acc highland and Koenig stops are very close together. Would love to see a stop in Windsor park.

The plan is very impressive and in my opinion essential for Central Texas to stay livable.

I think it's awesome. Traffic is so horrible as you get close to, and inside, downtown. Any expansion of more easily usable public transit is great. I lived in DC and used the metro all the time. I'm glad to see Austin evolving with the population.

The west suburbs out 71 need to be connected. A park and ride from The Galleria to downtown would be wonderful.

There should be a blue line connection between Government Center and Republic Square if one does not already exist (hard to see on the map). You also need to take cash and credit card, only accepting payment via an app is prohibitive and exclusionary. Visa credit is a necessity or else you are wasting everyone's time. You really need to take major credit cards in order to be a legitimate rapid transit solution.

While I generally strongly support the Project Connect vision regarding building out a high-capacity transit system for Central Texas and think all of the proposed route alignments are strong choices, I find a few of the tactics (especially some of the most recently introduced) problematic. First, though I broadly support light rail as a more reliable form of high-capacity transit, true bus rapid transit with dedicated lanes is a very strong and less expensive alternative that could mean significant improvements to capacity and reliability more quickly. Bus rapid transit could also then be transformed into light rail in the future. Second, I am concerned about the plan for a downtown tunnel. While it is certainly the ideal solution, given the current economic moment, it seems like an exorbitantly costly piece of infrastructure when buses or trains could just as easily run on a dedicated above-ground right-of-way. Regarding both of the tactics I address — light rail vs. BRT and the downtown tunnel — I feel they add significant unnecessary cost to Project Connect that, during an economic downturn, will make voters less likely to support the sorely needed overall plan. I admire your boldness, but given the uncertainty brought about by the pandemic, we need a realistic vision that we will be sure can pass.

Yes, more transit! I fully support the addition of light rail, more train lines, and more busses to reduce waiting time.

You're ending routes that are critical to the visually impaired. Not allowing bus access to employers like Austin Lighthouse Blind for the Blind who employ many visually impaired in our community. Not all who work at Lighthouse for the Blind qualify for Metro Access. Those who are legally blind but have functional vision can't receive Metro Access, with bus route ending, employees will not be able to get to work. Is Capital Metro willing to provide Metro Access to all of those visually impaired individuals who would lose bus service to their places of employment?

The changes are good and essential. I hope we can ensure there's funding for other infrastructure, bike in particular. It's an issue not only to have a way to take a bike on buses and trains, but also that there are separate, protected bike and pedestrian lanes on key streets. Cross-town streets are particularly important, one example: Oltorf which will have north/south transit all along it, but the street itself is unsuited, and in fact dangerous for bike traffic. That's likely the case for many east/west streets in the core. If we're going all in for transit, which I believe is essential, supportive infrastructure for bikes, walking, and other "last mile" transit should be part of the ask for voter funding.

Please please please do this!!! This is what I have been wanting for years. I even wrote an op-Ed on why we should have a stronger public transportation system. This would change out city, for the better, drastically.

The green line is a much needed proposal that would make the east side of the city more accessible. The bus routes along 183 are almost nonexistent, and a metro line would help ease traffic problems. Now that 183 is being converted into a toll road, most drivers are using the access road. This had made traffic more challenging, and current public transportation options are not useful. We would love to have the green line and would use it regularly.

Let's make this happen.

Like the plan, excited for it to begin.

ARE ALL ROUTES 10/20, THAT IS A 10 MINUTE WALK W 20 MINUTE WAIT AS RECOMMENDED NATIONALLY? I cannot read the plan at the moment but I will. This is my main concern. We really need a good system. Austin is supposed to be a very good city to live in & has been since I came in 1970. However, the traffic is dangerous now. With such high rents, people have to move further out but still have to come central for work. Thank you for the opportunity to express opinions. XX. I support masks on buses & trains.

We still need more bike infrastructure and accessibility. There are many streets in Austin with bike lanes that are still way too dangerous (i.e. South Lamar, Parmer Lane, Loyola, etc). Speed limits and the number of cars on the road need to be reduced. I have co-workers who refuse to bike to work because of how dangerous it seems to them. We also need more bike paths (i.e. gravel) that aren't shared with cars.

Thank you for your commitment!

Austin needs public transportation now more than ever! Anytime I go to a big city like Toronto or New York, I'm in awe and jealous of their public transportation. Please, please, please make public transport more accessible for all and get more cars off the roads!!

A comprehensive public transit system is the future that Austin deserves.

Extend the service to the south of Austin: Buda, Kyle, and San Marcos

I Believe that with the population, popularity and international viability Austin TX is facing, this Project Connect is the step in the right direction to ensure:

1. Ease of accessibility for working professionals, students and elderlies from all social economic status to have reasonable access to the many lovely parts of the Austin Metro area.

2. Avoid congestion on the road by providing reasonable and feasible alternatives to commuters

3. Ensure that Austin TX is view at par/if not better than other leading teach cities around the world

4. Ensure commuting safety with the lively Austin night life and festivals that make the city unique and a great place to be

5. Promote businesses by expanding their customer reach

6. Easing, housing affordability by giving home buyers and renters the option to move further from the city while still being able to get to the city withing reasonable effort and time
I would also strongly suggest considering accelerating the rail line to Manor TX as this expands Austin, TX reach to a rapidly growing area with potential educational collaborations programs for students while providing accessible professional opportunities for many working professionals in the area.
We need a reliable, fast and a transit system that can be used. Currently the trains don't make sense to use: there are not enough trains running, the stops are irrelevant and we need more lines!!!!
I think this is an amazing start to creating a transit system that will enhance the downtown community bringing all of us an opportunity to use public transit. Love the loop to the airport and republic square, creating a hub on Rainey Street will bring so many to the trail. Great job. It is time for Austin to support public transit. We will use it.
I'm very happy to see that the project has embraced light-rail and solutions that aren't hindered by the flow of traffic.
The current available transit options either don't get you where you want to go or take a very long time. If you currently need to transfer buses, just forget about it. You'll be looking at a 60 minute minimum for most trips through the city.
I love how connected the new plan feels as well. I could actually see myself enjoying public transit a lot more with this plan. I currently live within easy walking distance to the Highland Red Line stop but I rarely ever use it since it either doesn't take me where I want to go or isn't operating at the times I do want to use it.
I rely heavily on biking and public transportation to travel to work and to get around town. I know it's a long way off and it'll be an uphill battle, but I'd be proud to live in a city with this plan implemented. Keep up the good work and keep fighting the good fight!
My primary concern is about how the neighborhood circulators will work in East Austin, and if this system will be easily accessible to people on the East side without having to drive to stations/stops.
Very excited about the possibility of a light rail in Austin.
The light rail plan doesn't move enough riders from all parts of Austin, and it's primary benefit is to the rich who live in high rises downtown, and to airport travelers, who will rent a car or Uber it anyway due to lack of a local rail feeder system. The Metrorail plan looks more comprehensive. I'll be dead then, but at least we will have a transit system that services all of Austin. With the Density plan in the works, we'll be in the same amount of trouble without antigravity machines (lol).
Blue line should be given priority. South Austin has been ignored too long.
Hi! I'm in North Austin & LOVE the prospect of the orange line light rail. I used to use public transit more frequently but now that I have young kids, I almost never do. I feel like light rail is a more comfortable experience with my kiddos. I can't wait!

The main issues I have are related to the construction phase of these projects. I'm concerned that an underground tunnel would be susceptible to flooding, given the incidents of the past year or two. Also, my understanding is that the ground in Austin is generally too hard/dense to dig deep enough for even a basement in a house. How do you plan to accommodate a train station with retail shops? Also, how long will the existing traffic patterns be disrupted while this construction is going on? I don't want Austin to replicate the "Big Dig" in Boston that took 12 years to complete and was a nightmare for residents and tourists alike.

Personally, I think it's a mistake to keep increasing the number of towers downtown while also increasing the costs of housing. That's contributing to making the transit problem significantly worse. More reasonable housing prices downtown would allow for more workers to not have to commute. Sure, have a few high-end condo towers, but make twice as many that offer price points that the average person can afford.

I live at the end of Rainey St next to trail (no service for quite a few blocks) and teach at UT. Very bad connections. The walk along the H&B trail is good, but the buses esp. returning along Lamar are so bumpy that they give me migraines. There is so little that has been done for all the people LIVING on in the Rainey St. area that I'm just depressed. I'm entering disagree here because there isn't even information about where the underground would run from or 2, no new cross-traffic along Cesar Chavez, and nothing in the area where I actually live except the shuttles, about which there is much talk and no action. Basically, I gave in and got a garage place at UT, although it can take me 35-40 minutes to get the 2 miles home, but I carry too many books to deal with the transit available to me.

Love the plan! Excited to see these changes be put into action!

I like the overall plan, but am very disappointed that it leaves out the Arboretum and Jollyville corridor. I would really like to see at least a MetroRapid line running through the Arboretum, connecting to downtown. While there is a commuter route, its hours are extremely limited, which does not make it usable for non-work related activities such as festivals or entertainment.

I've been taking public transit in Austin from my home in Wooten to work at the university and to the airport. This plan makes improvements, most definitely. One of the issues I've experienced is with the North Lamar Transit Center and its inability to be useful and safe for pedestrians. It's an island surrounded by fast-moving cars and does not have safe connections to surrounding neighborhoods. There are limited crosswalks, there is insufficient lighting in and around Research/183, and a lack of sidewalks that connect in a straight line on the same side of the street. It's taken as much as 15 mins to walk from the North Transit Station to Anderson Ln because the crosswalks and sidewalks don't match up right.

In order to make transit hubs more effective and user-friendly, please consider that they should be more than accessible to cars and surrounded by parking lots.

Thanks!

We cannot fix our transportation system without addressing 2 development issues: density and grade separation. Re: Density. As much as we would like it, the single family housing model cannot be sustained; it results in 92% impervious cover. We need much more density, especially in housing (multi-family/multi-storied), with retail businesses and professional services on the 1st and 2nd stories and large tracts of parkland and urban agriculture (makes for a pleasant urban environment). We also need more multi-storied white collar work buildings, leaving single storied, road-accessed buildings for manufacturing, equipment sales and repair, and construction-related businesses.

As to public transportation, we need grade separation via monorail (which would work nicely with multi-family housing) for transporting people, leaving roads for delivering products and supplies.

The voters are NOT going to waste money on this garbage. You will NEVER get our support.

This is a waste of money and taking of the roads to try and in force you socialize ideas.

I personally will be contacting my congressman and tell him not to support any Federal money for any of these projects.

It seems great!

I think given the additional housing being planned for Manor Rd and MLK Blvd it would make a lot of sense to have LRT along the Manor corridor, connecting Cherrywood and Mueller and MLK to downtown, it's already being upgraded to MetroRapid in this plan but it would make a lot of sense to go further. And if it's not feasible now, would there be any ability in the future to make the switch? And if it is feasible now, what's the reason for proposing it be a rapid extension instead of going further? This area, especially near Airport is already aggressively zoned for TOD, it would be great to take advantage of that now instead of waiting until it's maxed out in terms of housing capacity and the buses and roads are overwhelmed.

Ben White needs more Free lanes, Capital of Texas Hwy needs more lanes all the way and not turning into 3 lanes and then going back to two lanes right past the mall? Why are we not expanding Capital of Tx HWY? Will Manchaca road ever have a middle lane for turning cars?(Starting at WM Cannon and Manchaca) South 1st going North, will S1st ever have a middle turning lane?

East Slaughter and 35, Slaughter lane is only two lanes going east through all those new homes being built? Will there ever be 3 or 4 lanes? It is a nightmare of traffic on East of Slaughter.

Rail, Rail, and more rail, if we can't have a subway system then Austin needs RAIL. Why can't Austin do an Elevated Train like Chicago? Why take lanes away from the road, go UP fellas. Austin is only getting bigger and an E-Train or Rail needs to be installed to help.

Implement it as soon as possible! Can't wait to use all the new amazing transportation options.

Mass transit and Rapid Transit are the keys to unlocking Austin's continuing success into the future. Bold, prescient action plans in the present will absolutely yield huge multiplier effects in the opportunistic future. Austin must take these actions so as to not repeat errors of the past, such as the collapse of Hwy. 290 West. Weak leadership in the past allowed challenging problems of implementation to defeat desperately needed east-west access roads. Hwy 290 West could have become an alternate IH-10 W all the way to Johnson City. Hwy 290 West should still be made a priority and completed. Moving forward with the Recommended System Plan will provide the impetus to further expand and continually improve Austin mobility for reasons of quality of life, business opportunities, and dynamically effective growth in Austin, TX.

Would love more connections into and around Pflugerville. I do not own a car and live on the North Austin and Pflugerville boundary and right now it's easier to get downtown than even a mile away in Pflugerville.

Please make green line happen!!! We need commute option for Elgin manor residents. 3 trips a day of 990 is not enough. We've been talking and contemplating about this rail service for past 20 years! Would like to see it in my life time. Btw I'm in my 40s

I like the bold effective plan laid out by Project Connect. The ongoing pandemic has shown how clean the air in Austin can be when automobile travel is not a daily fact of life for nearly all residents. Please continue to advance this transformative plan and help to reshape Austin's broken transportation system, and build a better transportation future for Austin that helps to alleviate the effective pandemics caused by poor air quality, climate change, and sedentary lifestyle, the damage of which this new pandemic has made all the more apparent.

The key component of all of this is station placement. People will not walk more than 5 minutes to get to a station. The map is excellent, but if the stations are not (extremely) easily accessible, this will all end up like the red line...a big waste of taxpayer money.

I enthusiastically support the Project Connect Recommended System Plan and urge the council to do whatever they can to move this plan forward. With Austin growing so quickly, we need to plan getting people where they want to go without adding more cars. ASAP! :-)

It's about time!!!

More rail/subways take lots of traffic off the road; limit growth of traffic/pollution in town. Don't forget to connect regions (like Georgetown).

Need to add rail service to Oak Hill area, rail service along MoPac and 183 to Lakeline, and an east/west connector route along 35th street. Rail service should be totally free of grade crossings so trains can run at faster speeds. Need adequate parking at stations and buses to feed key outer rail stations.

Would like better public transport from Manor

I have watched I35 grow from 4 lanes across town to where it is now. Adding lanes, adding the upper deck, widening overpasses. Dumping 5 lanes of traffic into 3 southbound I35 lanes at 15th. Eliminating the RR tracks across I35 at Airport Rd. Every expansion was utterly obsolete before it was completed. Every improvement was over budget and behind schedule. Traffic was a nightmare before, during and after these construction projects. Look at the construction between Slaughter and Ben White right now on IH35. The construction lasts forever. A lot of us won't live long enough to see them completed. Now you want to do this all over town? Ridiculous! Start by making the 130 bypass from Lockhart to Georgetown free. At least 130 between the North and South 45 intersections with I35 should be open to free travel. All of the through traffic on I35 can be diverted to this route. Finish the 45 Southwest connection to I35 and create a 3rd North/South route and make it free to encourage more use. Finish the LaCrosse/MoPac intersection. This should have been completed before 45SW was built. East/West travel would improve if 290 didn't share I35 all the way across downtown. All of this is planning that should have been started and completed in the last century. Don't forget the MoPac toll lane boondoggle. Remember how long that took to complete and the budget overruns. Austin is too far behind the curve for in-town expansion. Move the traffic to the outskirts first then solve the in-town problems that remain.

There are several areas that need reliable connections (Leander, Georgetown, and the huge number of residences along Parmer north of 1431.

More importantly, the schedules need to be dramatically improved. Several times, we've wanted to use the metro for a convention only to find it doesn't run at times... or the convention is miles away from the nearest terminal. Walking is fine, but miles, in August, in Austin, with a child is not going to happen.

I left Austin for my current location after far too many years of I-35 traffic jams.

It does but should it? The "new normal" will have many more people working from home or remote locations, continuing the trend toward on line shopping and having an increased concern about the health impacts of mass transit. Spending money on fixed rail lines and tunnels is folly.

I can't tell from your maps where these lines are (what is the street name? cannot enlarge big enough to see the street names), but I can see there aren't enough cross-town (east-west) lines, so connecting from where you live to where you work will always involve multiple rides and connections without any good way to go east-west and also if you don't live or work directly on a line, it will involve needing transportation and parking on both ends. We definitely need something done, I hope you know what you're doing, but where are the east-west routes???

Not enough details provided to make informed decisions. Eg. What is the cost of the cross town tunnel and what are the benefits vs. simply blocking off some of the cross streets to traffic and so minimizing delays due to traffic etc. Excessive costs of this may threaten overall approval of connect project.

Kevin

Overall the plan in it's current state is great and and should be proceeded with full speed ahead. I think there is nothing being proposed that shouldn't be implemented, in terms of the expansion and enhancement of the system. There are some small items of concern, or things to think about going forward:

--Not that I think the plan does this per se, but I think that great care should be taken to make sure that "innovative" an "disruptive" solutions such as ride-sharing, and door-to-stop pickup, and are not implemented at the expense of existing, future, and even former MetroBus routes, frequencies, stops, and features/amenities. Let's build the best local bus system we possibly can before reinventing the wheel.

--I believe that the new MetroRapid routes are a great start, but lacks ambition in terms of the service area. The MLK and Crosstown lines should go much further east to avoid being obsolete on opening day. Also, there is no crosstown equivalent route south, say on William Cannon or Slaughter.

--The downtown tunnel and light rail lines will vastly improve transit connectivity to and from downtown. There will still be some odd transit deserts/backwaters in the heart of Austin. The Amtrak station is the biggest glaring omission (currently hard to access via transit, which is not at all addressed in the plan. If the tunnel were extended westward to the UP bridge over Town Lake, or the old railbed along (I think its 4th street?) re-built, there would be a rail link to the current station location, which would help in and of itself or allow for a number of other possible fixes, such as moving the station to downtown (would require realignment of the Texas Eagle along one of the MetroRail lines between Austin and Taylor). It would also provide transit to the Seaholm development, a site which it seems was built for transit but lacks any.

--There is still a dearth of transit to Pflugerville. The MoKan corridor should be developed as a commuter (MetroRail) line, and I feel this corridor is as critical as the lines in Project Connect.

--The idea of interregional commuter rail has really fallen off the plate after the last round of talks for LoneStar rail collapsed. We NEED a Georgetown to San Antonio connection via rail!

Do it sooner than later.

I haven't read all of the plan yet but have been skipping around to the different projects. It sounds very comprehensive and with a vision of a city that I'd like to live in. In particular, I've been for light rail forever and I'm glad to see routes that are more relevant then the last plan on the ballot. That one seemed intended for developers and increasing their profits, not for ordinary citizens. I lived in Washington DC for a short time, so I know how great it is to live in a city with excellent mass transit. Full speed ahead! Thank you for your thoughtful planning and for the opportunity to comment.

This plan is better for North Austin than South Austin. Connectivity in South Austin isn't really changing much in this plan. William Canon service needs to go all the way from Southwest Parkway to ABIA with a rapid bus or Monorail. Put the route in, and the riders will use it to get to the airport. The 333 isn't that useful today, because it doesn't go far enough at both ends.

Oak Hill continues to be under served. There should be a monorail route down HWY71 West and down HWY290W past the Y in Oak Hill.

I would LOVE to see an elevated monorail system installed to vastly increase traveler speed along MoPac, Lamar, and South Congress. It frustrates me that Capital Metro calls monorail experimental!!! How long has it been running successfully at Walt Disney? It was built before I was born! Then there is Seattle, and Las Vegas. Come ON! There is data that shows monorail works and is FAST and fully automated. There is no solid excuse why this mode of transportation is not being taken more seriously. Light rail sucks because it is at grade. It is expensive to build tunnels. Build up, not down.

This monorail could have TOD stations on the second or third floors of vertical mixed use properties along transit corridors, with collaboration with private developers.

TOD anchor stores need to include a grocery store, and child care center to get parents out of their cars. All transportation should also be bike friendly.

I think that at the moment Austin's public transportation system is flawed and unreliable. I think this project is a great opportunity for large improvement in the system, allowing more people to use it. I am very happy to learn that there is also a focus on making it better for the environment. I hope this project works out, I have been using the CapMetro buses my entire life and I would love to see the light rail and the tunnel.

May 15 - VCM District 4 & 7

Zoom Webinar

We should answer for our pre-covid routine, right?

I think you should also ask, who in your home uses transit? In my home, although, I don't use it that much, my kids do. They use it to get where they need to in the city.

To what extent are expected transfers between lines modeled in determining system ridership projections? For example does the increased ridership for LRT vs BRT on the Gold line from Campo 2045 data outweigh the increase in new Red line riders who would transfer to Orange and Blue lines (if red line capacity was expanded) from the same data?

Will the local addition of \$633m to the Texas Transportation Commission and CAMPO for the expansion of I-35 impact the local \$5.6b commitment to ProjectConnect?

Clarification re the marketing materials needed - Previously materials had Orange Line north of North Lamar Transit as a nice to have in the future "potential extension" - is it now a definitive part of project and no longer a "one day we hope to extend" to Tech Ridge?

The url <https://www.capmetroengage.org/en/content/orange-line> is the first page you land on with "orange line at a glance" which lists travel times from Tech Ridge which makes it appear this is now a permanent part of phase 1 or that there are no longer phases at all.

Also, the initial url uses Tech Ridge as the 21 mile route and not North Lamar Transit.

HOWEVER, your other document you link to from that 1st page:

https://www.capmetroengage.org/sites/default/files/orangelinefactsheet_08.pdf

states "The Orange Line is an approximately 21-mile light rail link with 22 stations, running from North Lamar Transit Center (183 & N. Lamar)...."

So is the 21 miles from Tech Ridge or from North Lamar Transit?

No worries. In that case, consider an extra "use transit every day" answer in your poll!

I hope you all will consider City transit back and forth to downtown from Bee Cave. Several of us don't want to drive/park downtown. Thank you so much.

The current proposal is to fund Project Connect through sales tax, the most regressive approach. Lower-income households in the north part of D4 would pay a much higher portion of their already thin household incomes.

The only significant proposed change in the north of D4 is for our North Lamar Transit Center to be used as a park-and-ride, an expanse of asphalt where more affluent households who live further north and northwest could store their cars during the day, while they ride the air-conditioned, wifi-equipped, train to their office jobs.

1. The unused space under the elevated sections of 183 and the new I35 flyovers would continue to be unused. Why can't this space be used as parking, like in Houston and in south Austin, and the transit center be redeveloped for community benefit, like the St John Home Depot site?

2. School children would continue to crouch outside of pool halls in order to access a wifi signal to do their homework. Why can't a gabillion dollar Project "Connect" also include broadband

What can Travis county residents do to make project connect happen before November?

Not a question, but I agree that we should not change our long-term vision for Project Connect despite the current situation. Infrastructure takes a long time to build, and in this case that might be a good thing as it will give us time to get past this current situation, even if it takes a few years.

https://capmetro.org/uploadedFiles/New2016/ProjectConnect/Traffic_Jam/What-is-Project-Connect.pdf

What is the difference between Light Rail and Metro Rail?

Are Trolley Buses being considered as Zero Emission Electric Vehicles besides Battery Electric Buses?

I am here from the Highland Neighborhood. We are very much in support of the transit promising to come to our neighborhood. We have had cap metro in our meetings to present as well as the public forums. Many of us are afraid it will not pass when brought to public vote, just because people say it's "expensive" or they live in the suburban areas and don't see how it benefits them. How can we as citizens help?

Is there a possibility of using the money coming in for the I-35 redevelopment to contribute to Austin transit or pedestrian/ bike improvements along our urban corridors?

Where can we find copies of the videos that are being played during this presentation?

At Light Rail & Bus Rapid Transit Stations, will continuous sidewalks be implemented as traffic calming measures to protect pedestrians?

How much will it cost?

Hi everyone, thanks for hosting the town hall. At this point, is it more likely that Cap Metro will move forward with a Green Line or an expanded bus system?

I'm a fan of the project. In your financial model. What is the projected fare for the light rail year-1?

What is the Project Connect vision for Lamar? It would be nice if it were easier to cross as a pedestrian. Particularly around Crestview Station. We should try to connect the neighborhoods on either side of Lamar.

Are there any funds earmarked for land acquisition for affordable housing to offset loss of homes and gentrification that will likely be caused by the expanded network
Is that 7-14 cents on the dollar?
How many participants are in this meeting?
Long-standing concerns w. east-west travel and connections. How does this plan address that?
How is Project Connect resolving the voids left when Capital Metro removed the few 24-hour routes there was?
Since the Republic Square and Downtown stations are situated at junctions between lines, a single island platform like the one in the illustration won't work, so how will the platforms be arranged? And will the junctions be flying junctions which will allow trains going in opposite directions to avoid blocking each other?
Is there further clarity available on project prioritization? What elements will happen first?
Was the purposed tax on top of the existing CapMetro Sales taxes or is this a different tax added to the existing property taxes?
Given the significant and increasing budget deficit at the federal level, what is your basis for stating an expected 40% participation in this project?
With the potential changes to the Land Development code significantly increasing property taxes to urban core residents how does this plan help/assist urban core residents?
Thanks Sam. The answer needs to be public though so that people in District 4 know exactly what it is we are voting for. Are we voting for a line that ends at North Lamar Transit and will maybe one day go to Tech Ridge, or are we voting on a line that is going to Tech Ridge now?
Affordability is a true consideration here in TC. How can Austinites keep up with fare and property tax increases?
Will new Transit Oriented Development zoning overlays be created to coincide with the potentially new transit stations?
Has City of Austin Zoning been engaged re: increased density along these new transit routes?
Thanks that answered my question. Which means the current materials are very misleading. They need to reflect what was just said on screen. That the first phase is to North Lamar Transit and that Tech Ridge is a later hope. So 2028 to North Lamar Transit and who knows when for past North Lamar Transit. The older materials reflect what he said verbally just now and the current ones do not.
Why is there not a stop at the Hancock Center on the Gold Line?
Thanks!
Facebook Live
Improvements for innovative purposes are interesting and mobility hubs are good conversation, but of those 40k you've engaged with, how many have you identified actually use Capital Metro daily, and who need 24/7/365 continuous service? Even in the poll shown on this feed, those who use Capital Metro a few times monthly reflect a larger presence than those who depend daily on service. So what are you all doing against the impact of the digital divide during the pandemic, to gain accurate feedback for Project Connect? I still believe that the conversation is missing quite a bit --
Una cosa es que nosotros los hispano usamos mas el bus y la mayor parte no hablan inglés nos quedamos en shock no se que se dice
Qué buscas traducción simultánea?
That is expensive.
Is there a way to spread the cost out to all residents instead of just on the backs of property owners. How can renters pay into this investment?
Taxpayer here in District 7 ready for the 5% increase. Great use of my dollars!
When will normal afternoon services to Round Rock?? The 50-150 specifically!?
Thanks for doing this Ron, Leslie and Greg!!
Looking at what Seattle has done, a big part of their success is making the system free for many, many community members. Assuming we can pass the election and invest from a public funding standpoint, can we find ways to cover the costs on a day to day basis for students, employees, - as many as possible?? Or is that not in the picture for Austin?
So true Randy about the nature of the City/Cap Metro relationship. Kudos!!!
May 18 - VCM District 1
Zoom Webinar
Now that the Gold Line has been changed to light rail; why should we trust this process won't result in the construction of the Gold Line instead of the Orange Line, given what happened here in 2013-2014 and the failure by the people involved to accept accountability for their roles in that process?
(I won't be able to stick around the whole time; I'm working today).

Given that major transit infrastructure projects like Project Connect have unintentionally resulted in involuntary displacement of low-income families and small businesses located in or near transit corridors in large cities like Austin, what resources will be provided to help prevent displacement of low-income families and small businesses located in or near Project Connect transit corridors in Austin?

What would the timeline be for the potential build-out of the Green Line (especially the first few stops in more densely populated areas)? Is this line seen as something that would come after the other rail lines?

Will equity enter the equation for when this line is built? Even though it might not have as much ridership as other lines, it is the ONLY new line that services northeast Austin (including a huge area that will not be serviced by new rapid bus lines).

Also, THANK YOU for including a new station at Springdale & Airport. Not having that stop in some of the earlier drafts was a real missed opportunity with no planned service to a huge population that the rail lines tracks go right through

Since we're discussing Project Connect in D1, what's the chance of us in the district getting later or overnight routes, so that we can have to opportunity to find employment in areas where 24-hour facilities are hiring, like North Austin and Round Rock?

Please give an update on MetroAccess.

I'm a resident of district one and I ride the bus to work sometimes and see the bus (specifically bus 300) more than 50% full before and after work. I see there are not many stops along the green line, which covers a lot of the east side, more so farther east. My concern is that there are not many stops along the green line but when you see lines like the purple line, there are a lot more stops. I can see there are several stops in and near the Mueller area but when you look at the green line, southwest of the purple line there are only a few stops. Clearly more stops are needed as I'm stating that there are many individuals in these neighborhoods that use CapMetro. How can you make the green line more equitable?

Why has CapMetro Ride completely stayed out of South and Southwest Austin? Mr. Tranvillion is correct that CapMetro is for "ALL" of Austin. We are a transit DESERT.

What is the revised construction timeline now that the gold line is LRT? The orange line should be the priority given the amount of people it will serve.

This website that describes the Airport Blvd Station says "choose the picture of each type for how you would like your community to develop in the future." Some of these areas are currently apartments for low-income families. I am a teacher at Govalle Elementary so my students are highly affected by these "future developments." How will you involve residents that currently live in these areas into this conversation? You cannot assume that they are accessing these conversations and are aware of potential changes to future developments.

<https://www.capmetroengage.org/en/content/airport-boulevard>

Will I be able to contact MetroAccess by text anytime soon? When I am on the street waiting and my ride is late, I can't hear the MetroAccess operators because of the traffic noise.

All questions and comments from the public should be available to participants during the meeting and to the public after the meeting!

What is the difference between a metrorail line and a light rail line

How does this cost structure compare to other cities building similar systems? The economic case based on the return for each dollar spent is important so thank you for sharing that, but it might also be helpful for credibility reasons to show that expected expenditures are in line with other cities building light rail or rapid bus lines. I assume these data are readily available since it's likely how the budget was put together to begin with.

Will public input be gathered on deciding on the built-out timeline? The difference between 15 years and 30 years is significant!

Thank you, Jo Anne!

Will this include sidewalk improvements for folks that are in wheelchairs and other mobility devices?

Title VI: January 28, 2019 Capital Metro Chair Wade Cooper admitted disparate impacts: "It is also undeniable that individuals may have seen, in particular areas, changes that did not help those individuals and maybe disadvantaged [them]. . . . particularly, with respect to the Eastside community." - Cap Remap's 6-15 min network is Project Connect's foundation, yet Northeast remains the tradeoff with Blacks waiting 60 min on FM 969/Craigwood and minorities 45 min north of US 183 (shortlined Route 392/243. -Why should Black taxpayers/minorities with no service or inadequate coverage vote for Project Connect considering Capital Metro's refusal to restore Northeast-west service like South/West/Central Austin, in part, 392 to Arboretum, Domain, and Northcross to safely get to jobs, education, and healthcare instead of crossing 7 lanes and waiting extra 30 min to get west, diminishing our quality of life on infrequent, unreliable, disconnected service—counter to equity? Thanks!

The red line currently runs on fossil fuels, will all future lines be electric powered so we can limit carbon emissions?

Why use rail rather than the wheeled electric trackless “trains” they are currently shifting towards in China?
https://www.citylab.com/transportation/2017/11/can-we-just-call-this-a-bus/545189/
For Delia Garza: What is the plan to connect the Rainey St District/ Mexican American Cultural Center to this corridor? There is currently NO BUS LINE that stops at the MACC, and we need to make it more accessible to the Latino Community. How are we making sure the MACC can be accessed by public transport with Project Connect?
For anyone: What is the plan to connect Project Connect to the Rainey Street District? Please provide specifics.
Thank you! I’ll try to stay up to date and share this information with my parents. I’m a teacher at Govalle Elementary and have not heard about Project Connect on my campus even though we have several families that use CapMetro.
What, if any, consideration is being given to meeting sustainability goals as outlined by Envision for civil infrastructure or LEED in general?
From the Northeast, Randy, it'd take me a month to get to my job in Kitchens' district through Capital Metro. How are you observing this and helping?
Please explain more about the Blue Line connectivity to Rainey Street
Facebook Live
U thank everyone but the Drivers who make everything happenssad just sad
Is there any polling going on currently to see how the current crisis may effect voting come November? BTW, I love the full scope of the project and feel our city needs this!
Thanks for the obvious, Natasha: Accessibility. How can we organize ideas to assist Project Connect be a pillar of support to those in D1? Meaning overnight routes for mass transit, repairs to East Austin stops, and easier commutes to South and North Austin --
When do you foresee opening the 980 bus route?
May 19 - VCM District 9
Zoom Webinar
How do you anticipate the pandemic will affect people's willingness to ride on public transit - or to pay for it?
Ditto to Oscar Rodriguez’s quetion!!!!
Outside dark money groups have been targeting local responses to transportation planning in cities like Nashville. What plan does CapMetro and its partners in the planned referendum have to overcome the opposition that sank previous referenda?
USB charging areas? Perfect place to plant computer viruses. Not safe.
The old downtown 'Dillo service was way ahead of it's time. Why not just bring a similar service back as opposed to building the incredibly expensive underground system. We're all used to the heat and don't need to live underground in confined spaces that will best serve the next pandemic outbreak.
The illustration of light rail suggested a street that was very wide. How will this work on eg Guadalupe between 45th and downtown? What will happen to all the cars that currently drive on Guadalupe? How will you stop them cutting through my neighborhood?
Your grapic shows light rail with tracks in two directions plus three lanes of car traffic on one side and two lanes on the other. How is this possible on the routes you’ve selected? Do you anticipate using eminent domain powers to widen existing streets? I’m a big supporter of transit, but also a fan of realism.
All of the drawings indicate at least 100' of ROW required. Where will eminent domain be needed to buy out current property owners? and where?
You said “Every \$1 invested in public transit generates \$4 in return”. Can you please provide a citation for that statistic?
ditto the Dillo. How many of your transit riders are parking on South Congress then taking the bus downtown? The parking meters installed downtown put too much pressure on the low-income workforce. The meters just take a lot of money from Austin and send elsewhere. It takes way too long to pay for them. More affordable spaces in the garages are needed.
When the Gold Line was upgraded to light rail, money was taken away from the Red Line. Under this new plan, will the Red Line be able to run trains in both directions at the same capacity?
You mention federal funding using the word "hopefully." What happens if they don't want to do business in Austin? Will the project be fully funded before construction begins?
Why are you proposing to tax residents of Austin to provide transport from other regions outside of Austin tax basis? Why not include a toll on car entrants to the city limits to help raise funds?
Adding new taxes simply makes living here more expensive. Houston pays from Sales Tax not property tax or have the new development pay that. \$16/month for each household? Wow, that’s a lot

I agree with Rich that the 'Dillo was great but I don't think it would support all the people that are here now. I like the downtown tunnel but I'm confused how far it will actually extend, and I'm also curious what frequency the light rail is expected to run at.
Does Project Connect tie into the City's Vision Zero program? The insertion of light rail and bus rapid transit lines is the right time to implement vision zero redesigns of wide, blown-out streets with slower, safer, less wide, and less lanes.
Given that one of the initial issues with MetroRapid was that stations were spaced so far apart that the lines failed to adequately serve some areas, why does the Orange Line remove stops when compared to the 801, even in Central Austin? Specifically, UT loses the Dean Keeton stop, and the northwest part of downtown loses the Museum stop. Won't this result in worse service in the busiest parts of the city?
Has the controller for the city of Austin noticed any changes in property values coinciding with the economic downturn (foreclosures can depress property values)? This could affect potential revenues.
Wont the blue and gold lines compete with each other for ridership?
Where will the two ends of the Blue Line river crossing be? I saw a map last year which showed it coming very close to the Orange Line with sharp curves, which doesn't seem like the best idea.
With more employees working from home on a permanent basis post COVID 19, will fewer rides be needed in the central city area?
Why was the gold line converted to a fixed rail from a bus route?
Does the \$10 billion cost include the capitalized value of all leased equipment. When the Red Line was approved by voters years ago, the cost told to the voters did not include the capitalized leases of the equipment. Will it be done correctly this time?
Are there any plans to have more station connections between the gold line and the red line since they run very close to each other? Also, are there any plans to connect the gold line to the orange and blue lines at crestview?
Will dedicated transitways for the gold and blue line require any eminent domain proceedings in central austin?
If the Board and Council vote to move forward with everything proposed, which elements are the top priorities - focus on the highest cost/highest capacity items first, e.g. light rail, or focus on the lower hanging fruit to show progress, e.g. rapid service to more areas of town?
are the men wearing long trousers?
What do you do with the existing traffic during construction? Alternate routes or just a free for all?
What is the new Transit Partnership Board? What will be its membership? How will it be chosen?
As a rower on the lake, I don't want to see another bridge across the lake. Can you make the lines across current bridges?
For anyone. Could you touch more on what the new "Trasit Partnership Board?" What would the board do, who would be on it, etc.?
I was not asking about downtown in my question about street width! My question was about Guadalupe between 45th and downtown. The answer given was completely disingenuous!
What about making transportation more available for older adults that transportation may be a prob?
does the city have the ability to partner uniquely to coordinate things like ROW needed for station entrances and possible public housing or dedicated affordable housing on top?
For Kathie Tovo, you've usually opposed plans to bring more density and walkability to central Austin neighborhoods. Will you start to allow more density in areas around the new rail stops if these transit plans succeed?
Will we be able to eat on the trains? I've lived in NYC (where you can) and the bay area (where you can't) and this is important to usefulness!
I am very excited by all the information presented here today and I fully support the Project Connect Plan. Light rail, BRT, and transportation options that get people out of single occupant vehicles is critical to our future as an equitable, sustainable city
Facebook Live
Thank you for having this opportunity to discuss the future of Austin transportation. Your efforts to reach the community has been fantastic. What can the community do to help make public transit happen in our area? What happens to our region if we don't act? How important is transit for jobs, employment and our regional economy? - Tina Cannon, Executive Director Austin LGBT Chamber of Commerce
Transit makes up a major part of how I get around, and I'm incredibly excited about the Gold Line, which will serve my current neighborhood. Right now we're talking about a huge expansion of services, but one issue that many of the clients I work with in my social work day job and I have all talked about: comfort on transit. How are vehicles looked being looked at for updated fleets to make sure that they are inviting and welcoming to ridership? Some specific complaints I've heard are the lighting and lack of sufficient stop statements on routes other than on the rapid service. Edit: I had the wrong color for the line along my street.

Austin is such a fluid town for the LGBT community. Unlike most cities there is not a traditional "gayborhood" but a good deal of our socialization does happen in downtown, D9. Can you talk about the access points to the DT area, specially 4th street area- home to many of the LGBT social spots?
that answer is going to be exciting. It looks like that will be the route of the downtown tunnel connecting Riverside to Republic Square.
Will above-ground stops also have platform screen doors?
What will bridge/tunnel look like crossing Town Lake?
Why are there less bus in poor section of towns where people need the bus to get around?
We need a Dillo-like system downtown! So much of late-night and daytime traffic comes from people getting from one area to another within the city center
May 20 11AM - VCM District 6
Zoom Webinar
In regards to the \$10billion economic benefit, is there public access to a utilization strategy?
Could you all explain more to me, what "Transit Referendum to the Tax Rate" means?
Is it correct to say that if we use a tax rate election to pay for project connect that it will be an immediate tax increase after its approved, and that austinites will pay that full increase throughout the buildout of improvements? Isn't it typical to use a bond where the tax impact fades in over time?
Not a question.. but a point - Tesla may open a factory here and add to traffic.
thanks
Jimmy, always appreciate your eagerness. Are you confident that the Downtown Tunnel will help alleviate traffic in the FM 2769/Anderson Mill area? How and why?
There are "New" park and rides "Outside" the service area.
Facebook Live
I love it! Better to be future proofed than having traffic all way
The potential Manor/Elgin extension... still TBD?
Is that slide covering all the phases? Or is it for a specific part of the project?
In regards to the \$10bil economic benefit to us in the Project Connect plan, is there public access to a utilization strategy?
What about South?
The potential future expansion for the green line... what's the hold up? Just to better understand if it is demand or something else
Could you all explain further to us, what the "transit referendum to the tax rate" will include?
Can the south have options as well?
Want less cars on the road let people work from home!
No more taxes!!!
Oakhill needs options
Thank you
Huge tax increase to pay for
Jimmy, appreciate your eagerness. Are you confident that the Downtown Tunnel will alleviate traffic in the FM 2769/Anderson Mill area?
We don't need a tunnel, take an overhead view there is plenty of space for more lanes.
the tunnel would be better for the long run...
You are are not understanding the cost. No can not hide the need for roads!
I can't imagine a mature city without a solid transit system, yet I wonder about the coming about to have autonomous, electric, on-demand vehicles that could be game changers. Especially with a 30+year horizon. How do these fit together?
Open up the 130 and witness the relief on I-35!☺
Eric, thanks for your anecdotal perspective. I'd love to compare your service delay stories west of Mopac with that of mine in South & East Austin --
Traffic already is a huge tax on commuters and the environment.
Let's keep Austin beautiful and unique. I was born and raised here. Would like to see it kept simple. Please no tunnels like big city.
Looks like that ship has sailed. Austin already is a big city and it's going to continue getting bigger.
Yes, indeed. The majority that visits falls in love with our town and ends up moving here. I don't blame them one bit. It just takes the small town feeling away seeing high rises and congestion. Next will be smog filled skies.
hence the need for mass transit.
We Don't Want Our City Built, We Want Our City Back. Thank You Very Much♡.
you may want to reread your statement. So at what point was the built enough?

All future roads, should be built 4 to 5 lanes wide.
Let people work from home.
yeah, bc that has worked out so well in Houston, LA, Dallas, etc...
the city is not everyone's boss lol
Build the roads up
https://www.citylab.com/.../citylab-university.../569455/
We Wouldn't Need All This Unnecessary Money Spending If You All Would Stop Letting Outsiders Come In To Accommodate Them, While Inconveniencing The Born And Raised. Really?
really, so build a wall then?? No more freedom of choice.
Your funny 😂😂😂😂
I am all for expanding rail! But, while traffic is currently reduced and a lot of people are looking for work, could we also do something to build out the main thoroughfares in Greater Austin?
already happening, see the mobility bond of 2016.
but have they ramped and speeded it up during the pandemic?
"The next president and chief executive officer of Capital Metro will be paid a salary of \$285,000 a year, the transit board decided Monday.
Under the five-year contract, Randy Clarke also will be paid deferred compensation of \$25,000 a year and will be eligible each year, subject to the board's evaluation of his performance, for a raise in his base pay and a bonus of up to 10 percent."
Doesn't this pay seem excessively high for someone who works for the people, with the people's tax money?
May 20 5PM - VCM District 10
Zoom Webinar
Can you explain how Enhanced MetroRapid Routes will be different than the existing bus routes that are operating currently, along the same routes?
Is there any motion to make public transport free?
How do you propose to transport commuters from the (proposed) Park and Ride at Loop 360 to the MetroRapid bus station on Red Bud and Lake Austin Blvd? It's a little too far an hazardous a walk.
Mr. Calhoun just discussed the overview of the plan. Can we get further explanation of the "Park and Ride" expansion, especially the 10 of the 24 outside the service area? Also the "EIGHT" NEW routes, FIVE of which are outside the service area. After listening to this presentation several times, nothing has been really said regarding this portion of the plan. Thanks
where would the regional transpo center be located?
If I understand correctly, this will be paid by increasing property taxes. Is there a way to have citizens who are renters contribute as well verses just the citizens who own property?
IS there a role for other jurisdictions to help pay for this as it will be a regional resource
Would there be an end date to the property tax to pay for this or would it be a never ending tax?
did the timeline indicate that revenue will come from City budget (property taxes) and GO Bonds?
What home value was used for the estimated monthly tax impact of the transit fund election?
Transit bonds have failed in the past. How will this Project connect bond be presented to get it passed by a majority?
Multiple previous Project Connect Open Houses have shown that Burnet development will destroy access to existing businesses from, at least, Koenig to Anderson Lane. Despite community input, Project Connect refuses to remove the center median that does not appear necessary according to their own safety data. How will the City assist the small businesses they will destroy?
Will Republic Park remain?
IN all European countries you hardly ever take your car to the airport - why can't we have a policy where going to Airport should be forced to use public transport
Facebook Live
Is the present council member willing to increase entitlements at least within half mile radius around stops? Will she also support the code rewrite to help ensure the success of these lines and to add much needed housing?
Alison, I know you never forget your constituent base that earns less than the MFI and cost of living here in Austin. We're concerned about rising property tax rates in the proposed Project Connect tax rate referendum that will push us away from the apartments and dwellings off of Jollyville Road and Oak Knoll, etc. that we must at some point get back to, to continue working at the restaurants and other retail locations in D10 --
Thank you for sharing the project connect plans. It's exciting! Does the plan include better connectivity to ABIA?
Thank you, Jo Anne!

Tenured citizens are not so much worried about connectivity to ABIA, but from where they're being relocated to, to where they work. For example, someone from 78702 who moved to Dove Springs, needing to still commute to their role in the Arboretum --
Will this be a permanent tax increase?
May 21 6PM - Spanish Language VCM
Facebook Live
Maravilloso!! tiempo en 20 minutos wow♡
Estas rutas estarán disponibles para áreas como del valle o hornsby bend?
Están planeando el tren rápido para rutas del sur este de Austin?
Muy buena propuesta para mejorar nuestro ex tres♡
Wow, es estupendo
May 26 - City Wide VCM
Zoom Webinar
Has a micro bus alternative been evaluated?
If the Federal Government passes an infrustrtuctor bill will that reduce the amout of funding required from the city?
Is the plan to still go to vote in November? Or will it be delayed as people need significant time to regain their financial footing due to COVID before asking to raise taxes?
Airport has a captive audience 95% of which comes to Austin so why not start the public transport there. IN all European countries you have over helming mass transit from Airport - which not use that as a model and start it from the Airport. You have a captive set of folks who will definitely use it.
Will there be access for individuals who live on the East side of town across 183?
Will the proposal moving forward include a "first mile - last mile" electric vehicle solution that will open up mass trasit to neighborhoods through which buses don't travel?
Ehy can't I type
What project delivery method (ie. design build, design-bid-build etc.) is planned for the larger infrastructure portions of ProjectConnect such as the downtown tunnel and what timeframe would those projects be procured?
How do we get the citizenry involved in marketing this solution?
How are you incorporating in the plans consideration of the long-term impacts of this virus, which could be around for years, and future viruses on people's ability and willingness to use transit?
I think it plan is genuinely amazing. Are the uses in the Recommended System Plan reflected in CAMPO 2045? More generally, how do we ensure that the other regional stakeholders are aligned on the vision?
Has the pandemic caused any rethinking as to the viability/desirability of mass transit?
Will the underground stations really have platform screen doors, or is that just a proof-of-concept?
What is the potential for driverless smart vehicles to significantly decrease traffic congestion?
The presentation gave a "typical street with light rail in the center" graphic. This showed a four lane roadway with an additional two lanes for light rail. Where in Austin will this be the case in Austin? The routes for light rail don't appear to have six lanes capable of accomodating this roadway configuration. Will additional ROW be required and where?
Congrats on the HEROS of DELIVERY for Food Bank!
Great INNOVATION!
Can we Optimize Assets, Reduce Congestion, Deliver to those in NEED with a transparent, accountable, private, secure and SAFE DELIVERY OF PEOPLE and PACKAGES?
Can City of Austin accept REVENUE (as Sales Tax Revenue decreases via COVID) with City Assets of CURB, SIDEWALKS, and PARKING be optimized and BOUGHT/SOLD via a real-time Geolocation EXCHANGE?
Attached is an overview as DART becomes DARD (Dallas Area Rapid Delivery)
www.SeatsX.com
www.ShipsX.com
See attached Texas Cities as we move to the future!
Safety, Security, Transparency, Accountability, and Privacy in GUARANTEED DELIVERY OF PEOPLE AND PACKAGES
Thanks!
Mark Spilotro
mark@SeatsX.com
I'm really excited about this proposal and hope it moves forward for this November. A couple quetsions: 1: On streets (such as Riverside Dr.) where there is a center median with trees planted, could the rail go to the side of that median? It would be a shame to lose those trees that are needed to help keep the area cool and clean our air. 2. What is the current thinking about fares? Will ligh rail cost more to ride? Will there be discounted fares for lower-income riders?

Will we see an outline of the actual legal relationship, not just a org. diagram, between the COA and CMTA to build, own and operate the rail and BRT service. Will the COA control the relationship given it will be the capital funding source and provide the bigger part of the O&M funding?
Why invest in Gold Line instead of more investment in systemwide Rapid buses that would move more people in more areas of the city?
so, it appears that the system will not be self-sufficient. What percentatge of ongoing costs will be covered by fares?
When will be see the actual O&M budget and proposed revenue sources. The funding discussions todate and on line are inadequate to understanding the level of committment to fund the Project Connect proposals. What sensitivity analysis has the COA and CMTA done to assure us the funding will be adequate regardless of the economic environment.
If the City will be using tax increment financing (TIF) to support Project Connect, how will the COA assure we are getting affordable housing in the TIF districts without hurting the revenue needed for Project Connect?
What was the reasoning behind changing the gold line from BRT to LRT?
Where are the revenue projections for the proposed Project Connect revenue sources? We need more than tax bill impacts info.
How is a light rail train supposed to go up the hill on south congress? Would a better starter line be the top half of the orange line into the bottom half of the blue line?
Will the COA be licensing the roadway ROW to the legal entity proposed to manage the Project Connect projects?
What programs are envisioned for encouraging use by individual and small to large biz users? This can include education and engagement for culture change, incentivizes from biz for their workers/commuters, fare reductions or even fare-free, etc.
Has CMTA looked at offering subscription micro-transit able to have access to, and use of the dedicated BRT rights of way? This type of servie is offered in Calif. cities and in other countries and could help pull ridership to the Project Connect offerings from auto commuters.
Why are there multiple rail laines serving the same stations? (overlap of the orange and blue lines and overlap of the gold and orange lines)
I believe mobility and public transportation is a basic needs and should be free to all citizen. Would you work on providing the service free of charge to the citizen of Austin.
How will the new services be branded to create a new vision for the city's transportation solutions and attract new riders?
What impact will this rail line have on # of vehicles on the major thoroughfares (I-35, MoPac, 183)?
Does the city or CMTA pay for street damage from CMTA buses, particularly on new routes? This cost should be included in the Project Connect funding plan.
Does the Mayor have an idea of what the mazimum bond program would be? What can we afford under this max?
Mayor Adler - CapMetro has a large team of consultants driving this project forward. Does the City of Austin have a team of consultants as well looking out for the City's interest as it is the primary funding partner for this program?
Is Capital Metro looking into any sort of automatic train operation for the light rail lines in the downtown tunnel to improve safety or headways between trains?
Why not use the Bergstrom Spur to give us early access to the airport? This route gives the best tax increment financing revenue opportunity and connect better to S. Austin than the current Project Connect plans.
Can Austin expect high ridership if we continue to build large parking garages and offering space for free to car owners?
What is the expected financial impact to property taxes for homeowners? If I heard correctly, it was mentioned earlier that the property tax may be 3-5%?
If the current tax rate in Austin usually ranges anywhere from 1.8%-3.3% of a home's assessed value, and the median price of a home in Austin as of June 2019 was \$428,426, then adding a 3-5% increase on property taxes would bring the tax rate to 4.8% to 8.3%.
If you average the property tax rates for homes that sold in Austin (city limits and/or mailing address) over the past three months (04/16/2019-07/15/2019), you'll find the average property tax rate is about 2.28%. If you use the median price of a home in Austin in June 2019, \$428,426, you'll get an average property tax of \$9,768/year. Adding 3% to the tax rate would result in a tax bill of approximately \$22,620/year and adding 5% to the property tax rate would make the average tax bill \$31,189.
Given we already have Housing Affordability crisis in Austin, how will the City ensure this doesn't force p people from their homes.
So GREAT to see you Ron Oliveira! You look wonderful!

Have you considered adding a Capmetro rail infill station at Hancock?
Facebook Live
Blah blah blah Whisperin' Steve. You ruined Austin.
That's going to be more costly
Metro is a big disappointment to the Austin community they need to just stop their service
I was just passed and left by two buses this morning on my way to work and was fired for being late
We built TONS of infrastructure that we still use NOW during the Great Depression.
Parks, buildings, dams... were built and provided jobs. We can't afford to wait, but we should revisit the plan.
We need a much more robust e-bike way system with tunnels and bridges going over and under roadways and highways. We need to cut through neighborhoods and have dedicated Suspension bridges over ravines to connect places over the Barton Creek Greenbelt. We need quick,safe and fast connections. We need bikeways along rail and freight ways. We need to be able to commute without having to stop for traffic lights or navigate winding subdivisions. We need speed and safety. Make it happen.
We need much more rail, and we need it yesterday.
Kudos to those who put all this together. It looks really amazing. Very well planned. That being said, this kind of initiative would only be possible PRE-COVID-19. We can't do this now. We can't think about this now. There's no money for this. We can't even entertain such a project when we don't know what's going to happen with the coronavirus. How are we going to pay for this when our country and state is in the middle of a pandemic and on the precipice of a recession? It seems really tone deaf to attempt to push forward such a huge, costly, unnecessary project when millions of people are just worried about keeping their jobs and feeding their families. Can we just put this on the shelf and revisit it in 5 years?
this has already been put on the shelf for far too long.
Each \$1b spent equates to 21,800 jobs- Each job costs \$46k to create?
AND more important a service that will be used millions of times over the course of its year in service!!! Sounds like a bargain!
May 28 - VCM District 5 & 8
Zoom Webinar
Will Cap Metro serve Lost Creek (In Westlake Area) now that its full purpose COA annexed? If so, how and how will we be keped safe from potential crime realted to CAPMETRO presence?
Rep. kitchen attended a meeting of the Southwood Neighborhood Association and we discussed the Bergstrom Spur project. We were told to support Project Connect if we were interested in the Bergstrom Spur Trail. I visited the Project Connect virtual open house, but did not see the Bergstrom Spur mentioned. Did I miss it or has it been omitted from the program. If it was omitted, what is the plan for the Bergstrom Spur?
How will social distancing on mass transit affect transit revenue?
If riders have to sit six feet apart, there will be fewer riders on a given bus or train and thus less revenue.
Very happy we're moving forward on transit. Question: while I think the outline of the lines for train and bus are great, I haven't heard a lot about interconnection from the lines with bike and ped. Many east/west streets aren't suitable -- Oltorf comes to mind (or enfield or 2222, for that matter). the mobility plan envisions not only shifting to public transit, but also increasing significantly bike and walking. Thoughts?
I get the impression that Loop 1 north and south bounds operate like a vulture culture! during rush hours the Express lane price goes up very high (almost \$10 for a five miles stretch). The effort should be to move the traffic during rush hour rather than use the hardship of the driver too enhance the coffers of the City! We believe that during the rush hour, the express lane should remain at the same rate and not increase!
Would like to hear more information on plans to expand East-West service and connecting ACC campuses in a more rapid manner.
As an infrastructure jobs program, Project Connect doesn't qualify as shovel-ready by any stretch of the imagination. When you will start hiring construction workers to build Project Connect? Where will the funding for their salaries come from?
We need more roads and highways dedicated to vehicular traffic. More parking garages,more lanes on existing roads. The people of Austin has complained for over 20 years that Austin had insufficient roadways for cars. Light rail is too expensive and does not solve the transportation needs. City after city that had light rail projects had huge cost overruns and did not have the volume to be profitable.
Will the tax increases be permanent or will the have an end date?
What is the annual tax burden to individual taxpayers / property owners. How many years will we be paying / subsidizing this system.
If taxpayer reject this at the election, and given current conditions they likely will, what is plan b on funding

Your reference to new jobs is a euphemism for more government bureaucracy. These jobs do not spur private sector employment nor do they create new businesses. The government will expand exponentially and with it new taxes. When capital metro first started over 30+ years ago, What was sold to the taxpayers was a fleet of buses that would quickly pay for itself and the funding source was a new sales tax levy. The City Council assured everyone that the tax would be temporary and sales tax rates would resume back to the previous rates. The sales tax is still 8.25%, the MTA keeps adding more costs and new buses. None of the promises made have been kept. The final point is cost. We already pay for half-empty buses and now you want to add more costs and light rail. The City Council gave an estimate of \$3 to \$10 billion dollars. No one should vote on any measure without a complete cost/benefit breakdown.

Where is the additional street/highway component? We're the 11th largest city in the country and only have one interstate highway

The votes have twice rejected light rail ... why do you think they'll approve it this time?

Since public transit projects typically cost 200% or more of the original estimates provided to the voters, what is your contingency to get an additional \$9.8 B to fully pay for this?

What pct of the new bus seats do you project will actually be used? Is that number realistic in light of historical bus usage?

We have low rider ship in SW Austin because we have NO TRANSIT NOW. We have been promised transit for years - why should we believe it now?

If you compare things to NY, maybe you should consider brain transplants into Texans to try to convince us we don't like our cars. We do!

any consideration on adding an additional fee to game day or airport usage as examples to help offset tax base contributions?

Are there any plans for campaigning to highly encourage taking public transit over driving oneself? How can begin to change the "driving culture" so to speak? How can we ensure that citizens really utilize the rails and buslines over choosing to drive if they have that option?

Facebook Live

CM Kitchen attended a meeting of the Southwood Neighborhood Association and we discussed the future of the Bergstrom Spur. We were told to support Project Connect if we were interested in the Bergstrom Spur trail. I visited the Project Connect virtual open house, but did not see the Bergstrom Spur mentioned. Did I miss it or has it been omitted from the program? If it was omitted, what is the plan for the Bergstrom Spur?

Thank you. I hope I get an answer tonight. I have attended other CM zoom meetings and did not get my questions answered. I know they are busy, but I am hopeful tonight.

Damn right it ain't right

But is it going to work?

Can't hear you

Hi austin

Mad

Is how I feel

Work on how to do better first

Where is the money coming from? Covid knocked everything off.

I won't be able to joy it I'll be to old by then

I like the plan. What is the timeline?

metro rapid expansions as soon as four years! and orange and blue line 8-9 years! this is what i recall from the last meeting, double check on that!

In south east

TRANSIT is a UTILITY Infrastructure (a la Power, Water, etc)..

I live off riverside and grove. Can you talk more on improvement for this area?

So be honest if a guy asses you out on a date with a bicycle while you go

Necessary for our ECONOMIC HEALTH !! 💰💰💰

Which line would start first?

What happens to the old north Lamar transit center

Will the tax increases be permanent or will they have an end date?

Its a UTILITY..not a single Project.

Conventions, Events, Hospitality taxes will pay for much of this. (SXSW, ACL, Conventions...) Folks, ATX is an INTERNATIONAL CITY that folks LOVE to visit !! 😊💰😊💰😊

What would riverside look like after construction? Trying to visualize what this area would look like

Please address: The "Tax Rate Election" seems far fetched with the current talk of raising property taxes for current "state of emergency." Can you move forward with Cap Metro and Federal funds for now?

Nice! I am 39 i well be on aarp when this is done
You.ll be w aarp at 49 ?? 🙄
that quick
But ya know..I think You can.sign up at 50 !! 🙄📱
I am on Facebook and Zoom at the same time.
I will attest that the city SIDEWALK SYSTEM has VASTLY IMPROVED over past 5 yrs !!...making for better Multi-model inter-connection !! 🚶🚶🚶🚶🚶🚶
If the blue line is going into the airport, is the airport going to help pay for the line?
Are the fares going to go up post covid to help pay for this as well?
Who asked that about more ROADS ??!! READ UP !!..Ya CANNOT build out of TRAFFIC..EVER !! (Ask Houston 🙄🙄🙄)
Thank you Council-person Paige (My district) and Council-person Kitchen and Mr. Olivera and the other participants. Your leadership on this issue is important and well-done. Godspeed to "Rapid Transit."
We got skipped lol
not your fault due to time. This was a first time real time seeing this. When is the next one?
May 29 - VCM District 2 & 3
Zoom Webinar
What is the current thinking about connecting to "last mile" or "last block" transportation options to incentivize people to use public transit to get as close as possible to their destinations?
Great to see so many more Park & Rides. Will you be adding Level 2 EV chargers in those new and in existing Park & Rides to help encourage the growing number of EV owners to use public transportation?
Love this plan, we need equitable and sustainable transit solutions that keep us out of traffic. How can we support?
How do we avoid a boondoggle? Transportation projects like this turn into major cash cows for the financiers and developers. Cities like Denver and Boston have done similar projects...they go way over budget and take much longer than promised. How are learning from other cities to avoid such problems?
Would those additional jobs be permanent, or temporary in conjunction with the transit project development?
For the Council Members -- how can the City help assure that affordable housing will be developed along transit lines?
How do we ensure that new housing along transit does not help displace more people of color from Austin?
Are we planning ahead in current construction for future projects? The downtown station is in major construction right now, I hope we wouldnt need to tear it all down to build ProjectConnect.
What all can be done to help shift our culture away from driving and encouraging citizens to ride transit if they have the option? I feel a lot of people in the South especially are attached to their cars and don't know how convenient taking public trasportation can be.
Thank Each of You for doing this!! We love Mayor Pro Tem Delia Garza and Citycouncilman Pio Renteria.
They are both doing such an excellent job.
My question: How can we help make this happen much faster than 20-30 years? Not super fast but smart. Just faster.
Currently, it's a ~10 min uber from the airport to east 5th/6th street. Is there an opportunity to make public trasportion more appealing for that route?
How will Covid-19 affect voters' interest in ProjectConnect? Do you anticipate a drop in enthusiasm for public transit as people fear disease transmission? How will we tackle that challenge?
Re: the tunnel - Where would the underground tunnel begin and end? What sub-surface geologic studies have been done to analyze the feasibility of this project in light of sub-surface springs and rock excavation? How much would this tunnel require in the cost of condemnation of private property?
Awesome! 57 new affordable condos!
For City Council - What are the next steps on the resolution that was passed by City Council on April 23 re: implementing transit-infrastructure related anti-displacement?
*anti-displacement strategies?
The marketing for ProjectConnect does not mention climate change or environmental sustainability. It does mention zero-emissions, but why not explicitly with that context?
What federal grant programs would be available for the different elements of this overall project? The tunnel alone would cost \$2.5 Billion. Can you specify the different federal grant programs and how much fedearl taxpayer money would be drawn down for particular aspects of the project? This is a use of federal taxpayer funds in addition to local taxpayer funds. So we would be taxed twice.
What can we do to help secure our federal funding?
Facebook Live

Please kee all bus drivers safe!!!!

Please post your questions and they will submitted to the panel. If not answered live, you can review FAQs at projectconnect.com.

Why TRANSIT ?? You want ATX to be the ECONOMIC DRIVER & TECH LEADER that it is ??? Gotta have TRANSIT !! 📄

No Transit..Austin FALLS BEHIND !! 😞🙄😞🙄

Godspeed to these Leaders & to their City and Godspeed to Capital Metro Rapid Transit!

APPENDIX D: CORRIDOR CONDITIONS REPORT

Planning & Environmental Linkages Study

Corridor Conditions Report

June 21, 2019

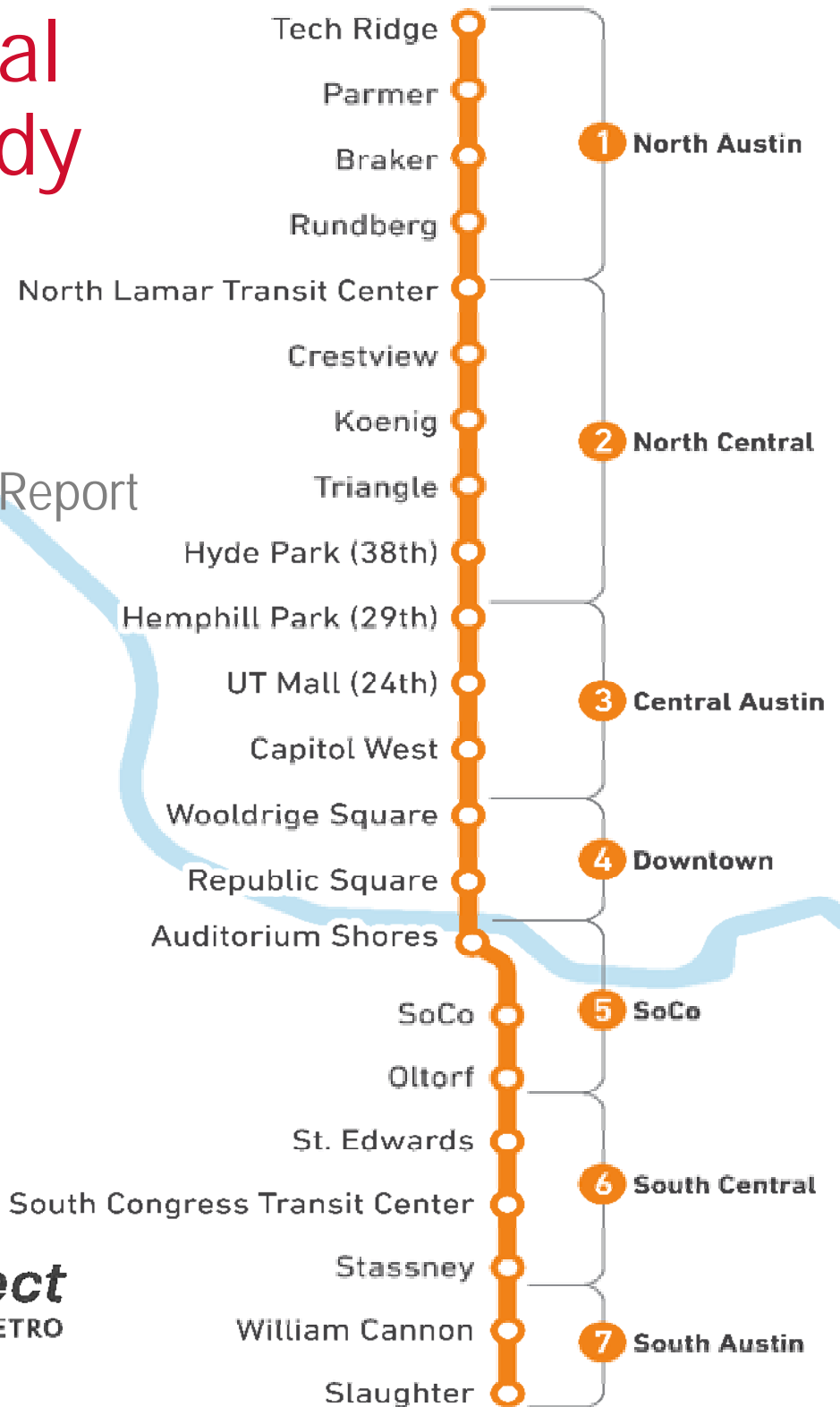


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Acronyms and Abbreviations

µg/m ₃	Micrograms Per Cubic Meter
µg/m ₃	Micrograms Per Cubic Meter
ACS	American Community Survey
AISD	Austin Independent School District
AOR	Areas of Responsibility
ARR MSA	Austin – Round Rock Metropolitan Statistical Area
AST	Aboveground Storage Tanks
ASTM	American Society for Testing and Materials
BCCP	Balcones Canyonlands Conservation Plan
BGEPA	Bald and Golden Eagle Protection Act
BRT	Bus Rapid Transit
CAA	Clean Air Act
CAMPO	Capital Area Metropolitan Planning Organization
CAPCOG	Capital Area Council of Governments
Capital Metro	Capital Metropolitan Transportation Authority
CO	Carbon Monoxide
CO ₂	Carbon Dioxide
CoA	City of Austin
CWA	Clean Water Act
e.g.	exempli gratis, for example
EB	Eastbound
E-bus	Entertainment bus
EJ	Environmental Justice
EMST	Ecological Mapping Systems of Texas
EO	Executive Order
ESA	Endangered Species Act
ESRI	Environmental Systems Research Institute
F	Fahrenheit
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FM	Farm-to-Market
Ft.	Feet/foot
FTA	Federal Transit Administration
GIS	Geographic Information System
HPALM	Hybrid Potential Archeological Liability Map
HCT	High-Capacity Transit
HTCs	Historic Texas Cemeteries
HUC	Hydrologic Unit Code
i.e.	id est, in other words
ICT	Innovative Clean Transit
IH	Interstate Highway
IHWCA	Industrial Hazardous Waste Corrective Action
IPaC	Information for Planning and Consultation
ITS	Intelligent Transportation System
LEP	Limited English Proficiency
LOS	Level of Service
LPA	Locally Preferred Alternative
LPST	Leaking Petroleum Storage Tank
LRT	Light Rail Transit

LWCF	Land and Water Conservation Fund
MAP-21	Moving Ahead for Progress in the 21st Century Act
MBTA	Migratory Bird Treaty Act
mg/m ³	Milligrams Per Cubic Meter
MSL	Mean Sea Level
MLK	Martin Luther King
NAAQS	National Ambient Air Quality Standards
NB	Northbound
NDD	Natural Diversity Database
NFIP	National Flood Insurance Program
NHD	National Hydrography Dataset
NHL	National Historic Landmarks
NO ₂	Nitrogen dioxide
NO _x	Nitrogen Oxides
NPA	Neighborhood Planning Association
NPS	National Park Service
NRHP	National Register of Historic Places
NWI	National Wetlands Inventory
O ₃	Ozone
OTHMs	Official Texas Historic Markers
PARC	Parks and Recreation Department
Pb	Lead
PEL	Planning and Environmental Linkages Study
PM	Particulate Matter
PM ₁₀	Particulate Matter Smaller than 10 Microns in Diameter
PM _{2.5}	Particulate Matter Smaller than 2.5 Microns in Diameter
ppb	Parts per Billion
ppm	Parts per Million
ROW	Right-of-way
RRT	Rapid Rail Transit
RTEST	Rare, Threatened, and Endangered Species of Texas
RTHLs	Recorded Texas Historic Landmarks
SAL	State Antiquities Landmark
SB	Southbound
SH	State Highway
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SO ₂	Sulfur dioxide
SS	State Highway Spur
St.	Saint
T&E	Threatened & Endangered
TARL	Texas Archeological Research Laboratory
TASA	Texas Archeological Sites Atlas
TCEQ	Texas Commission on Environmental Quality
TEA	Texas Education Agency
THC	Texas Historical Commission
THSA	Texas Historic Site Atlas
TPWD	Texas Parks and Wildlife Department
TWDB	Texas Water Development Board
TX	Texas State Highway
TxDOT	Texas Department of Transportation
U.S.	United States
US	U.S. Highway

U.S. EPA	U.S. Environmental Protection Agency
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish & Wildlife Service
USGS	U.S. Geological Survey
UST	Underground Storage Tank
UT	University of Texas
VCP	Voluntary Cleanup Program
WB	Westbound
WBD	Watershed Boundary Dataset
WOTUS	Waters of the U.S.
WVC	Wildlife-vehicle Collisions

1.0 Introduction

Over the last several years, the Capital Metropolitan Transportation Authority (Capital Metro) has conducted a number of transportation-related studies within the Austin area. The *Project Connect Central Texas High-Capacity Transit System Plan* (Capital Metro, 2012) outlined the goals and priorities for high-capacity transit (HCT) service in the region. It identified the regional transit needs and provided a solid framework for moving forward with development of HCT in Central Texas. The *Project Connect Central Corridor High-Capacity Transit Plan* (Capital Metro, 2014) was one of two priority corridors identified by the Vision System Plan for development of HCT solutions. The current Project Connect initiative carries forward the goals and objectives of both the System Plan and 2014 studies, while aligning its goals with those of the *Capital Metro 2016-2021 Strategic Plan Overview* (Capital Metro, 2016) and *Imagine Austin Comprehensive Plan* (City of Austin [CoA], 2012a). The *Austin Strategic Mobility Plan* (CoA, 2019) calls for a balanced transportation network that includes HCT.

In December 2018, Capital Metro approved Project Connect Long Term Vision Plan which included two dedicated pathway HCT corridors, seven Bus Rapid Transit (BRT) light corridors, two commuter rail corridors, eight commuter bus corridors, and downtown circulator corridors, as well as numerous enhancement projects. Together, this “program of projects” constitutes a cohesive HCT system that will deliver real mobility solutions and benefits for the region in concert with the underlying fixed route network and other complementary mobility programs and services.

The focus of this Corridor Conditions Report is the Orange Line which is a 21-mile corridor currently served by for Capital Metro’s MetroRapid 801 from the Tech Ridge Park & Ride in north Austin to the Southpark Meadows Park & Ride in south Austin. The entire 21-mile corridor is being proposed for HCT dedicated pathways. The Orange Line will be the spine of a regional HCT network that will provide faster, more reliable transit connections in addition to safe and economically competitive means of travel using proven HCT as an alternative to the automobile within the corridor.

Capital Metro is currently conducting a Planning and Environmental Linkage (PEL) Study (referred to herein as the Orange Line PEL Study) for the Orange Line. The Orange Line PEL Study is being conducted to identify existing conditions and anticipated constraints to be taken into consideration during the development of transit improvements. This Corridor Conditions Report has been prepared as part of the Orange Line PEL Study and documents current transportation and environmental conditions within the corridor. The information presented in this report will be used as a basis in developing and evaluating possible HCT alternatives and will help to inform the Locally Preferred Alternative (LPA). This Corridor Conditions Report has drawn information from several sources, including the recently completed Project Connect PEL Study conducted for the Project Connect Long Term Vision Plan and information obtained from other state, regional and local agencies. Information gathering has benefited from a comprehensive public and agency coordination effort, which is expected to continue as the Orange Line PEL Study proceeds.

2.0 Corridor Conditions Report Methodology

2.1 Study Area

The study area for this Corridor Conditions Report extends 1/2 mile from the center line of the Orange Line alignment as documented in Capital Metro’s Project Connect Long Term Vision Plan, extending from the Tech Ridge Park & Ride in north Austin south through downtown and terminating at the intersection of South Congress Avenue and Slaughter Lane in south Austin (Figure 2.1-1). This study area is herein referred to as the Orange Line Corridor. Unless otherwise stated within the resource specific methodologies in Section 3.0, corridor conditions were evaluated for the entirety of the Orange Line Corridor.

2.2 Methodology

Chapter 3.0 describes the existing human, social, and natural environment within the Orange Line Corridor. These resources were evaluated and are documented in separate sections within this chapter. The order of the resources is as follows:

- 3.1 Transportation
- 3.2 Land Use and Economic Development
- 3.3 Neighborhoods
- 3.4 Visual Quality
- 3.5 Air Quality
- 3.6 Noise and Vibration
- 3.7 Ecosystems
- 3.8 Water Resources
- 3.9 Historical and Archeological Resources
- 3.10 Parklands
- 3.11 Hazardous Materials
- 3.12 Public Safety and Security

Each section of Chapter 3.0 follows this organization:

- Methodology – Describes the methodology and data sources used to assess existing conditions within the Orange Line Corridor.
- Results – Describes the existing conditions in the context of the Orange Line Corridor and tabulates data results for each resource, where applicable.

At the conclusion of Chapter 3.0, a summary is provided to present next steps of how the corridor conditions information will inform the conceptual and detailed evaluation of alternatives for the Orange Line LPA.

3.0 Orange Line Corridor Conditions

3.1 Transportation

This section provides a summary of transportation infrastructure and transit networks within the Orange Line Corridor. The approximately 21-mile corridor mainly travels along Capital Metro's existing high frequency bus route MetroRapid 801 and through the heart of some of the CoA's densest transit networks.

3.1.1 Methodology

An understanding of current transportation conditions within the Orange Line Corridor was evaluated through the identification of the following:

- Existing traffic conditions within the Orange Line Corridor (Texas Department of Transportation [TxDOT], 2013) – Note: As the corridor primarily travels along Capital Metro's existing high frequency bus route MetroRapid 801, the traffic conditions analysis focuses on those roadways currently utilized by this bus route vs. the entire corridor.
- Capital Metro transit routes within the Orange Line Corridor (Capital Metro, 2019a)
- Capital Metro Park & Ride facilities within the Orange Line Corridor (Capital Metro, 2019b)
- Ridership data for MetroRapid Route 801 (Capital Metro, 2019c)

- Station location data for MetroRapid Route 801 (Capital Metro, 2019d)
- Major cross streets within the Orange Line Corridor (TxDOT, 2019)

To evaluate future conditions, planned TxDOT and CoA roadway projects within the Orange Line Corridor were identified (TxDOT, 2019a; CoA, 2019b).

3.1.2 Results

Existing Conditions

The existing transportation network within the Orange Line Corridor is discussed in this section. A review of existing traffic conditions and transit networks, ridership data, stations, and park and & ride facilities is presented. A review of major roadways crossed by the Orange Line Corridor is also discussed.

Existing Traffic Conditions

Population and employment growth in Austin has resulted in a corresponding increase in traffic. According to a report from INRIX, Austin drivers spend approximately 104 hours stuck in traffic every year, which is more than any other Texas city (INRIX, 2018). In addition, as shown in Table 3.1-1, several roadways are currently designated at a Level of Service (LOS) of E and F, with more forecasted by 2040, which is an indicator of congestion and delay. LOS is a term used to qualitatively describe the operating conditions of a roadway based on factors such as speed, travel time, maneuverability, delay, and safety. The LOS of a facility is designated with a letter, A to F, with A representing the best operating conditions and F the worst. Specifically, LOS E is defined as severe congestion with some long-standing queues on critical approaches and LOS F is defined as total breakdown, stop-and-go operation (Federal Highway Administration [FHWA], 2017).

Table 3.1-1 Orange Line Corridor LOS, 2015 to 2040

Road	Segment		MAX Level of Service	
	From	To	2015	2040
North Lamar	Howard Lane	Parmer Lane	D	D
	Parmer Lane	Braker Lane	C	C
	Braker Lane	Rundberg Lane	D	E
	Rundberg Lane	US 183	D	F
	United States (U.S.) Highway (US) 183	Airport Boulevard	D	D
	Airport Boulevard	Koenig Lane	F	F
	Koenig Lane	Guadalupe	F	F
Guadalupe	North Lamar	45 th Street	B	C
	45 th Street	38 th Street	A	A
	38 th Street	29 th Street	B	C
	29 th Street	Martin Luther King (MLK) Boulevard	B	C
	MLK Boulevard	15 th Street	B	D
	15 th Street	10 th Street	E	F
	10 th Street	5 th Street	F	F
1 st Street	5 th Street	1 st Street	F	F
	Cesar Chavez Street	Riverside Drive	E	E
Riverside	1 st Street	South Congress	C	D
	Riverside Drive	Oltorf Street	E	F
South Congress	Oltorf Street	US 290	C	D
	US 290	Stassney Lane	C	D
	Stassney Lane	William Cannon Drive	B	C

Road	Segment		MAX Level of Service	
	From	To	2015	2040
	William Cannon Drive	Slaughter Lane	C	E

Source: Capital Area Metropolitan Planning Organization (CAMPO), 2015

Capital Metro Transit Routes

Capital Metro is the primary transit service provider in the Orange Line Corridor, operating bus services and one commuter rail line (MetroRail) (Capital Metro, 2019a). Currently, there are 62 Capital Metro transit routes within the Orange Line Corridor as described below and listed in Table 3.1-2:

- MetroBus Local Bus Routes: six bus routes to and from downtown, with regular stops
- MetroBus Flyer Routes: six bus routes that provide limited-stop neighborhood level service between suburban neighborhoods and downtown
- MetroBus Feeder Routes: two bus routes between neighborhoods, transit centers, and Capital Metro park & rides
- MetroBus Crosstown Routes: 10 bus routes that bypasses downtown and provides neighborhood level services
- University of Texas (UT) Shuttle Routes: seven frequent shuttle routes that are open to the public but focus on connecting UT riders to campus and residential areas
- Round Rock Route: one bus route from the Tech Ridge Park & Ride to the Round Rock Transit Center, with limited stops
- MetroExpress Routes: eight bus routes to and from downtown, designed to bring outlying residents into central Austin
- High Frequency Routes: 14 bus routes throughout Austin that operate on 15-minute or better frequencies, including two MetroRapid bus routes 801 and 803
- Entertainment Bus (E-Bus) Routes: three bus routes that operate each fall and spring when more UT students are on UT campus
- Night Owl Routes: four bus routes that operates from midnight until 3 a.m., Monday through Saturday nights
- MetroRail: one commuter rail route that operates between the Capital Metro Leander Station to the Downtown Station MetroRapid Stop Locations/Stations

As previously discussed, the Orange Line follows Capital Metro's existing high frequency MetroRapid 801 route. Twenty-two MetroRapid stations are within the Orange Line Corridor (Table 3.1-3).

Table 3.1-2 Capital Metro Transit Routes within the Orange Line Corridor

Route #	Existing Bus Service	Route Type	Direction
2	Rosewood	High Frequency	Eastbound (EB)/Westbound (WB)
3	Burnet/Manchaca	Local	Northbound (NB)/Southbound (SB)
4	7 th Street	High Frequency	EB/WB
5	Woodrow/Lamar	Local	NB/SB
6	East 12 th	Local	EB/WB
7	Duval / Dove Springs	High Frequency	NB/SB
10	South 1 st /Red River	High Frequency	NB/SB
17	Cesar Chavez	High Frequency	NB/SB
18	Martin Luther King	High Frequency	EB/WB
19	Bull Creek	Local	NB/SB
20	Manor Rd/Riverside	High Frequency	NB/SB
30	Barton Creek Square	Local	NB/SB
52	Round Rock Tech Ridge	Round Rock Transit	NB/SB

Route #	Existing Bus Service	Route Type	Direction
103	Manchaca	Flyer	NB/SB
105	South 5 th	Flyer	NB/SB
111	South Mopac Flyer	Flyer	NB/SB
135	Dell Limited	Flyer	NB/SB
142	Metric	Flyer	NB/SB
171	Oak Hill	Flyer	NB/SB
201	Southpark Meadows	Feeder	NB/SB
243	Wells Branch	Feeder	EB/WB
300	Springdale/Oltorf	High Frequency	NB/SB
310	Parker/Wickersham	Crosstown	NB/SB
311	Stassney	High Frequency	EB/WB
315	Ben White	Crosstown	EB/WB
318	Westgate/Slaughter	Crosstown	EB/WB
323	Anderson	Crosstown	EB/WB
324	Georgian/Ohlen	Crosstown	EB/WB
325	Metric/Rundberg	High Frequency	NB/SB
333	William Cannon	High Frequency	EB/WB
335	35 th /38 th	High Frequency	EB/WB
337	Koenig/Colony Park	Crosstown	EB/WB
345	45 TH	Crosstown	EB/WB
350	Airport Boulevard	Crosstown	NB/SB
383	Research/Braker	Crosstown	NB/SB
392	Braker	Crosstown	EB/WB
410	E-Bus/West Campus	E-Bus	NB/SB
411	E-Bus/Riverside	E-Bus	Counterclockwise
412	E-Bus/Main Campus	E-Bus	NB/SB
481	Night Owl North Lamar	Night Owl	NB/SB
483	Night Owl Riverside	Night Owl	NB/SB
484	Night Owl South Lamar	Night Owl	NB/SB
486	Night Owl South Congress	Night Owl	NB/SB
550	MetroRail Red Line	Commuter Rail	NB/SB
640	Forty Acres	UT Shuttle	Clockwise
642	West Campus/UT	UT Shuttle	Counterclockwise
656	Intramural Fields/UT	UT Shuttle	Inbound
661	Far West/UT	UT Shuttle	Outbound
663	Lake Austin/UT	UT Shuttle	Outbound
681	Intramural/Far West	UT Shuttle	Outbound
682	Forty Acres/East Campus	UT Shuttle	Clockwise
801	North Lamar South Congress	High Frequency	NB/SB
803	Burnet/South Lamar	High Frequency	NB/SB
935	Tech Ridge Express	Express	NB/SB
980	North Mopac Express	Express	NB/SB
981	Oak Knoll Express	Express	NB/SB
981	Oak Knoll Express	Express	NB/SB
982	Pavilion Express	Express	NB/SB
985	Leander/Lakeline Direct	Express	NB/SB
987	Leander/Lakeline Express	Express	NB/SB
990	Manor/Elgin Express	Express	EB/WB

Source: Capital Metro, 2019a

Table 3.1-3: Existing MetroRapid Stations in the Orange Line Corridor

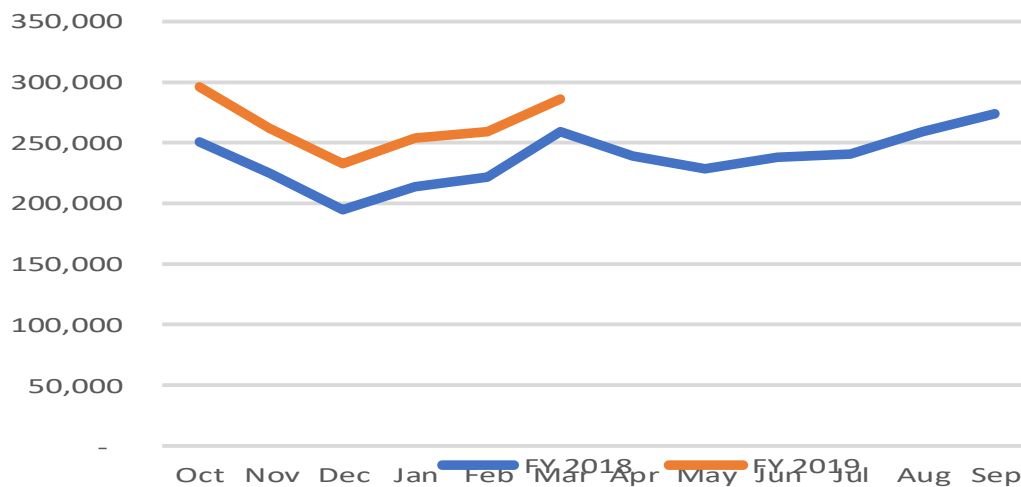
Name	Location
Tech Ridge	Northwest corner of Center Ridge Drive and Center Line Pass
Parmer	Southeast corner of Lamar Boulevard and Indian Mound Drive
Chinatown	Southeast corner of Kramer Lane and Lamar Boulevard
Masterson	Northeast corner of Masterson Pass and Lamar Boulevard
Rundberg	Southeast corner of Rundberg Lane and Lamar Boulevard
Fairfield	Northeast corner of Fairfield Drive and Lamar Boulevard
North Lamar Transit Center	Northwest corner of Lamar Boulevard and Research Boulevard (US 183)
Crestview	Northeast corner of Justin Lane and Lamar Boulevard
Brentwood	Northeast corner of Koenig Lane and Lamar Boulevard
Triangle	Northeast corner 46 th Street and Guadalupe Street
Hyde Park	Northeast corner of 39 th Street and Guadalupe Street
UT Dean Keeton	Southeast corner of Dean Keeton Street and Guadalupe Street
UT West Mall	Northeast corner of West Mall UT and Guadalupe Street
Museum	Southeast corner of 17 th Street and Lavaca Street
Capitol	Southeast corner of 13 th Street and Lavaca Street
Austin History Center	Southeast corner of 8 th Street and Lavaca Street
Republic Square	Northeast corner of 3 rd Street and Lavaca Street
Vic Mathias/Auditorium Shores	Northeast corner of Riverside Drive and 1 st Street
South Congress (SoCo)	Southeast corner of Elizabeth Street and Congress Avenue
Oltorf	Northeast corner of Oltorf Street and Congress Avenue
Saint (St.) Edwards	Northeast corner of Woodward Street and Congress Avenue
South Congress Transit Center	Northwest corner of Ben White (State Highway [SH] 71) and Congress Avenue
St. Elmo	Northeast corner of St. Elmo Road and Congress Avenue
Little Texas	Southeast corner of Little Texas Lane and Congress Avenue
Pleasant Hill	Northeast corner of William Cannon and South Congress Avenue
Southpark Meadows	Northeast corner of Turk Lane and Cullen Lane

Source: Capital Metro, 2019d

Ridership Trends

Capital Metro has provided transit service in the Orange Line Corridor since the agency's inception in 1985. Ridership has remained strong over the past few decades and continues to grow within the corridor. As shown in Figure 3.1-1, ridership for MetroRapid 801 has grown for all service times (weekday, Saturday and Sunday) between fiscal years 2018 and 2019 (Capital Metro, 2019c).

Figure 3.1-1 MetroRapid 801 Ridership Trends, 2018-2019

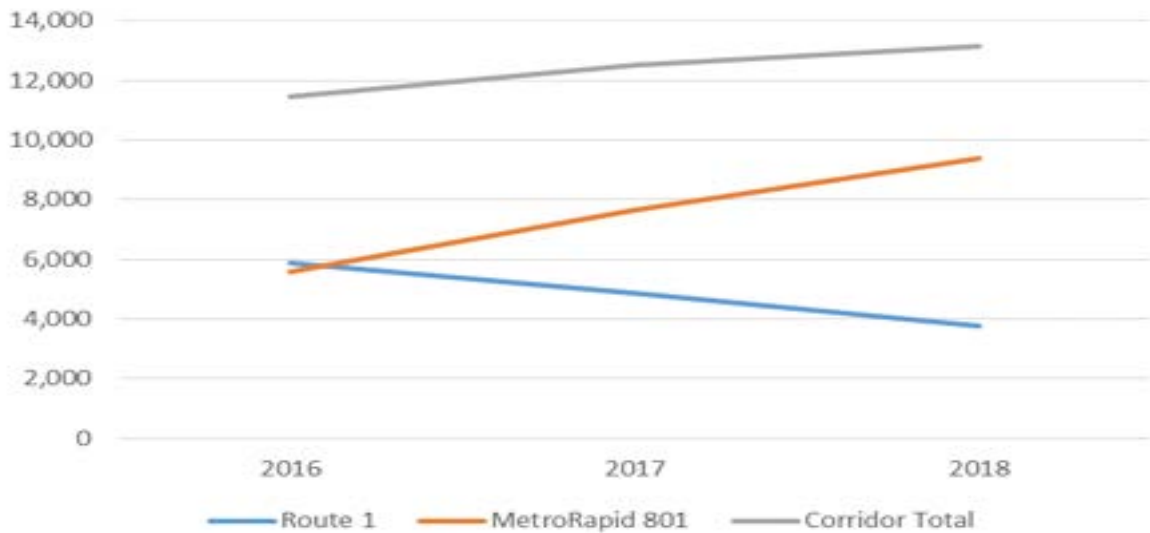


Source: Capital Metro, 2019

As shown in Figure 3.1-2, there has been a shift from use of the Local 1 route, which is a local bus route with multiple stops between North Lamar Boulevard to South Congress Avenue, to more usage of the MetroRapid 801 route. Despite the drop in Local route 1 ridership, collective ridership in the corridor has continued to grow year-over-year. The increase in ridership on MetroRapid 801 has been much steeper and thereby raised the total ridership in the corridor by over 15 percent.

Various service planning adjustments have helped to boost ridership in the corridor. In January 2017, MetroRapid fares were lowered from \$1.75 to \$1.25 to match local bus fares. In June 2018, Capital Metro initiated its largest service plan change in the history of the agency through Cap ReMap, which realigned many of the routes throughout Capital Metro's transit system towards a grid-type network, while also adding more high frequency routes, including improving MetroRapid 801, to 10-minute frequencies.

Figure 3.1-2 Average Ridership for Route 1 and MetroRapid 801, 2016-2018



Source: Capital Metro, 2019c

Park & Ride Facilities

Currently five Park & Ride facilities are located in the Orange Line Corridor (Capital Metro, 2019b), providing between 32 and 476 parking spaces for commuters at each station (Appendix A). As shown in Table 3.1-4, multiple bus routes connect to the Park & Rides and are served by the MetroRapid 801 (Capital Metro, 2019a).

Table 3.1-4: Park & Ride Facilities within Orange Line Corridor

Name	Address	Spaces Available	Routes Served
Tech Ridge Park & Ride	900 Center Ridge Drive	476	<ul style="list-style-type: none"> • 1 Metric/South Congress • 52 Round Rock Tech Ridge Limited • 135 Dell Limited • 243 Wells Branch • 325 Metric/Rundberg • 392 Braker • 801 MetroRapid • 935 Tech Ridge Express
North Lamar Transit Center	8001 US 183	268	<ul style="list-style-type: none"> • 1 Metric/South Congress • 323 Anderson • 350 Airport Boulevard • 383 Research • 801 MetroRapid
Triangle Park & Ride	4600 Guadalupe Street	200	<ul style="list-style-type: none"> • 1 Metric/South Congress • 481 Night Owl North • 656 Intramural Fields • 681 Intramural Fields/Far West • 801 MetroRapid • 990 Manor/Elgin Express
South Congress Transit Center	301 West Ben White Boulevard	60	<ul style="list-style-type: none"> • 1 Metric/South Congress • 310 Parker/Wickersham • 315 Ben White • 801 MetroRapid
Southpark Meadows Park & Ride	9300 South Interstate Highway (IH) 35 Frontage Road	75	<ul style="list-style-type: none"> • 3 Burnet/Manchaca • 10 South 1st/Red River • 201 SouthPark Meadows • 801 MetroRapid

Source: Capital Metro, 2019b

Existing Roadway Network

The current Orange Line alignment is approximately 21 miles in length beginning at the Tech Ridge Park & Ride in north Austin and traveling for approximately 8 miles along North Lamar Boulevard, approximately 4 miles along Guadalupe Street, 0.3 mile along South 1st Street, 0.25 mile along Riverside Drive, and 7 miles along South Congress Avenue in south Austin. The Orange Line's southern terminus is at the intersection of South Congress Avenue and Slaughter Lane.

Due to the Orange Line's length and its travel through high density and urbanized areas of Austin, the corridor crosses many major arterials, including (TxDOT, 2018):

- Parmer Lane
- Braker Lane
- Rundberg Lane
- US 183/Anderson Lane
- Koenig Lane
- North Lamar Boulevard
- West 38th Street
- West 24th Street
- MLK Jr. Boulevard

- 15th Street
- 11th Street
- Cesar Chavez Street
- Riverside Drive
- Oltorf Street
- US 290/ SH 71/Ben White Boulevard
- Stassney Lane
- William Cannon Drive
- Slaughter Lane

Future Roadway Projects

Several future infrastructure improvement projects are planned within the Orange Line Corridor. A review of planned TxDOT and CoA roadway infrastructure projects is provided below.

TxDOT Construction Projects

Infrastructure improvements to seven TxDOT roadways are proposed within the Orange Line Corridor as provided in Table 3.1-5 and depicted in Appendix A. Improvements to these roadways generally consist of drainage and safety enhancements, rehabilitation improvements, and roadway widening to accommodate increases in traffic. All of these TxDOT projects are currently either in the final stages of planning or being finalized for construction (TxDOT, 2019).

Table 3.1-5: Planned TxDOT Projects within the Orange Line Corridor

Roadway	Extent		Description	TxDOT Project Number*
Texas State Highway (TX) 275 (Lamar Boulevard)	IH 35 SB Frontage Road	Parmer Lane (Farm to market [FM] 734)	Install left turn lane, convert four-lane undivided to 2-lane highway	1511066
	US 183	Dillingham Lane	Reconstruct roadway, add storm drains, raise center median	1511067
	Dillingham Lane	Howard Lane	Reconstruct roadway, add storm drains, raise center median	1511068
	Foremost Drive	Slaughter Lane	Overlay with edge milling	1601125
	Riverside Drive	Slaughter Lane	Widen road – add lanes	1513077
IH 35	Stassney Lane (north of intersection)	William Cannon Drive (south of intersection)	Add shoulders, auxiliary lanes, ramp improvements/pavement	1513379
	Slaughter Lane	0.71 mile north of Stassney Lane	Safety lighting	1513384
	FM 1825	US 183	Add NB and SB non-tolled managed lanes, reconstruct ramps	1513389
	Parmer Lane intersection	Parmer Lane intersection	Highway improvement	1513396
US 290	Banister Lane	IH 35	Eastbound frontage road refurbishment	11313177
State Highway Spur (SS) 69	North Lamar Boulevard	IH 35	Install Intelligent Transportation System (ITS) signs and devices	11401062
US 183	Loop 1	IH 35	Inlay on main lanes and frontage roads	15106144
	NB Frontage Road TX 275	NB Frontage Road TX 275	Rehabilitate bridge	15106146
	Metric Boulevard	IH 35	Overlay and restripe to add northbound and southbound	15106149

Roadway	Extent		Description	TxDOT Project Number*
			auxiliary lanes	
FM 2222	TX 360	North Lamar Boulevard.	Install ITS signs and devices	210001068
FM 734	TX 275	Travis/Williamson County line	ITS deployment	341701032
FM 734	East US 290	TX 275	ITS deployment	341703027

Source: TxDOT, 2019a

*See Appendix A for locations of these projects by TxDOT Project Number

CoA Planned Projects

The CoA has multiple transportation improvement projects planned within the Orange Line Corridor. In 2016, Austin City Council initiated a public engagement effort to determine the community's highest priorities for improving mobility around the city. According to the CoA's 2016 Community Survey Findings, 72 percent of Austinites were dissatisfied with traffic flow on major city streets. In November 2016, Austin voters approved \$720 million for the local, corridor, and regional mobility improvements. A large portion is for the Corridor Mobility Program, which defines the development, design, and construction of improvements along key Austin corridors that will enhance mobility, safety, and connectivity for all users whether you drive, bike, or take transit. Within this program, four projects are within the Corridor Mobility Program's Corridor Construction Program, which includes projects currently planned for construction (Table 3.1.-6) (CoA, 2019b). Four additional CoA Corridor Mobility Program projects within the Orange Line Corridor are planned and currently in the preliminary engineering and design phase (Table 3.1-6).

Table 3.1-6: Planned CoA Infrastructure Projects within the Orange Line Corridor

Roadway	Extent		Description
Corridor Construction Program Projects			
North Lamar Boulevard	US 183	Howard Lane	Includes traffic signal improvements, intersection improvements, up to 11.5 miles of new or rehabilitated sidewalks and shared-use paths, up to 10 miles of new dedicated bicycle lanes, up to 5.5 miles of pavement rehabilitation, new bridge construction and/or widenings, addition of a dedicated transit connection, intermittent median islands, on-corridor Stormwater drainage upgrades, possible construction of pedestrian crosswalk signals, and up to 1 mile of full street reconstruction.
Guadalupe Street	18 th Street	29 th Street	Includes up to three traffic signal improvements, up to 4.5 miles of new or rehabilitated sidewalks, up to 1.5 miles of pavement rehabilitation, addition of transit operational enhancements, new street lighting to improve visibility and enhance safety, a new continuous, dedicated center turning lane along 24 th Street between Lamar Boulevard and Guadalupe Street, and restripe Nueces Street
William Cannon Drive	Southwest Parkway	McKinney Falls Parkway	Includes bus stop improvements, a proposed new bus stop, traffic signal improvements, new sidewalk/shared-use path, dedicated bicycle lane, pedestrian hybrid beacons.
Slaughter Lane	FM 1826	Vertex Boulevard	Includes an improved bus stop, upgraded traffic signal, new sidewalk/shared-use path, dedicated bicycle lane, and new pedestrian hybrid beacons.
Planned Projects in Preliminary Engineering/Design Phase			
North Lamar Boulevard	Lady Bird Lake	US 183	Intended to improve safety, mobility, and connectivity for people using all modes of transportation. In order to allow for additional coordination with Capital Metro's Project Connect Long-Term Vision Plan, this project is currently on hold.
Guadalupe Street	29 th Street	North Lamar Boulevard	Intended to improve safety, mobility, and connectivity for people using all modes of transportation. In order to allow for

Roadway	Extent		Description
			additional coordination with Capital Metro's Project Connect Long-Term Vision Plan, this project is currently on hold.
East MLK/FM 969	North Lamar Boulevard	US 183	Intended to improve safety, mobility, and connectivity for people using all modes of transportation. Funding for this project has not been identified.
South Congress Avenue	Lady Bird Lake	Slaughter Lane	Intended to improve safety, mobility, and connectivity for people using all modes of transportation. In order to allow for additional coordination with Capital Metro's Project Connect Long-Term Vision Plan, this project is currently on hold.

Source: CoA, 2019b

3.2 Land Use and Economic Development

The Orange Line Corridor is within the limits of the CoA, which is the municipal agency responsible for land use planning within the corridor. Other agencies involved with local land use planning recommendations within the corridor include the CAMPO and several Neighborhood Planning Associations (NPAs). These agencies do not have the authority to set land use policy, but do provide recommendations to the CoA.

3.2.1 Methodology

Land Use

Existing land use was obtained from the CoA (CoA, 2016). The goal of the land use evaluation is to provide the land use classifications by percentage within the Orange Line Corridor and document land use patterns which may be unique to the corridor.

Economic Development

Economic development data was obtained from the CoA Austin Open Data Portal (CoA, 2019c). This assessment was designed to document key economic development areas within the Orange Line Corridor, as identified in the CoA Imagine Austin Comprehensive Plan (CoA, 2012).

3.2.2 Results

Land Use

Existing land use within the Orange Line Corridor is primarily single family residential (30 percent), commercial (14 percent), and multi-family or civic (each 13 percent), as shown in Table 3.2-1 and depicted on Figure 3.2-1.

Table 3.2-1 Orange Line Corridor Land Use

Land Use Category	Percentage (%) of Orange Line Corridor
Single Family	26
Mobile Homes	1
Large-lot Single Family	1
Multi-family	10
Commerical	11
Mixed Use	1
Office	5
Industrial	5
Civic	10
Open Space	6
Transportation	2
Roads	20
Utilities	1
Undeveloped	3
Water	<1

Land Use Category	Percentage (%) of Orange Line Corridor
TOTAL	100

Source: CoA, 2018

Some of the significant civic land uses in the Orange Line Corridor include the UT, the State of Texas Capitol complex, the Long Center for the Performing Arts, St. Edward’s University, and several parks and recreational trail systems along the Colorado River (Lady Bird Lake). Downtown Austin is a mix of several types of land uses, but primarily composed of office land uses. Most of the NPAs within the corridor (as discussed in Section 3.3.2) include a mix of multi-family and apartment housing land uses, and single-family land uses.

Economic Development

The CoA’s Comprehensive Plan, Imagine Austin, identified 50 Activity Centers and 25 Activity Corridors to focus economic development. The Orange Line Corridor connects some of the largest and most substantial Activity Centers within the greater Austin region (Figure 3.2-2). Not only does the corridor extend through downtown Austin, with the highest concentration of jobs in the region, but it is directly adjacent to both the State Capitol of Texas and UT, which are among the top employment centers in the region. As the population of the CoA increases, additional Activity Centers continue to emerge along the corridor. Eight of these Activity Centers are located in the Orange Line Corridor and provided in Table 3.2-2. The table also provides the type of center as recommended by the comprehensive plan.

Table 3.2-2 Imagine Austin Activity Centers within the Orange Line Corridor

Activity Center	Center Type
Tech Ridge	Neighborhood Center
Lamar & Rundberg	Neighborhood Center
Crestview Station	Town Center
Highland Mall Station	Regional Center
Downtown	Regional Center
South Central Waterfront	Regional Center
St. Edwards	Neighborhood Center
South Park Meadows	Town Center

Source: CoA, 2012a

Of the Imagine Austin Corridors, 19 are located in the Orange Line Corridor as shown in Table 3.2-3.

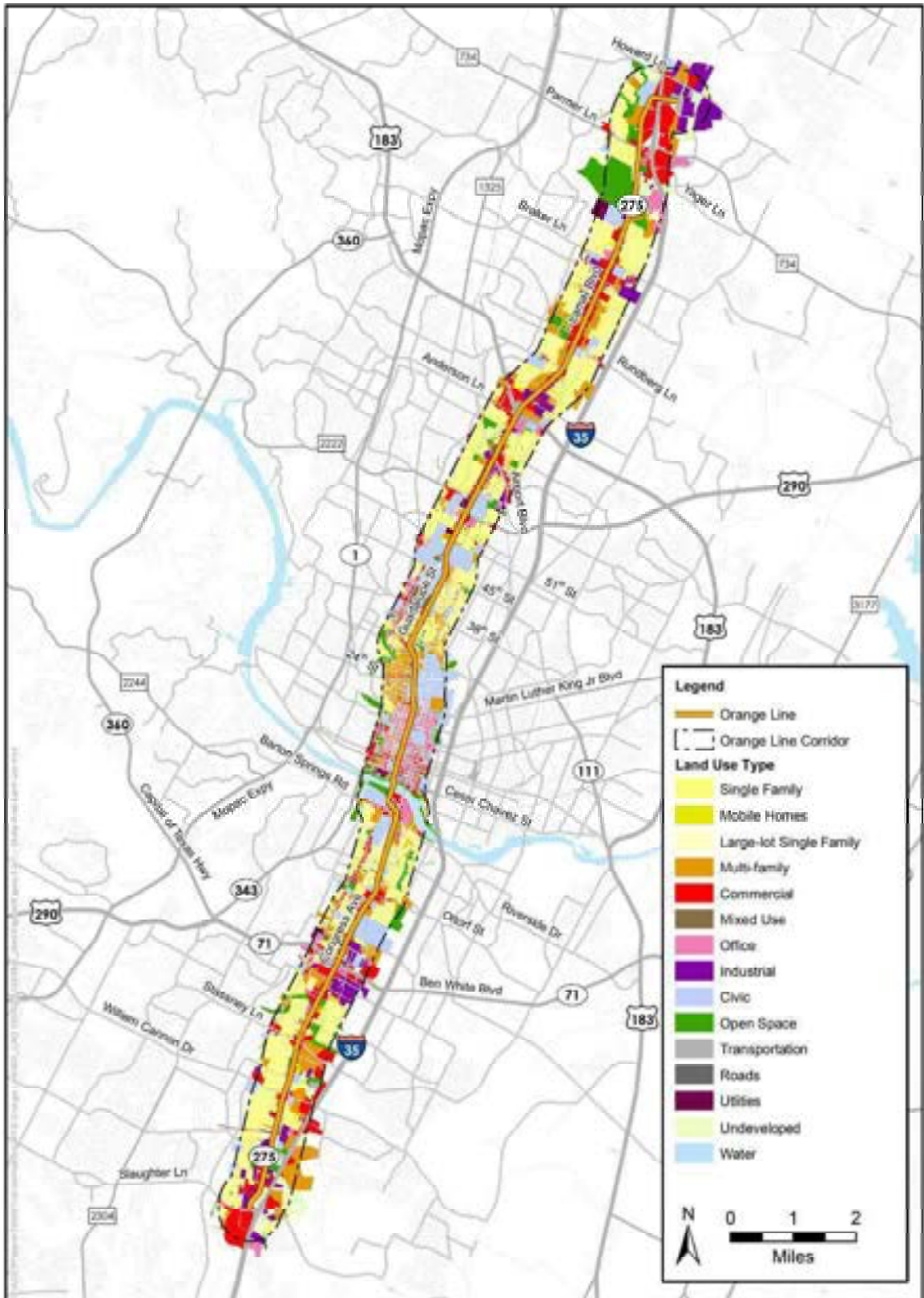
Table 3.2-3 Imagine Austin Activity Corridors within the Orange Line Corridor

Activity Corridor Name	Activity Corridor Name
35th/38th	MLK
51st Street / Airport / 53rd Street	Parmer Lane
5th/6th Streets/Lake Austin Boulevard	Riverside Drive
Airport Boulevard	Rundberg Lane/Ferguson
Anderson Lane	Slaughter Lane
Braker Lane/Blue Goose	South Congress
Burnet Road	South First
Guadalupe	Stassney Lane
Howard Lane/Gregg	William Cannon Drive
Lamar Boulevard	

Source: CoA, 2012b

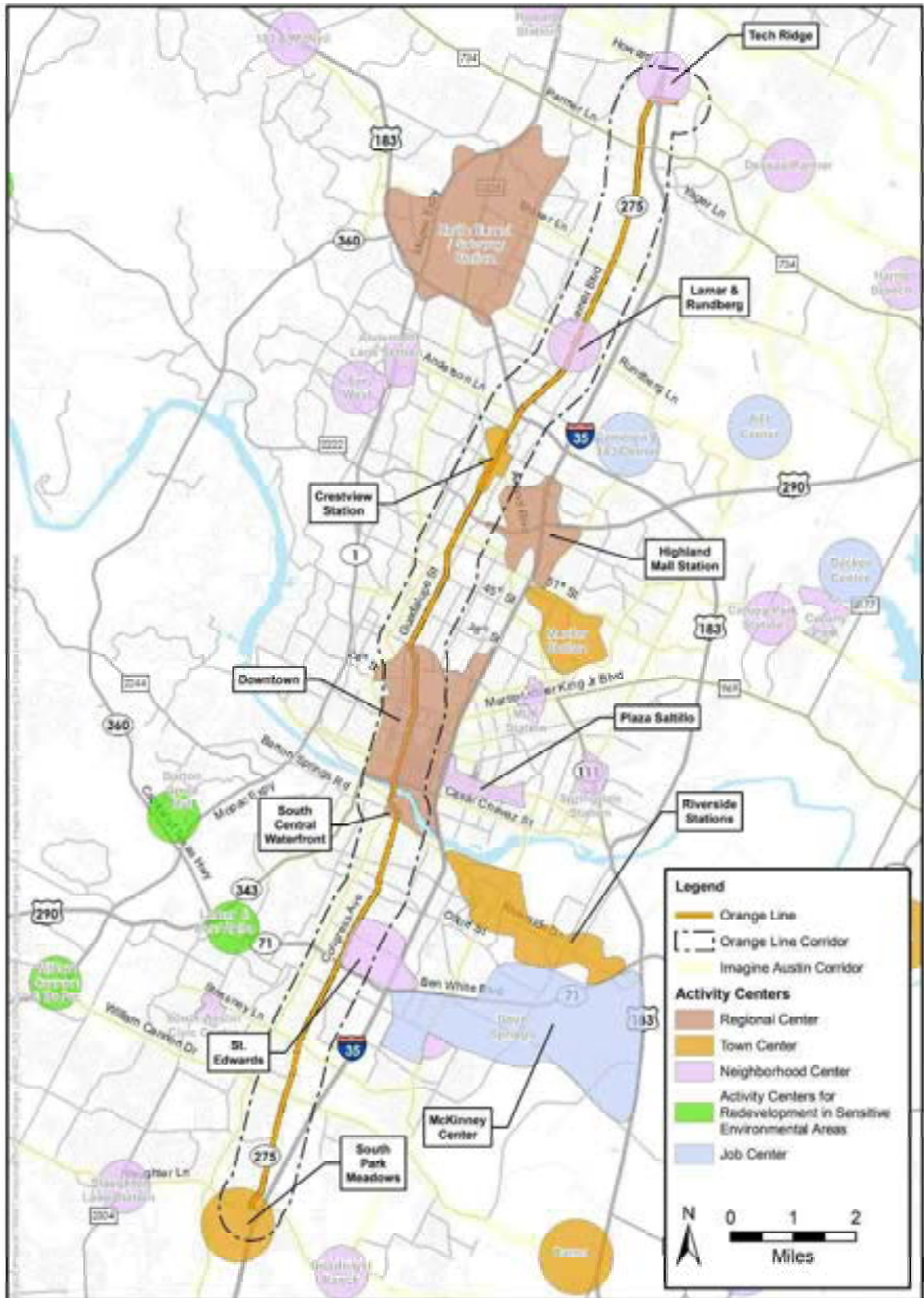
In addition to the Activity Centers and Activity Corridors, the CoA also provides a database of emerging projects. As of March 2019, there are over 160 emerging projects including office, mixed use, residential multi-family, residential single family, and commercial developments within the Orange Line Corridor (Figure 3.2-3) (CoA, 2019d).

Figure 3.2-1 Orange Line Corridor Land Use



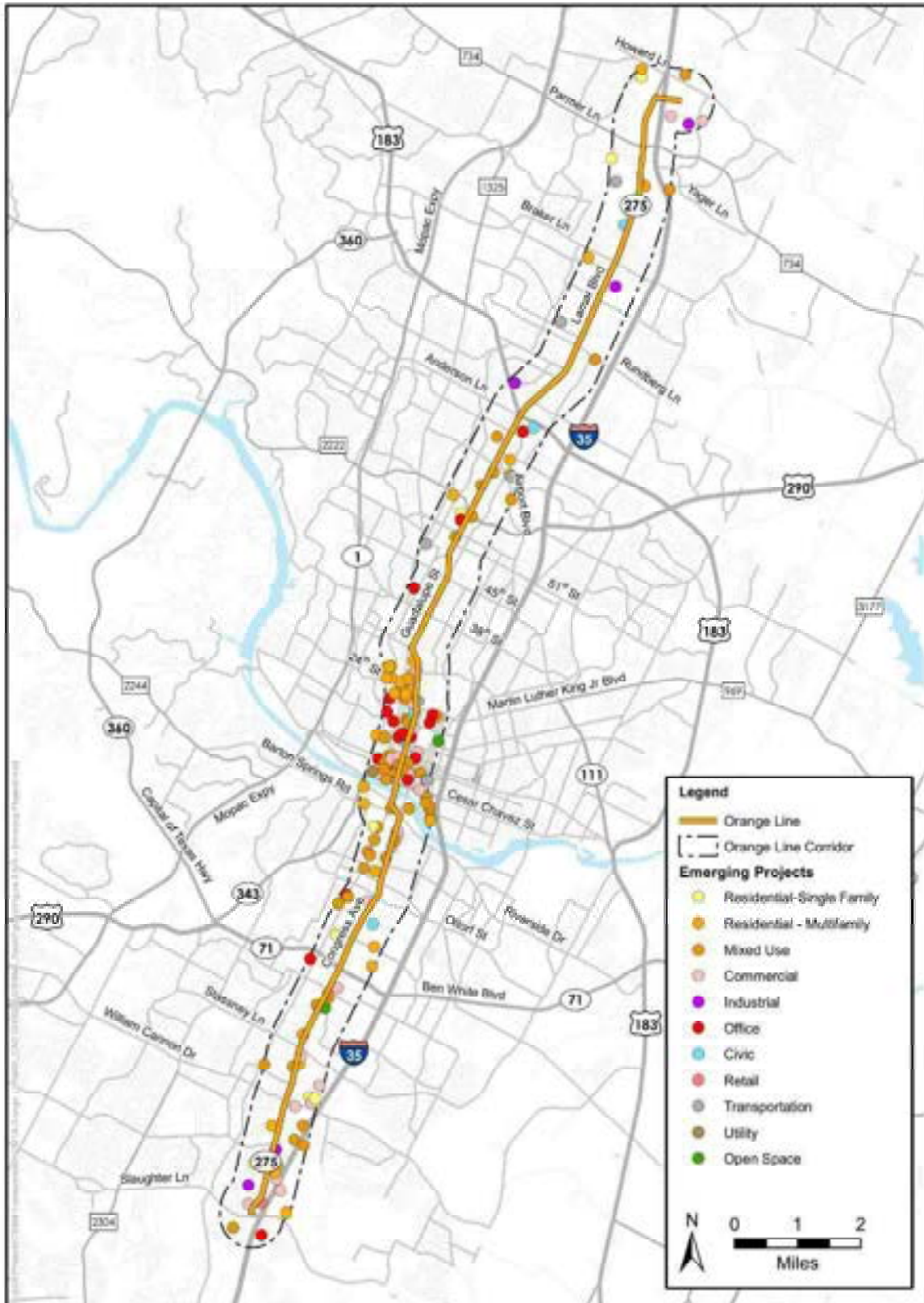
Source: CoA, 2018

Figure 3.2-2 Imagine Austin Activity Centers along the Orange Line Corridor



Source: CoA, 2019

Figure 3.2-3 Emerging Projects within the Orange Line Corridor



Source: CoA, 2019

3.3 Neighborhoods

The following sections discuss demographics, community characteristics, and Environmental Justice (EJ) communities within the Orange Line Corridor.

3.3.1 Methodology

Demographics

Demographics are defined as the statistical information of the human population and particular groups to identify characteristics such as age, income, language, and race. These demographic indicators are used to identify a community's potential benefits and impacts as a result of actions from a project such as the Orange Line. In addition, demographics can provide information to identify transit dependent populations to further assess the need for additional transit service.

Demographic data assessed for the Orange Line Corridor are based on 2017 American Community Survey (ACS) and other pertinent data sources, and includes analyses at the census tract, block group, City, and County levels.

Community Characteristics

Community characteristics identified within the Orange Line Corridor include planning areas, culturally important properties, and community facilities such as schools and churches. Information used to identify community characteristics within the Orange Line Corridor was obtained from the CoA Open Data Portal, Texas Education Agency (TEA), and Texas Historical Commission (THC).

Environmental Justice

Executive Order (EO) 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, was issued by President William J. Clinton in 1994 to focus federal attention on the environmental and health effects of federal actions on minority and low-income populations. EO 12898 directs federal agencies to identify and address the disproportionately high and adverse human health or environmental effects of their actions on minority and low-income populations, to the greatest extent practicable. The order is intended to promote nondiscrimination in federal programs that affect human health and the environment, as well as provide minority and low-income communities access to public information and public participation. An EJ community is one where residents are predominantly (greater than 50 percent) minority or low-income. Minority populations are those comprised of all races excluding non-Hispanic white alone and low-income populations are those that are living below the federal poverty level.

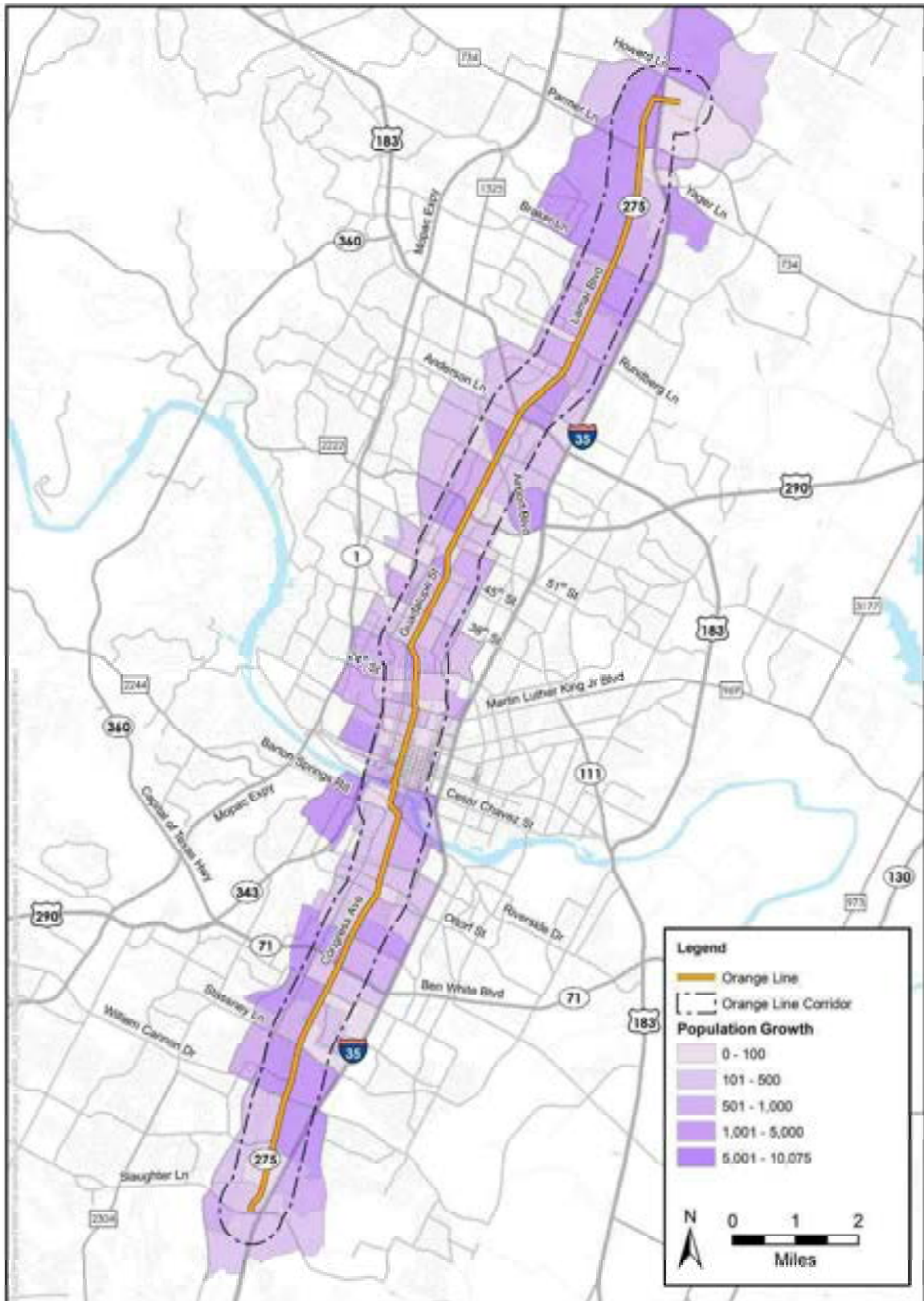
Information used to identify EJ communities within the Orange Line Corridor was obtained from the 2017 ACS. Data was used to identify block groups that are predominantly minority, Hispanic, and low-income.

3.3.2 Results

Demographics

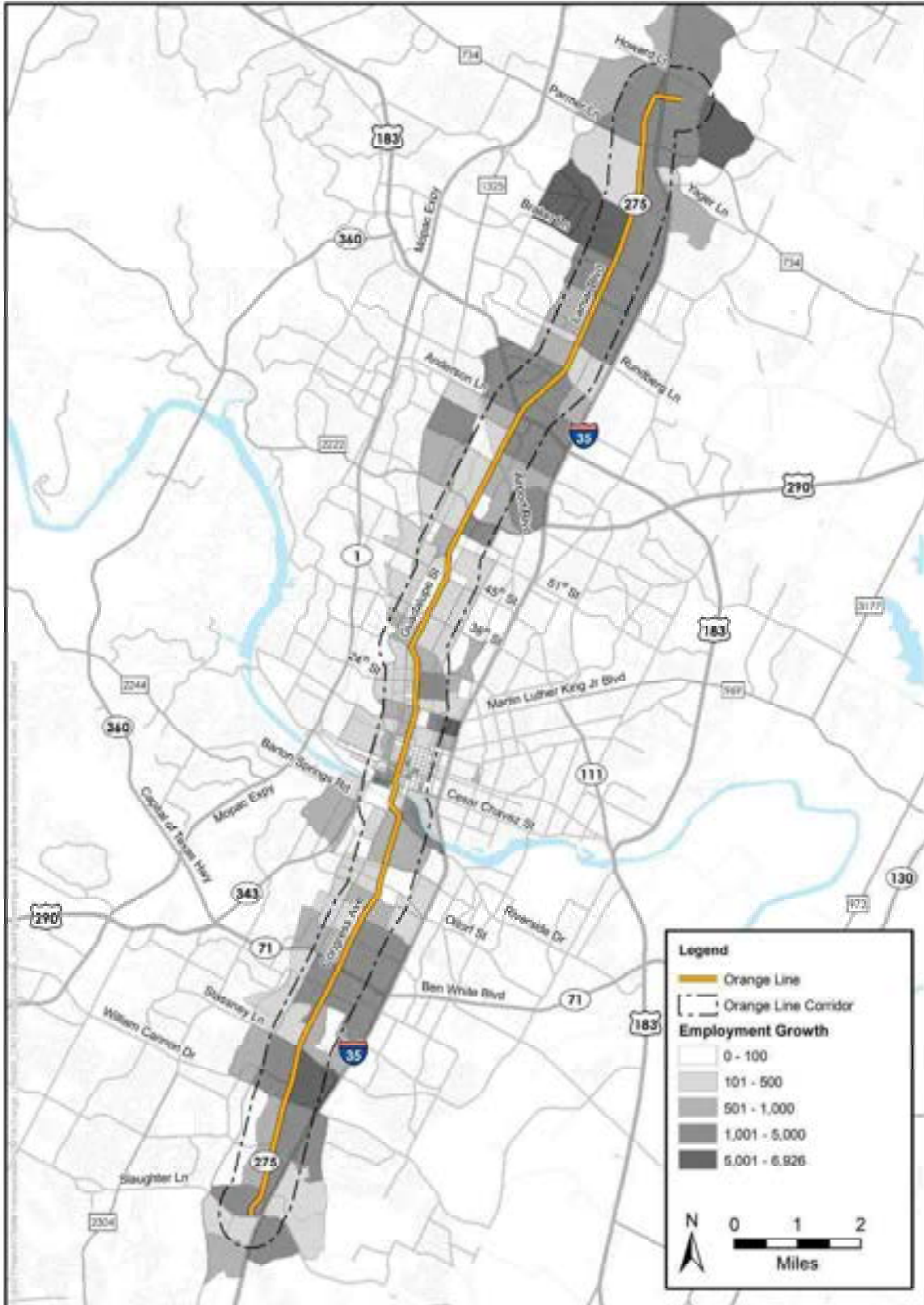
Based on forecasts from CAMPO (CAMPO, 2015), the population within the Orange Line Corridor is projected to increase 65 percent from 2010 to 2040 (Figure 3.3-1). Employment is projected to increase 93 percent over the same time period (Figure 3.3-2). Key demographics for the Orange Line Corridor in comparison to the CoA and Travis County are presented in Tables 3.3-1 and 3.3-2. As shown in Tables 3.3-1 and 3.3-2, the Orange Line Corridor contains approximately 20 percent of the total population and over 30 percent of the total employment in Austin. Table 3.3-3 describes demographic data which could help identify those who are dependent on transit.

Figure 3.3-1 Population Growth Surrounding the Orange Line Corridor, 2010-2040



Source: CAMPO, 2015

Figure 3.3-2 Employment Growth Surrounding the Orange Line Corridor, 2010-2040



Source: CAMPO, 2015

Table 3.3-1 Population Growth Surrounding the Orange Line, 2010-2040

Location	2010	2015	2020	2040	2010-2040 Percent (%) Growth
Orange Line Corridor	169,183	193,035	216,987	278,946	65%
CoA	777,710	876,776	976,180	1,314,551	69%
Travis County	1,001,490	1,125,640	1,250,211	1,709,791	71%

Source: CAMPO, 2015

Table 3.3-2 Employment Growth Surrounding the Orange Line, 2010-2040

Location	2010	2015	2020	2040	2010-2040 Percent (%) Growth
Orange Line Corridor	188,778	218,201	247,172	363,585	93%
CoA	512,251	613,102	713,752	1,166,435	128%
Travis County	563,637	662,185	760,507	1,195,660	112%

Source: CAMPO, 2015

Table 3.3-3 Orange Line Corridor Transit Dependent Demographics

Location	Percent (%) Population Below Federal Poverty Level	Percent (%) Zero-car Households	Percent (%) Population 65 and Over	Percent (%) Population Under 18 Years
Orange Line Corridor	22	8	6	17
CoA	15	4	8	21
Travis County	14	3	9	23

Source: ACS, 2017

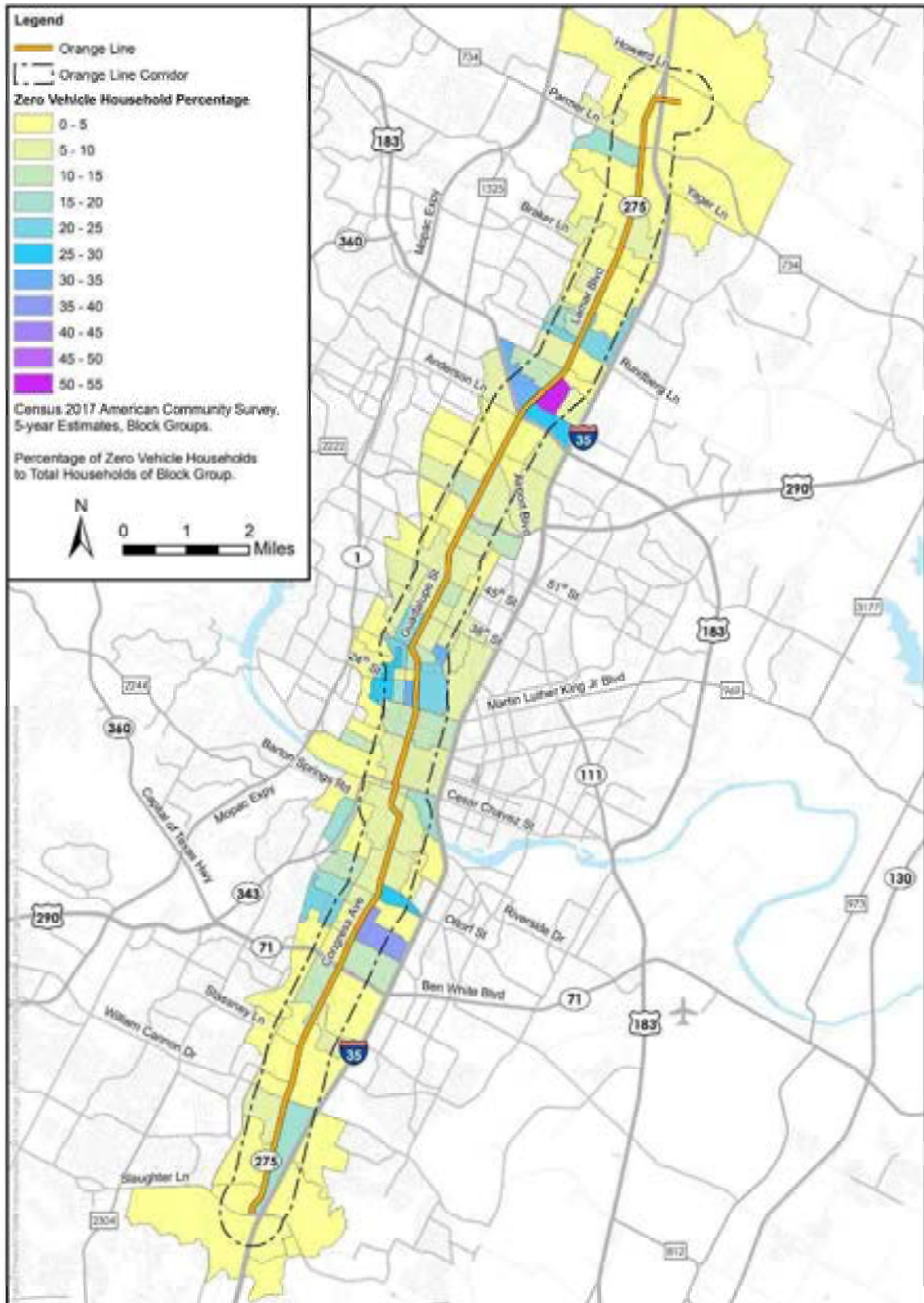
The Orange Line Corridor has higher percentages of residents living below the federal poverty level, and zero-car household, than the other geographies. Zero-car household percentages within the Orange Line Corridor are presented in Figure 3.3-3. Many of the zero-car households are located near UT or in areas of high student housing. Other locations in proximity to downtown also have a higher proportion of zero-car households as the need to own a car is lessened when one is in proximity to major job centers (e.g. downtown and UT). Areas with a particularly high rate of zero-car households, but located away from major job centers, is the area of Lamar Boulevard just north of US 183 and neighborhoods surrounding Rundberg Lane. These areas have a high concentration of residents who may or may not have access to a personal car and are therefore dependent on public transportation. North of Braker Lane and south of Ben White Boulevard, the land use becomes much more auto-oriented, as reflected in the decrease of zero-car households. However, there is a notable exception south of Ben White Boulevard where a significant number of zero-car households are present in the block group bounded by IH 35, South Congress Avenue, and William Cannon Drive.

The median age for residents within the block groups that intersect the Orange Line Corridor is 33 years. Over 17 percent are under 18 years, and residents over 65 years make up an additional 6 percent of the population, illustrating a younger population (Figure 3.3-4). These two groups combined are typically described as transit-dependent. Additionally, several of the census tracts that intersect the Orange Line Corridor have disability populations greater than 9 percent, which is greater than the CoA (8.7 percent) (Figure 3.3-5).

Community Characteristics

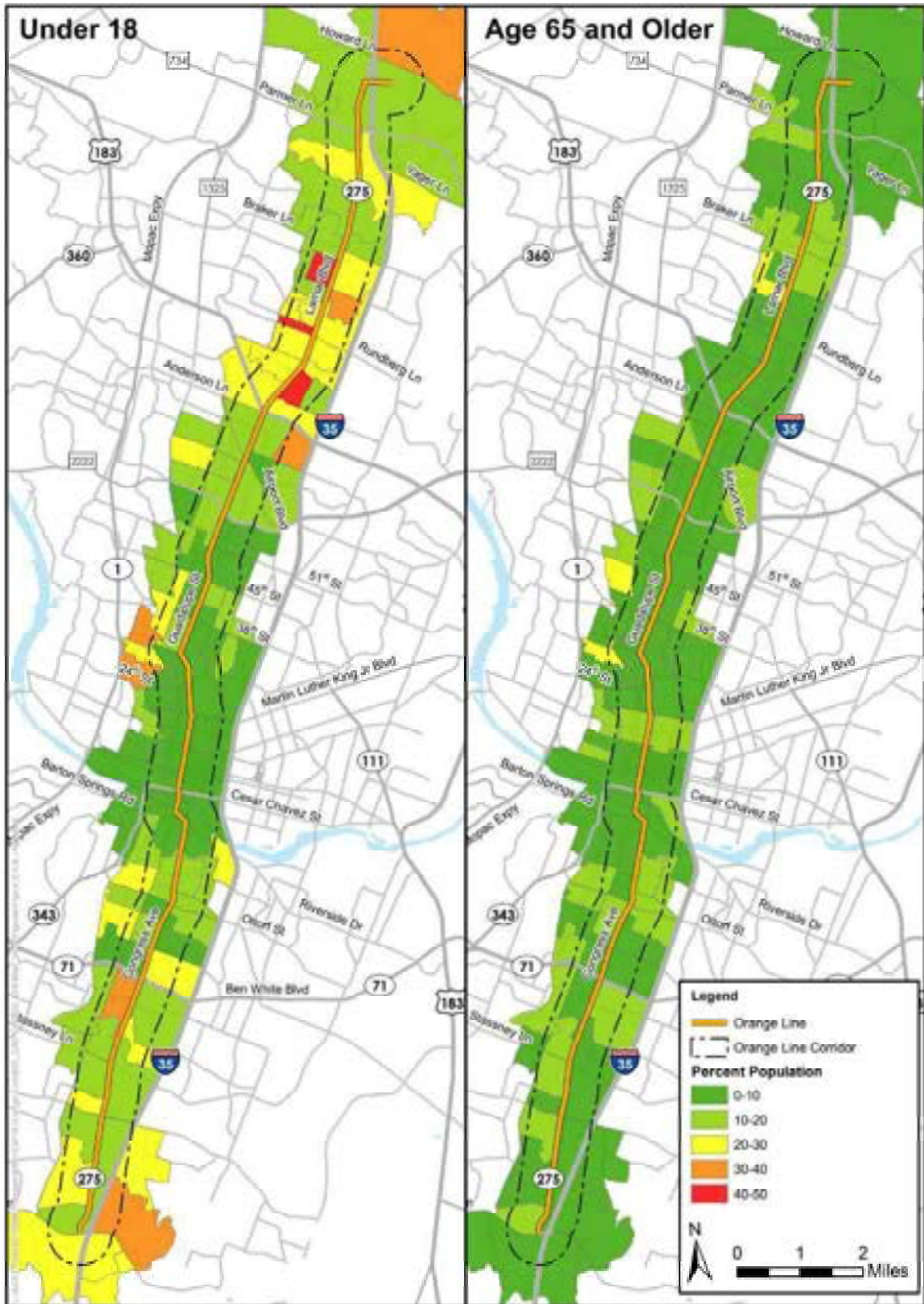
There are currently 15 NPAs within the Orange Line Corridor, as shown in Figure 3.3-6 and described in Table 3.3-4. Each NPA contains a plan for future land uses, as well as ordinances acknowledging the CoA's adoption of neighborhood plans. The northern and southern termini for the Orange Line Corridor do not

Figure 3.3-3 Zero-Car Households Surrounding the Orange Line Corridor



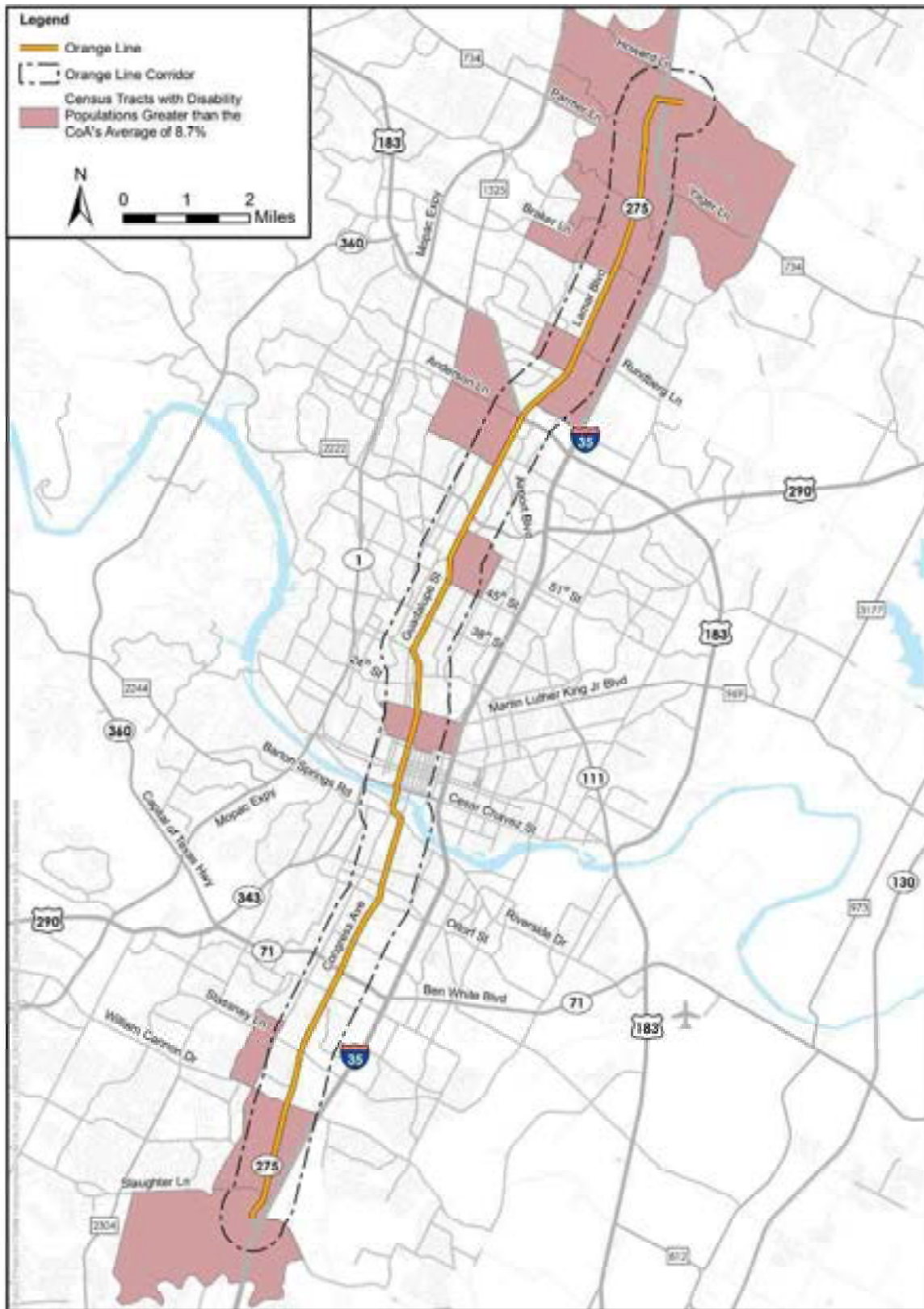
Source: ACS, 2017

Figure 3.3-4 Populations Under 18 and Over 65 Years of Age Surrounding the Orange Line Corridor



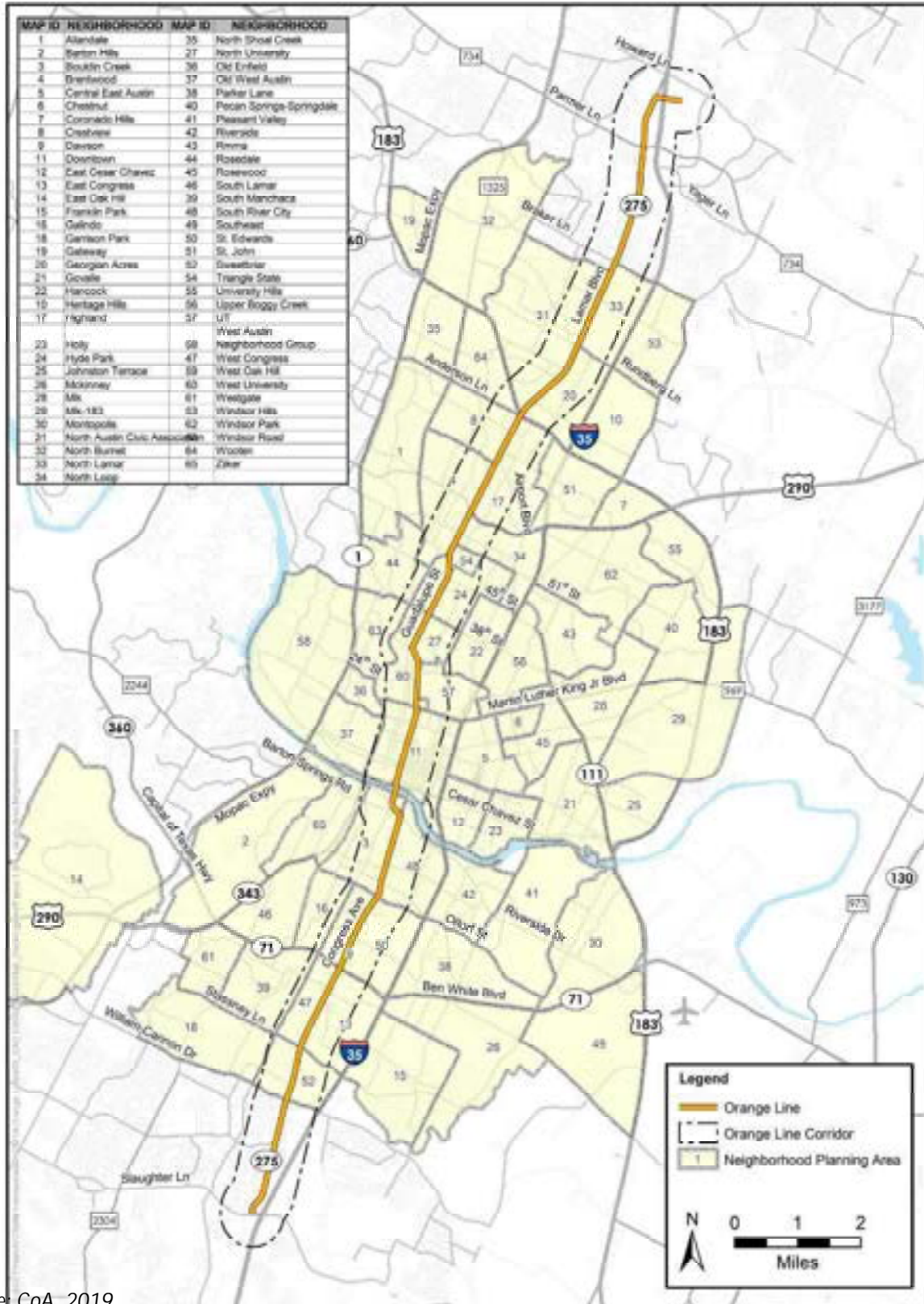
Source: ACS, 2017

Figure 3.3-5 Disability Populations Surrounding the Orange Line Corridor



Source: ACS, 2017

Figure 3.3-6 NPAs Surrounding the Orange Line Corridor



Source: CoA, 2019

contain NPAs, nor does the portion of the Orange Line Corridor in downtown Austin. However, City Council adopted the Downtown Austin Plan in December 2011 that was a result of downtown stakeholder engagement (CoA, 2011).

Table 3.3-4 Neighborhood Planning Areas in the Orange Line Corridor

Neighborhood Planning Area	
Bouldin Creek	North Austin Civic Association
Brentwood/Highland Combined	North Lamar Combined
Central Austin Combined	North Loop
Central West Austin Combined	Old West Austin
Crestview/Wooten Combined	Rosedale
Dawson	South Austin Combined
Greater South River City Combined	South Congress Combined
Hyde Park	

Source: COA, 2019e

There are currently 30 K-12 schools within the Orange Line Corridor, including the Texas School for the Deaf, the Texas School for the Blind, various academies, preparatory schools, and charter schools (Appendix A). The majority of schools are public schools, including 12 elementary schools, two middle schools, three high schools, and seven alternative schools.

The Orange Line Corridor also contains one public university, UT at Austin, and one private university, St. Edward's University. The student enrollment at UT and St. Edwards' University is over 51,000 and approximately 4,500 students, respectively, with the majority of these students residing on campus or in neighborhoods adjacent to the campuses (UT, 2019; St. Edward's University, 2019).

Within the Orange Line Corridor, there are also four hospitals, one recreation center (the Austin Recreation Center), and 11 museums. There are also nearly 100 churches or religious establishments within the Orange Line Corridor and three cemeteries. See Appendix A for locations of all community facilities within the Orange Line Corridor.

Environmental Justice

This subsection describes the EJ community within the Orange Line Corridor, as defined by block group geographies. As previously described, an EJ community is one where residents are predominantly (greater than 50 percent) minority or low-income. Minority populations are those comprised of all races excluding non-Hispanic white alone and low-income populations are those that are living below the federal poverty level. Table 3.3-5 describes minority populations, those with Limited English Proficiency (LEP), and those of Hispanic origin. The Orange Line Corridor has a significantly higher percentage of minority residents than the CoA or Travis County, and the percent of LEP households is slightly higher in the CoA. Those of Hispanic origin are relatively consistent with the other geographies. There is also a significant Hispanic community within the Orange Line Corridor.

Table 3.3-5 Orange Line Corridor Minority, Hispanic, and LEP Populations

Location	Minority Populations		LEP Populations		Total Hispanic Origin	
	Total	Percent	Total	Percent	Total	Percent
Orange Line Corridor	62,697	26	27,519	13	78,991	36
CoA	229,129	25	104,309	12	316,709	35
Travis County	295,179	25	131,481	12	398,398	34
State of Texas	6,960,087	25	3,576,480	14	10,673,909	39

Source: ACS, 2017

The number of block groups identified as EJ communities are as follows:

- 8 minority block groups
- 28 Hispanic block groups
- 30 low-income block groups

As shown on Figures 3.3-7 and 3.3-8, EJ communities are located throughout the Orange Line Corridor. Of note, two minority communities are located near the northern terminus of the corridor and two minority communities are located south of SH 71. The remaining four minority communities are located north of Lady Bird Lake and generally south of US 183. The low-income EJ communities are primarily located in the northern portion of the Orange Line Corridor, from US 183 to the northern terminus of the corridor, and between MLK Boulevard to US 290. The Hispanic EJ communities are primarily located between Lady Bird Lake and US 183, in the central portion of the Orange Line Corridor.

3.4 Visual Quality

3.4.1 Methodology

This visual quality assessment summarizes the existing aesthetic conditions of the Orange Line Corridor. To define the visual quality of the Orange Line Corridor, the corridor was divided into segments which have similar visual characteristics. The visual characteristics of a segment depend on the existing natural environment, as well as the built environment. Due to the length of the project, changes in development patterns, and unique natural environment characteristics, this visual quality assessment uses seven segments to describe the visual quality within the corridor.

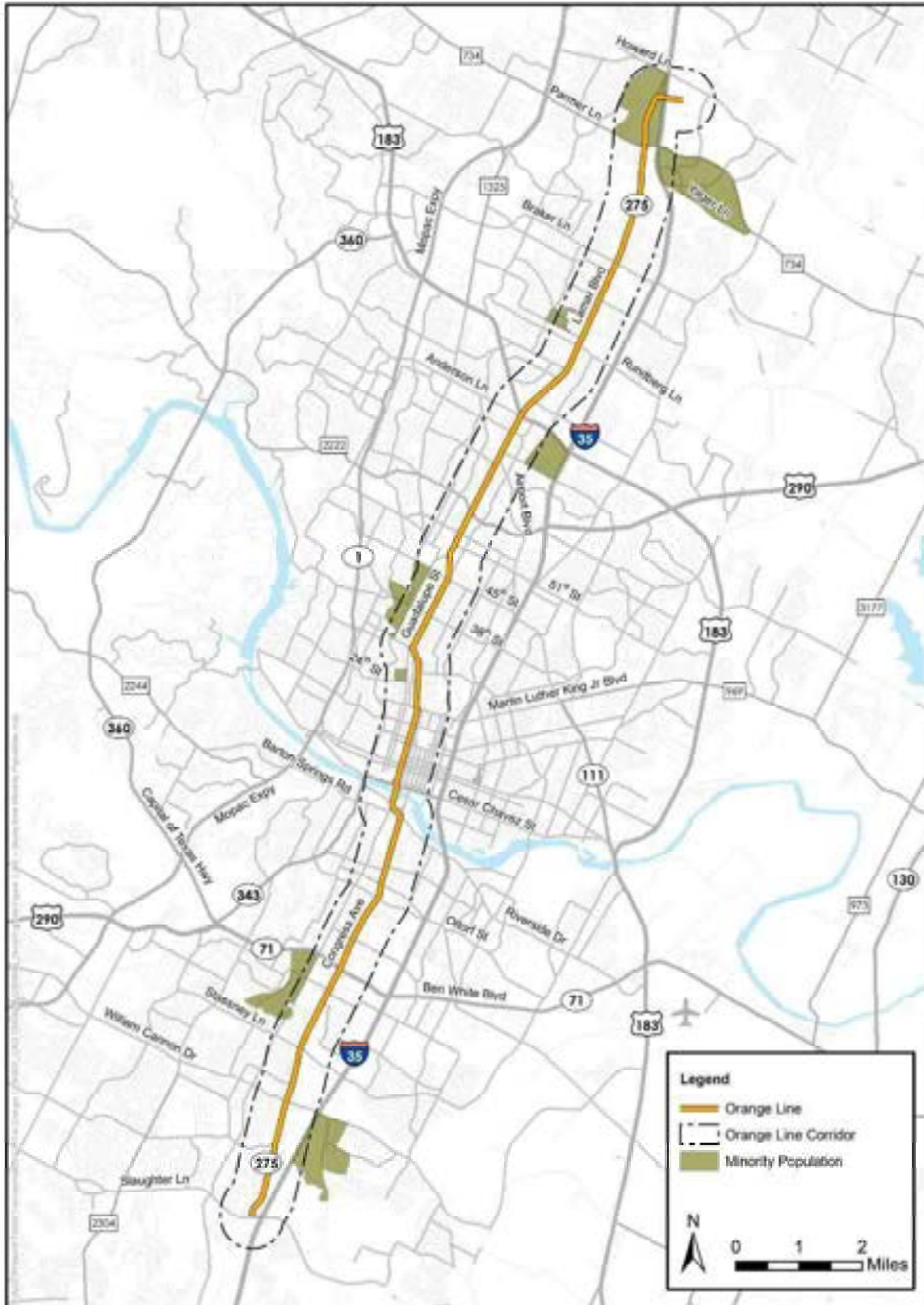
Visual quality can be evaluated based on viewers' perception of visual resources that compose the visual character of a particular scene. Neighbors and travelers may evaluate the visual quality of specific visual resources differently based on the factors of natural harmony, cultural order, and vividness, as defined below.

- Natural harmony – what a viewer perceives about the natural environment, labelling the environment as being either harmonious or inharmonious.
- Cultural Order – how viewers perceive the organization of the cultural visual environment, or the man-made built environment, including buildings, transportation facilities, structures or historical artifacts, labeling the built environment as orderly or disorderly.
- Vividness – the degree of memorable, dramatic, or distinctive components of the landscape. Vividness is an overall aggregation of topography, vegetation, water features, and cultural elements created by people.

Each of the segments received subjective ratings for the three categories, ranging from low, medium-low, medium, medium-high, and high. The sum of the three categories' scores provides the visual quality assessment for a particular segment. In addition to the visual quality assessment, each segment has received a viewer sensitivity rating.

- Low – refers to areas lacking value or having degraded visual resources with no aesthetically pleasing composition. An example would be a disjointed, abandoned industrial area adjacent to a heavily trafficked highway.
- Moderately low – refers to areas containing some visual resources but lacking a coherent and aesthetically pleasing composition. An example would be poorly maintained commercial area adjacent to a new community center.
- Moderate – refers to areas primarily of visual resources combined in an aesthetically pleasing composition with low levels of disruptive visual detractors. An example would be a cohesive, well-maintained development. This could be urban, suburban or rural.

Figure 3.3-8 Minority Populations Surrounding the Orange Line Corridor



Source: ACS, 2017

- Moderately high – refers to areas of visual resources combined in an aesthetically pleasing composition, expressing a sense of place and lacking prominent disruptive visual detractors. An example would be a planned development that includes open space and trails, or well-maintained agricultural lands with open vistas.
- High – refers to areas comprising visual resources free of disruptive visual detractors and with a strong sense of place. An example would be federally protected, undeveloped land with unique, scenic vistas.

Viewer sensitivity is the degree to which viewers are sensitive to changes in the visual character of visual resources. Viewer sensitivity is assessed on a scale of low, moderate and high. Viewer sensitivity is the consequence of two factors, viewer exposure and viewer awareness. Sensitivity to views varies among viewer types, which would, therefore, affect the significance of the impact. A definition for viewer exposure and viewer awareness follows:

- Viewer exposure – a measure of the proximity, extent, and duration of a viewer to a visual resource. Proximity is the distance between the viewer and the visual resource being viewed. Extent is the number of people viewing the visual resource. Duration is the length of time the visual resource is viewed.
- Viewer awareness – a measure of attention (level of observation based on routine and familiarity), focus (level of concentration), and protection (legal and social constraints on the use of visual resources).

A key component of assessing visual quality is to determine which views to base evaluations, because it is impossible to consider the viewshed of all viewer types from all locations. Therefore, key visual resources are used in the evaluation and come from a variety of places. Natural visual resources are primarily geological or biological in origin, but may be altered by people, such as maintenance and beautification of a designated forest, open space, or river. Cultural visual resources include the man-made built environment composed of buildings and artifacts of importance to the community. For example, the CoA has an ordinance to protect the view of the Capitol dome from various points within the city (referred to as Capitol View Corridors).

3.4.2 Results

This section provides a visual quality assessment and viewer sensitivity rating for each of the seven segments. Guidance for the aesthetic character of the community is regulated by local plans and ordinances from the CoA and also from the NPAs in the Orange Line Corridor.

The visual segments illustrating these segments are shown in Appendix A. More detail of the key resources can be found in the following sections: for Historic Resources, refer to Section 3.9.2 Historical and Archeological Resources; for neighborhood resources, refer to Section 3.3.2 Neighborhoods; for parklands, refer to Section 3.10.2 Parklands; and for rivers, streams, and bodies of water, please refer to Section 3.8.2 Water Resources.

Segment 1

The boundaries for Segment 1 extend from the northern terminus at Tech Ridge to US 183. The northern portion of this segment is characterized by large commercial strip centers and industrial developments along North Lamar Boulevard and IH 35. In addition to these developments, there are several large parks, trails, recreation centers, and open spaces, located primarily west of the proposed alignment. The southern portion of the segment is characterized mostly by single family and multi-family neighborhoods supported by commercial and industrial developments along North Lamar Boulevard. Segment 1 has lower density compared to other segments. The ratings for this segment are shown in Table 3.4-1.

Segment 2

Segment 2 extends from US 183 to West 38th Street. This segment contains a large amount of single family residential and civic land uses for state agencies, especially in the southern part of the segment. These state agencies include a large Texas Department of Public Safety campus, and several buildings between Guadalupe Street and North Lamar Boulevard, for health and human services. The northern portion of the segment contains Crestview Station, which is an emerging area of commercial and mixed-use developments supporting denser residential units near the station. The ratings are shown in Table 3.4-1.

Segment 3

Segment 3 extends from West 38th Street to West 15th Street. This segment includes a large portion of the area dedicated to the UT campus, located east of the proposed alignment along Guadalupe Street. To the west of campus includes several multi-family residential developments, while north of the campus has more single-family residential units. Small commercial, civic, and a lesser amount of light-industrial development exist adjacent to the proposed alignment. The overall density of this segment is moderate to moderately high. The ratings are shown in Table 3.4-1.

Segment 4

Segment 4 extends from West 15th Street to the Colorado River. This segment has a high vividness rating due to the unique characteristics of the State Capitol Complex, as well as historic resources, parks, and natural resources. There is a large concentration of high-rise buildings, as well as new construction of high-rises buildings. These buildings are typically occupied by office workers, with fewer buildings dedicated to residential units. The southern portion of this segment contains Lady Bird Lake, which includes a large, connected system of parks and trails adjacent to the river. This segment has the highest densities of all the segments. The ratings are shown in Table 3.4-1.

Segment 5

This segment extends from the Colorado River to East Oltorf Street. This segment contains several parks, civic, and commercial developments along the Colorado River. Additionally, new residential high rises with modern design have been recently built or under construction in the northern portion of this segment. Further south, the visual character is composed of smaller commercial developments adjacent to the main thoroughfares, with single-family, and some multi-family residential, located behind. This segment has a moderate to moderately high level of density. The ratings for Segment 5 are shown in Table 3.4-1.

Segment 6

Segment 6 extends from East Oltorf Street to West Stassney Lane. This segment is bisected by SH 71, a major highway in South Austin and the majority of the thoroughfare in this segment is lined with larger commercial, industrial, or civic land uses. The northern portion of this segment includes St. Edward's University and the neighborhoods surrounding the university. These neighborhoods include a mix of lower density single and multi-family residential developments, as well as smaller commercial uses along South Congress Avenue. The southern portion is similar to the northern portion with regards to residential housing developments; however, there is a larger industrial park located around SH 71, and several long linear parks. The ratings for this segment are shown in Table 3.4-1.

Segment 7

This segment extends from West Stassney Lane to the southern terminus at East Slaughter Lane. Segment 7 is characterized by single-family residential developments west of South Congress Avenue. To the east of the proposed alignment include a larger mix of denser multi-family and commercial developments. The southern end of this segment includes more industrial warehouse developments, as well as a large commercial park at the end of the proposed alignment. The ratings for this segment are shown in Table 3.4-1.

Viewer Sensitivity

Viewer sensitivity in this analysis ranges from low to moderate. Although these segments have visual quality ratings categorized as moderately high and high, many viewers' in these areas are currently witnessing and adapting to several changes to the visual environment, including new high-rise buildings and mixed-use developments, and roadway construction for multimodal improvements. Additionally, viewers are accustomed to seeing Capital Metro rapid transit vehicles and stations from Routes 801 and 803. These routes and stations have been in operation since 2014.

Table 3.4-1 Visual Quality Assessment

Segment	Natural Harmony	Cultural Order	Vividness	Viewer Sensitivity
1	Moderate	Moderate	Moderately low	Low
2	Moderate	Moderate	Moderately low	Low
3	Moderate	Moderate	Moderately high	Low
4	Moderately high	Moderately high	High	Moderate
5	Moderately high	Moderately high	Moderately high	Moderate
6	Moderate	Moderate	Moderate	Low
7	Moderate	Moderate	Moderately low	Low

3.5 Air Quality

The Clean Air Act (CAA) of 1970 (as amended) establishes federal policy to protect and enhance the quality of the nation's air resources to protect human health and the environment. The CAA requires that adequate steps be taken to control the release of air pollutants and prevent significant deterioration in air quality. The 1990 amendments to the CAA require federal agencies to determine the conformity of proposed actions with respect to State Implementation Plans (SIPs) for attainment of air quality goals.

Regulations implementing the CAA established primary and secondary National Ambient Air Quality Standards (NAAQS) as a basis for assessing air quality. Primary standards set limits to protect public health, including the health of children, the elderly, and asthmatics. Secondary standards set limits to protect public welfare, which includes damages to animals, crops, vegetation, and buildings. The U.S. Environmental Protection Agency (EPA) regulates air quality in accordance with the primary and secondary NAAQS. The NAAQS currently regulate six criteria pollutants under the primary standards. These are carbon monoxide (CO), nitrogen dioxide (NO₂), ozone (O₃), lead (Pb), particulate matter (PM), and sulfur dioxide (SO₂). PM standards are further defined into a standard for PM₁₀, regulating particulate matter smaller than 10 microns in diameter and PM_{2.5} regulating particulate matter smaller than 2.5 microns in diameter.

The CAA requires that all states attain compliance by adhering to the NAAQS, as demonstrated by the comparison of measured pollutant concentrations with the NAAQS. The NAAQS represent the maximum levels of background pollution considered acceptable with an adequate margin of safety to protect public health and welfare. These pollutants are typically quantified in units of milligrams per cubic meter (mg/m₃), parts per million (ppm), parts per billion (ppb), or micrograms per cubicmeter (µg/m₃). Table 3.5-1 shows the NAAQS for the six criteria pollutants.

Of these pollutants, vehicular sources including transit bus and diesel trains contribute significantly to emissions of CO and PM, along with nitrogen oxides (NO_x), hydrocarbons, air toxics, and carbon dioxide (CO₂). Most of the NAAQS pollutants are emitted directly from their sources; however, O₃ is not emitted directly but is formed in the atmosphere through chemical reactions of the precursor pollutants oxides of nitrogen and volatile organic compounds in the presence of sunlight. Electric trains are emission-free at the point of use.

3.5.1 Methodology

Existing conditions for the air quality of the Orange Line Corridor, defined as the Austin – Round Rock Metropolitan Statistical Area (ARR MSA) airshed, were developed by reviewing the current attainment status of the ARR MSA with respect to the NAAQS pollutants, reviewing metrological conditions affecting local air quality, and summarizing air quality trends within the Orange Line Corridor. The main air quality consideration is the regulatory status of the Orange Line Corridor which primarily determines the needs and requirements for air quality regional planning purposes.

Table 3.5-1 National Ambient Air Quality Standards for Criteria Pollutants

Pollutant	Primary Standards	Averaging Times ¹	Secondary Standards
CO	9 ppm (10 mg/m ³)	8-hour ²	None
	35 ppm (40 mg/m ³)	1-hour ²	None
Pb	0.15 µg/m ³	Rolling 3-Month Average	Same as Primary
NO ₂	100 ppb (0.100 ppm)	1-hour ³	None
	53 ppb (0.053 ppm)	Annual (Arithmetic Mean)	Same as Primary
PM ₁₀	150 µg/m ³	24-hour ⁴	Same as Primary
PM _{2.5}	12 µg/m ³	Annual ⁵	15 µg/m ³
	35 µg/m ³	24-hour ³	Same as Primary
O ₃	0.070 ppm	8-hour ⁶	Same as Primary
SO ₂	75 ppb (0.075 ppm)	1-hour ⁷	None
	None	3-hour ²	0.5 ppm (1300 µg/m ³)

Source: EPA, 2019

Notes:

¹ – The time period for which compliance with the standard is measured

² – Not to exceed more than once a year

³ – 98th percentile, averaged over 3 years

⁴ – Not to be exceeded more than once per year on average over 3 years

⁵ – Annual mean, averaged over 3 years

⁶ – The 3-year average of the fourth-highest daily maximum 8-hour average ozone concentrations measured at each monitor within an area over each year must not exceed 0.070 ppm

⁷ – 99th percentile of 1-hour daily maximum concentrations, averaged over 3 years

3.5.2 Results

The greater ARR MSA (including the Central Texas counties of Travis, Williamson, Hays, Caldwell, and Bastrop) is currently in attainment or unclassifiable with respect to all NAAQS pollutants; therefore, the transportation conformity rules do not apply. Air quality is affected by the rate and location of pollutant emissions and meteorological conditions that influence the movement and dispersal of pollutants in the atmosphere. These conditions include wind speed and direction, air temperature gradients, and local topography. The Orange Line Corridor is located in generally flat to rolling topography that does not hinder or trap air movement like large hills and mountains would. The Central Texas – Austin area climate is humid subtropical with hot summers and generally mild winters. Average temperatures in Austin vary from 42 Fahrenheit (F) in January to 97F in August, with annual average precipitation of approximately 34 inches (Austin Texas Climate, 2019). Prevailing winds for the Austin area are generally out of the south. Austin area weather conditions include extended hot summers and occasional stagnant, foggy conditions during winter with temperature inversions, all of which are conducive to either forming or trapping air pollutants within the lower atmosphere.

With respect to ozone, winter inversions and fog conditions are not as frequent during the year or do not impact ozone exceedances as much as hot summer conditions do. The highest concentrations of ozone form on sunny days with low wind speeds, as high-pressure systems dominate the regional weather and tend to produce clear skies that increase photochemical reaction with stagnate winds (Texas Commission on Environmental Quality (TCEQ), 2019a). The ozone season in Central Texas is roughly April through November and TCEQ forecasts ozone action days during this period for several regions including the Austin metropolitan area.

According to the most recent Air Quality Report for the ARR MSA (Capital Area Council of Governments [CAPCOG], 2018), air pollution levels have remained in compliance with all NAAQS, although the region's 2015-2017 O₃ levels were just 1 percent below the 2015 O₃ NAAQS. However, since 1999, the region's ozone design value shows a steady downward trend with an average ozone decrease of approximately 1.1 ppb per year. The design value for all other NAAQS pollutants is well below the respective NAAQS for the pollutant.

3.6 Noise and Vibration

Noise and vibration are among the major concerns regarding the effects of a transit project on the surrounding communities and are key elements of the environmental impact assessment process for public transportation projects. A transit system is often placed near population centers by necessity and may cause noise and vibration at nearby residences and other sensitive types of land use. While vibration from transit projects can be a major concern in underground subway operations, it is less of concern for at-grade and elevated operations.

Criteria for determining noise and vibration impacts from the Orange Line transit project has been established following Federal Transit Authority's (FTA's) *Transit Noise and Vibration Impact Assessment Manual, September 2018* (FTA, 2018) to guide impact evaluations. When impacts are identified from a new or improved transit project, mitigation measures are identified and considered for implementation into the project design.

3.6.1 Methodology

Existing noise and vibration conditions were developed based on the Orange Line alignment generally following the Lamar Boulevard, Guadalupe Street, and Congress Avenue corridor. The noise and vibration conditions analysis focuses on the Lamar/Guadalupe/Congress roadways and a 1,000-foot buffer on each side of the alignment vs. the entire Orange Line Corridor. Per the FTA Manual's maximum screening distances and given the urban/suburban nature of the corridor, 1,000 feet provides a sufficient buffer for this analysis.

Noise and vibration sensitive receptor categories are explained in Tables 3.6-1 and 3.6-2. Each land use and facility presents varying levels of sensitivity to noise and vibration and forms the basis for impact criteria. Based on FTA's *Transit Noise and Vibration Impact Assessment Manual*, Table 3.6-3 identifies the screening distances for various transit noise projects. Table 3.6-4 defines screening distances from transit facilities to identify potential vibration impacts.

Table 3.6-1 Land Use Categories and Metrics for Transit Noise Impact Criteria

Land Use Category	Land Use Type	Noise Metric, dBA	Description of Land Use Category
1	High Sensitivity	Outdoor $L_{eq(1hr)}$ *	Land where quiet is an essential element of its intended purpose. Example land uses include preserved land for serenity and quiet, outdoor amphitheaters and concert pavilions, and national historic landmarks with considerable outdoor use. Recording studios and concert halls are also included in this category.
2	Residential	Outdoor Ldn	This category is applicable all residential land use and buildings where people normally sleep, such as hotels and hospitals.

Land Use Category	Land Use Type	Noise Metric, dBA	Description of Land Use Category
3	Institutional	Outdoor $L_{eq(1hr)}$ *	This category is applicable to institutional land uses with primarily daytime and evening use. Example land uses include schools, libraries, theaters, and churches where it is important to avoid interference with such activities as speech, meditation, and concentration on reading material. Places for meditation or study associated with cemeteries, monuments, museums, campgrounds, and recreational facilities are also included in this category.

Source: FTA, 2018

* $L_{eq(1hr)}$ for the loudest hour of project-related activity during hours of noise sensitivity

Table 3.6-2 Land Use Categories for General Vibration Assessment Impact Criteria

Land Use Category	Land Use Type	Description of Land Use Category
-	Special Buildings	This category includes special-use facilities that are very sensitive to vibration and noise that are not included in the categories below and require special consideration. However, if the building will rarely be occupied when the source of the vibration (e.g., the train) is operating, there is no need to evaluate for impact. Examples of these facilities include concert halls, TV and recording studios, and theaters.
1	High Sensitivity	This category includes buildings where vibration levels, including those below the threshold of human annoyance, would interfere with operations within the building. Examples include buildings where vibration-sensitive research and manufacturing is conducted, hospitals with vibration-sensitive equipment, and universities conducting physical research operations. The building's degree of sensitivity to vibration is dependent on the specific equipment that will be affected by the vibration. Equipment moderately sensitive to vibration, such as high-resolution lithographic equipment, optical microscopes, and electron microscopes with vibration isolation systems are included in this category. For equipment that is more sensitive, a Detailed Vibration Analysis must be conducted.
2	Residential	This category includes all residential land use and buildings where people normally sleep, such as hotels and hospitals. Transit-generated ground-borne vibration and noise from subways or surface running trains are considered to have a similar effect on receivers.
3	Institutional	This category includes institutions and offices that have vibration-sensitive equipment and have the potential for activity interference such as schools, churches, doctors' offices. Commercial or industrial locations including office buildings are not included in this category unless there is vibration-sensitive activity or equipment within the building. As with noise, the use of the building determines the vibration sensitivity.

Source: FTA, 2018

Table 3.6-3 Screening Distance for Noise Assessments

Project Systems	Screening Distance, feet (ft.)*		
	Unobstructed	Intervening Buildings	
<i>Fixed-Guideway Systems</i>			
Rapid Rail Transit (RRT)	700	350	
RRT Station	200	100	
Light Rail Transit (LRT)	350	175	
Streetcar	200	100	
Access Roads to Stations	100	50	
Low and Intermediate	Steel Wheel	125	50
	Rubber Tire	90	40

Project Systems		Screening Distance, feet (ft.)*	
		Unobstructed	Intervening Buildings
Capacity Transit	Monorail	175	70
Yards and Shops		1000	650
Parking Facilities		125	75
Access Roads to Parking		100	50
Ancillary Facilities: Ventilation Shafts		200	100
Ancillary Facilities: Power Substations		250	125
Bus Systems			
Busway		500	250
Bus Rapid Transit (BRT) on exclusive roadway		200	100
Bus Facilities	Access Roads	100	50
	Transit Mall	225	150
	Transit Center	225	150
	Storage & Maintenance	350	225
	Park & Ride Lots w/Buses	225	150

Source: FTA, 2018

*Measured from centerline of guideway for fixed-guideway sources, from the right-of-way (ROW) on both sides of the roadway for highway/transit sources, from the center of noise-generating activity for stationary sources, or from the outer boundary of the proposed project site for fixed facilities spread out over a large area.

Table 3.6-4 Screening Distances for Vibration Assessments

Type of Project	Critical Distance for Land Use Categories* Distance from ROW or Property Line, ft.		
	Land Use Cat. 1	Land Use Cat. 2	Land Use Cat. 3
Conventional Commuter Railroad	600	200	120
RRT	600	200	120
LRT and Streetcars	450	150	100
Innovative Clean Transit (ICT)	200	100	50
Bus Projects (if not previously screened out)	100	50	--

Source: FTA, 2018

*For the Vibration Screening Procedure, evaluate special buildings as follows: Category 1 - concert halls and TV studios, Category 2 - theaters and auditoriums. There are no special buildings for Category 3.

3.6.2 Results

The 21-mile Orange Line Corridor centers on downtown Austin and spans out north and south through numerous residential neighborhoods, parks, and schools and universities. Table 3.6-5 identifies the number of single-family houses, multi-family apartment buildings, hotels, educational and religious facilities, land libraries, and parks/cemeteries between proposed stations. Land uses that are highly sensitive to vibration including concert halls, theaters, and research facilities may be located within the two university complexes, hospitals or other downtown areas.

Table 3.6-5 Potential Noise and Vibration Receptors within 1,000 ft. of the Orange Line

Assessment Area		Residential				Institutional			Parks
Station	Station	Houses	Apt. Bldgs.	Hotels	Religious	Education	Library		
Tech. Ridge	Parmer	0	29	1	0	1	0	0	
Parmer	Braker	240	27	3	5	1	0	1	
Braker	Rundberg	132	174	0	1	0	0	0	
Rundberg	North Lamar Transit Center	275	218	0		1	1		
North Lamar Transit Center	Crestview	219	26	0	2	0	0	1	
Crestview	Koenig	181	18	0	2	0	0	0	
Koenig	Triangle/48 th Street	165	96	0	1	0	0	0	

Assessment Area		Residential			Institutional			
Station	Station	Houses	Apt. Bldgs.	Hotels	Religious	Education	Library	Parks
Triangle/48 th Street	Hyde Park/38 th Street	223	66	1	2	0	2	2
Hyde Park/38 th Street	29 th Street	310	41	0	1	1	0	1
29 th Street	UT 24 th Street	32	53	0	2	2	0	0
UT 24 th Street	Capital / 15 th Street	24	52	2	12	3	-	0
Capital/15 th Street	Courthouse/10 th Street	32	16	1	3	0	-	0
Courthouse/10 th Street	Republic Square/5 th Street	23	6	2	1	0	-	1
Republic Square/5 th Street	Auditorium Shores	0	5	2	1	0	-	2
Auditorium Shores	South Congress	111	23	3	4	1	-	0
SoCo	Oltorf (Congress)	282	44	1	5	3	0	0
Oltorf (Congress)	St. Edwards	143	45	0	6	3	-	0
St. Edwards	South Congress Transit Center	251	34	1	1	2	0	0
South Congress Transit Center	Stassney	136	38	1	2	0	0	1
Stassney	William Cannon	247	20	0	1	1	0	0
William Cannon	Slaughter	183	47	0	2	0	1	2
Total		3,209	1,078	18	54	19	5	11

Source: Google Earth, 2019

Notes: UT and St. Edwards University campuses noted as 1 education facility, without differentiation of residential and other uses.

3.7 Ecosystems

Ecosystems are communities of living organisms (including plants and animals) in a particular area which interact with each other and support natural resources. The following federal laws have been established to protect plants and animals: the Endangered Species Act (ESA), the Migratory Bird Treaty Act (MBTA), the Bald and Golden Eagle Protection Act (BGEPA), and provisions of the Moving Ahead for Progress in the 21st Century Act (MAP-21). Federally-funded development projects, such as the Orange Line, should consider the ecosystems in which the projects occur and the existing wildlife therein.

3.7.1 Methodology

Information used to identify and characterize ecoregions; vegetation and habitat types; threatened, endangered and other protected species habitats; and wildlife corridors in the Orange Line Corridor were obtained from the following resources:

- Ecoregions of Texas (Griffith, Bryce, Omernik, & Rogers, 2007)
- Texas Parks and Wildlife Department (TPWD) Ecological Mapping Systems of Texas (EMST) (TPWD, 2014)
- TPWD Natural Diversity Database (NDD) (TPWD, 2019)
- TPWD Rare, Threatened, and Endangered Species of Texas (RTEST) (TPWD, 2018)
- U.S. Fish & Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) (USFWS, 2019a), and Google Earth aerial photography (2018)

Research and analysis centered on utilizing the most current version of publicly available information. Conclusions contained in this section are the opinion of the professionals who conducted the review and subject to confirmation by the USFWS and TPWD.

The wildlife resources that were identified during the review are categorized into the following:

- Vegetation and Habitats: Vegetation and habitat types mapped within the Orange Line Corridor using TPWD EMST data and aerial photography.
- Threatened & Endangered (T&E) Species: Federal- and state-listed T&E species, including candidates for listing under the ESA. Species specific information was obtained from the above resources and used in conjunction with aerial imagery and research to determine potential suitable habitat determinations.
- MBTA and BGEPA Species: Species federally-protected by the MBTA and BGEPA. Species specific information was obtained from the above resources and used in conjunction with aerial imagery and research to make preliminary potential suitable habitat determinations.
- Wildlife Corridors: Corridors where wildlife species freely move through the landscape. Wildlife corridors and wildlife crossings are identified as part of MAP-21. Provisions of MAP-21 include reducing vehicle-caused wildlife mortality, improving public safety, restoring and maintaining connectivity among terrestrial or aquatic habitats, and mitigating damage to wildlife passage, habitat, and ecosystem connectivity.

3.7.2 Results

The majority of the Orange Line Corridor is located within urbanized environments along an interface between the Edwards Plateau and Texas Blackland Prairies Level III ecoregions. Specifically, the Orange Line Corridor is located in the Northern Blackland Prairies Level IV ecoregion. This ecoregion stretches from the Red River through the Dallas/Fort Worth area and down into central Texas, forming a narrow strip of relatively fertile land between the calcareous Edwards Plateau and sandier soils of the Post Oak (*Quercus stellata*) Savanna ecoregion. The Northern Blackland Prairies Level IV ecoregion historically supported tallgrass prairie and savanna, much of which has been converted to farmland and various types of human development (Griffith, Bryce, Omernik, & Rogers, 2007).

Vegetation and Habitats

Thirty-three EMST habitat types were mapped within the Orange Line Corridor. In general, the habitats fall into nine categories: urban (89 percent), oak (*Quercus spp*)/hardwood/Ashe juniper (*Juniperus ashei*) woodland (3.4 percent), riparian/floodplain/slope forest (2.2 percent), native-invasive woodland and shrubland (1.8 percent), grassland and savanna (1.7 percent), barren (0.9 percent), open water (0.7 percent), and riparian and floodplain shrubland (0.03 percent).

Table 3.7-1 provides a list of EMST types and corresponding acreages within the Orange Line Corridor.

T&E Species

Twenty-two federal- and state-listed T&E and candidate species were identified as having the potential to inhabit the Orange Line Corridor (Appendix C).

Based on vegetation characteristics within the Orange Line Corridor and review of aerial photography, portions of Walnut Creek Metropolitan Park were identified as potential suitable habitat for the federally endangered golden-cheeked warbler (*Setophaga chrysoparia*). In addition, TPWD mapped this area as potential habitat (TPWD, 2016). In 1996, Travis County and the CoA created the Balcones Canyonlands Preserve system which protects habitat for eight federally listed species, including the golden-cheeked warbler. The USFWS authorized incidental take of these species in exchange for a system of preserves that protects suitable habitat outlined in the Balcones Canyonlands Conservation Plan (BCCP). Based on

maps and permitting information in the BCCP, golden-cheeked warbler habitat was not mapped within the Orange Line Corridor (BCCP, 2019).

Table 3.7-1 EMST Types within the Orange Line Corridor

EMST Types	Acres within Orange Line Corridor	Percent (%) of Orange Line Corridor
Urban Low Intensity	8,090.57	62.23
Urban High Intensity	3,486.72	26.82
Edwards Plateau: Deciduous Oak - Evergreen Motte and Woodland	229.49	1.77
Native Invasive: Deciduous Woodland	153.26	1.18
Edwards Plateau: Savanna Grassland	131.67	1.01
Barren	122.81	0.94
Edwards Plateau: Ashe Juniper Motte and Woodland	100.77	0.78
Open Water	95.07	0.73
Blackland Prairie: Disturbance or Tame Grassland	95.04	0.73
Central Texas: Floodplain Hardwood Forest	85.04	0.65
Central Texas: Floodplain Hardwood - Evergreen Forest	81.27	0.63
Edwards Plateau: Oak - Hardwood Motte and Woodland	80.70	0.62
Native Invasive: Mesquite Shrubland	45.86	0.35
Edwards Plateau: Oak - Ashe Juniper Slope Forest	38.38	0.30
Edwards Plateau: Live Oak Motte and Woodland	27.89	0.21
Central Texas: Riparian Hardwood - Evergreen Forest	23.56	0.18
Edwards Plateau: Oak - Hardwood Slope Forest	19.93	0.15
Native Invasive: Juniper Shrubland	17.82	0.14
Native Invasive: Juniper Woodland	17.63	0.14
Central Texas: Floodplain Juniper Forest	14.34	0.11
Central Texas: Riparian Hardwood Forest	12.60	0.10
Central Texas: Floodplain Herbaceous Vegetation	8.15	0.06
Central Texas: Riparian Juniper Forest	7.47	0.06
Edwards Plateau: Floodplain Hardwood Forest	4.38	0.03
Edwards Plateau: Ashe Juniper Slope Forest	2.87	0.02
Central Texas: Riparian Evergreen Shrubland	1.28	0.01
Central Texas: Floodplain Deciduous Shrubland	1.25	0.01
Central Texas: Floodplain Live Oak Forest	1.11	0.01
Central Texas: Riparian Live Oak Forest	0.88	0.01
Post Oak Savanna: Savanna Grassland	0.74	0.01
Central Texas: Riparian Deciduous Shrubland	0.69	0.01
Central Texas: Floodplain Evergreen Shrubland	0.66	0.01
Edwards Plateau: Live Oak Slope Forest	0.48	<0.01

Source: TPWD, 2014

Suitable nesting habitat for the bald eagle (*Haliaeetus leucocephalus*) was identified within the Orange Line Corridor along Lady Bird Lake; however, this species is not known to nest in this area. Waterways, including Lady Bird Lake, were identified as potential suitable habitat for the sharpnose shiner (*Notropis oxyrhynchus*), smalleye shiner (*Notropis buccula*), blue sucker (*Cycleptus elongatus*), western creek chubsucker (*Erimyzon claviformis*), false spike mussel (*Quadrula mitchelli*), smooth pimpleback (*Quadrula houstonensis*), Texas fatmucket (*Lampsilis bracteata*), Texas fawnsfoot (*Truncilla macrodon*), Texas pimpleback (*Quadrula petrina*), and golden orb (*Quadrula aurea*).

A unique system of karst (cave) features is well documented along the Edwards Aquifer of Central Texas. Due to the presence of several protected cave fauna (karst species) in this area, portions of Travis County, including the Orange Line Corridor, have been divided into the following Karst Zones (USFWS, 2016):

- Zone 1: Areas known to contain endangered cave fauna
- Zone 2: Areas having a high probability of suitable habitat for endangered cave fauna
- Zone 3: Areas that probably do not contain endangered cave fauna

- Zone 4: Areas which do not contain endangered cave fauna

All four Karst Zones are mapped within the Orange Line Corridor, including an area that intersects the Orange Line Corridor mapped within Karst Zone 1 (areas known to contain endangered cave fauna). Karst Zones 2 and 3 also intersect the Orange Line Corridor between 45th Street and Lady Bird Lake. These areas were identified as potential suitable habitat within the Orange Line Corridor for the Barton Springs salamander (*Eurycea sosorum*), Jollyville Plateau salamander (*Eurycea tonkawae*), Bee Creek Cave harvestman (*Texella reddelli*), Bone Cave harvestman (*Texella reyesi*), Tooth Cave pseudoscorpion (*Tartarocreagris texana*), Tooth Cave spider (*Tayshaneta myopica*), Kretschmarr Cave mold beetle (*Texamaurops reddelli*), and Tooth Cave ground beetle (*Rhadine persephone*).

According to TPWD, as shown in Figure 3.7-1, 19 Element of Occurrence Records (EORs) were identified within the Orange Line Corridor (TPWD, 2019). One protected species, the smalleye shiner, was recorded within the Orange Line Corridor. The remaining species are considered rare for Travis County and do not carry state or federal regulatory status. In addition, no critical habitats for federally-listed species were mapped within the Orange Line Corridor (USFWS, 2018). Appendix B includes information on species listing status, habitat descriptions, and suitable habitat determinations for federal and state listed T&E species identified by the USFWS and TPWD for Travis County, Texas.

MBTA and BGEPA Species

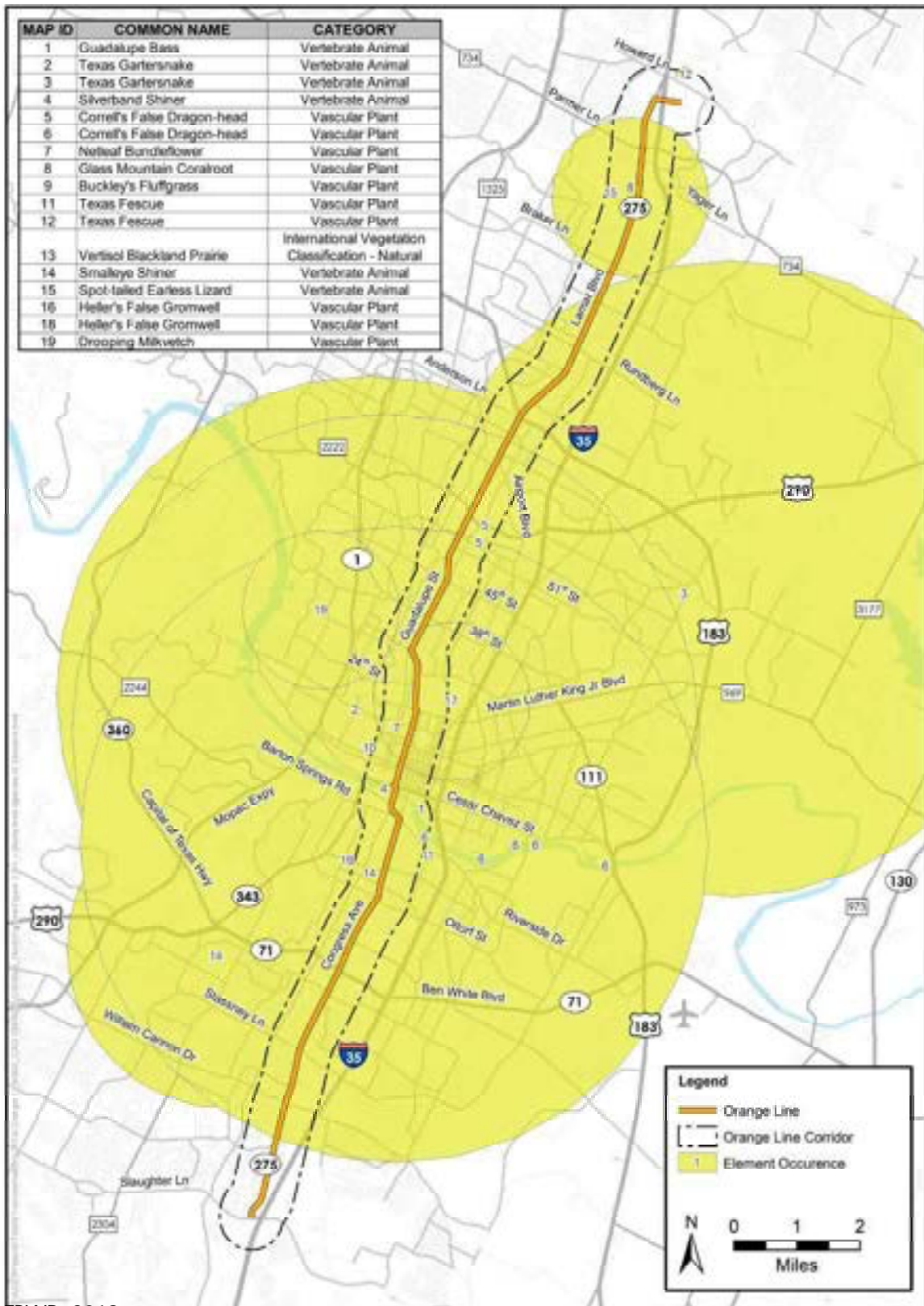
The bald eagle and their nests are federally protected from take under provisions of the BGEPA. Though potential suitable nesting habitat may be present within the Orange Line Corridor along the Colorado River, bald eagles are not known to nest along this section of the river and no known nests are located within or in the vicinity of the Orange Line Corridor.

Migratory birds and their nests are federally protected from take under provisions of the MBTA. Multiple migratory bird species have potential to nest in the Orange Line Corridor including swallows (e.g. *Petrochelidon* spp. And *Hirundo rustica*) which often nest on man-made structures such as bridges. Other suitable habitat for migratory birds includes wooded and forested areas (especially along waterways), fencerows, fields, and other undeveloped, suburban, or landscaped areas within the Orange Line Corridor. Several features and natural areas were identified within the Orange Line Corridor as having a high likelihood to support migratory bird nesting habitat, including Walnut Creek Metropolitan Park, Blunn Creek Preserve, the Colorado River corridor, Williamson Creek Greenbelt, and various other parks and recreation areas (see Section 3.10). Consultations with the USFWS and TPWD are recommended. In addition, nest surveys may be required to ensure no eagles are nesting in this area prior to construction.

Wildlife Corridors

Existing land use in the Orange Line Corridor primarily consists of residential and commercial development. The remaining areas of the Orange Line Corridor consist of parks and greenbelts which are situated along waterways. Though wildlife corridors are heavily fragmented in this urban landscape, wildlife utilize features like creeks, rivers, and greenbelts for migration, dispersal and other movements across the landscape. Wildlife are often observed crossing roadways resulting in a safety hazard, causing millions of dollars annually in repairs and medical costs due to wildlife-vehicle collisions (WVCs) (Federal Highway Authority, 2008). Several wildlife corridors were identified within the Orange Line Corridor, including the Colorado River, Walnut Creek, and the Williamson Creek Greenbelt. The construction of wildlife-friendly structures over and/or through these drainages and greenspaces would provide an avenue for wildlife to move through the Orange Line Corridor while keeping the general public safe.

Figure 3.7-1 Orange Line Corridor Element of Occurrence Records



Source: TPWD, 2019

3.8 Water Resources

This section provides a summary of floodplains and general hydrology within the Orange Line Corridor (wholly or in part), including waterbodies and wetlands.

3.8.1 Methodology

Floodplains

Travis County and the CoA participate in the National Flood Insurance Program (NFIP), administered by the Federal Emergency Management Agency (FEMA), and are responsible for regulating development within FEMA designated floodplains.

Information used to identify and characterize floodplains within the Orange Line Corridor were obtained from the FEMA Flood Insurance Rate Map (FIRM) panels 48453C0265K, 48453C0455J, 48453C0460K, 48453C0465J, 48453C0445J, 48453C0605J, 48453C0595J (effective 1/6/16), 48453C0270J (effective 8/18/14), and 48453C0585H (effective 9/26/08).

Hydrology

In recognition of the importance of clean water and the ecological value of streams and wetlands, in 1972 the U.S. Congress passed the Clean Water Act (CWA) to protect the physical, biological, and chemical quality of waters of the U.S. (WOTUS), including adjacent wetlands. Section 404 of the CWA defines waters of the U.S. as:

- All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide and their tributaries
- All interstate waters including interstate wetlands (all rivers, lakes and other waters that flow across or form part of, state boundaries) and their tributaries
- All waters such as intrastate lakes, rivers, streams, mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, in use, degradation or destruction of which would affect interstate or foreign commerce and their tributaries
- All impoundments of waters otherwise defined as waters of the U.S. under the definition and their tributaries
- Wetlands adjacent (bordering, contiguous or neighboring) to the above-mentioned waters (other than waters that are themselves wetlands)

The U.S. Army Corps of Engineers (USACE) and EPA have statutory responsibilities under Section 404 of the CWA. Under this act, discharges of dredged or fill material into WOTUS are regulated; therefore, such activities may require permit authorization. The Orange Line Corridor lies within the USACE Fort Worth District Area of Responsibility (AOR). Any permission USACE renders for the Project would be conditioned such that construction of each phase of the Project that impacts jurisdictional waters would not be allowed to occur until such time that each phase of the Project is designed, submitted for review, and subsequently approved by the USACE. Information used to identify and characterize waterbodies, streams, and wetlands within the Orange Line Corridor were obtained from the following resources in April 2019:

- U.S. Geological Survey (USGS) National Hydrography Dataset (NHD) and Watershed Boundary Dataset (WBD).
- USFWS National Wetlands Inventory (NWI) (USFWS, 2019c)
- USGS Topographic Maps (USGS, 2019c)
- Google Earth recent aerial photography (Google, 2018)

Research and analysis centered on utilizing the most current version of information available online. Conclusions contained in this section are based on data provided by various agencies and subject to confirmation by field investigations and the USACE.

3.8.2 Results

Floodplains

There are several mapped 100-year floodplains within the Orange Line Corridor that approximately correspond to mapped hydrological features, including the Colorado River, streams, and other drainages. These floodplains are mapped within Zones A, AE, and AO. The remainder of the Orange Line Corridor is mapped within Zone X, areas with a 0.2 percent annual chance of flood hazard (500-year floodplain) as well as areas of minimal flood hazard. Descriptions of the 100-year floodplain zones are provided below:

- Zone A is part of the FEMA 100-year flood hazard area where base flood elevations have not been determined.
- Zone AE is part of the FEMA 100-year flood hazard area where base flood elevations have been determined.
- Zone AO is part of the FEMA 100-year flood hazard area subject to shallow flooding (usually sheet flow on sloping terrain) where average depths are between 1 and 3 ft. and base flood elevations have been determined.

Most 100-year floodplains mapped along drainages within the Orange Line Corridor are designated as Zone AE. Small portions of these drainages are designated as Zone A and Zone AO (Appendix A).

Floodways include the channel of a stream and the adjacent land areas that must remain unobstructed. No floodways have been delineated for drainages within the Orange Line Corridor.

Hydrology

The Orange Line Corridor is located within the Colorado River Basin (Texas Water Development Board [TWDB] 2018). The Orange Line Corridor lies within the Austin-Travis Lakes watershed, and specifically within the Walnut Creek-Colorado River, Town Lake-Colorado River (Lady Bird Lake), Williamson Creek-Onion Creek, and Slaughter Creek-Onion Creek subwatersheds (12-digit Hydrologic Unit Codes [HUC] 120902050307, 120902050306, 120902050409, and 120902050408, respectively) (USGS, 2019b).

Topography within the Orange Line Corridor is gently undulating to rolling with surface gradient sloping down in elevation at locations associated with drainages, especially the Colorado River. The highest elevation is located in the northern portion of the Orange Line Corridor at approximately 780 ft. above mean sea level (MSL). The lowest elevation is located along the Colorado River near the central portion of the Orange Line Corridor at approximately 430 ft. above MSL. The corridor is located within the USGS 7.5-minute topographic quadrangle maps for Pflugerville West, Texas (2/23/2019), Austin East, Texas (2/23/2019), Austin West, Texas (2/23/2019), Montopolis, Texas (2/23/2019), and Oak Hill, Texas (2/23/2019).

NHD data, several streams and waterbody features were identified within the Orange Line Corridor. A total of 37.6 miles (198,732.8 ft.) of NHD flowline features were identified within the Orange Line Corridor, including 6.0 miles (31,500.24 ft.) of perennial stream/river features, 29.4 miles (154,970.41 ft.) of intermittent stream/river features, and 2.3 miles (12,262.1 ft.) of artificial path features. The Colorado River, Walnut Creek, Little Walnut Creek, East Bouldin Creek, Williamson Creek, and several unnamed drainages intersect the Orange Line. See Table 3.8-1 below for more information.

Table 3.8-1 NHD Stream Features within the Orange Line Corridor

NHD Flowline	Length (ft.) within the Orange Line Corridor
Artificial Path	12,262.10
Colorado River (Lady Bird Lake)	7,535.66
Unnamed	4,087.18
Williamson Creek	542.69
Shoal Creek	96.57
Intermittent Stream/River	154,970.41
Unnamed	76,664.79
East Bouldin Creek	18,314.27
Waller Creek	13,747.12
Blunn Creek	10,923.53
Williamson Creek	10,918.68
Wells Branch	9,356.57
Boggy Creek	7,116.30
Little Walnut Creek	4,097.27
Tar Branch	1,936.80
West Bouldin Creek	1,895.07
Perennial Stream/River	31,500.24
Shoal Creek	11,358.29
Walnut Creek	8,387.82
Waller Creek	6,979.47
Little Walnut Creek	4,774.66
Total	198,732.75

Source: NHD, 2019

Twenty-eight NHD waterbodies totaling approximately 116 acres were identified within the Orange Line Corridor, including 17 lake/pond features and 11 reservoir features (Appendix A). Lady Bird Lake accounted for 104.7 acres (90 percent) of the NHD mapped waterbodies within the Orange Line Corridor. See Table 3.8-2 below for more information.

Table 3.8-2 NHD Waterbody Features within the Orange Line Corridor

NHD Waterbody	Acres within Orange Line Corridor
Lake/Pond	111.5
Lady Bird Lake	104.7
Unnamed	6.78
Reservoir	4.32
Unnamed	4.32
Total	115.8

Source: NHD, 2019

Based on NWI data, 70 wetland features totaling approximately 203 acres were identified within the Orange Line Corridor. NWI mapped features were generally associated with NHD mapped features. Per NWI classification (Cowardin et al, 1979), the wetland and deepwater habitat types documented within the Orange Line Corridor include Freshwater Emergent Wetland, Freshwater Forested/Shrub Wetland, Freshwater Pond, Lake, and Riverine (USFWS, 2016). The Colorado River (Lady Bird Lake) accounted for 105.6 acres (52 percent), and emergent and forested wetlands accounted for 23.1 acres (11 percent) of NWI features mapped within the Orange Line Corridor (Appendix A). See Table 3.8-3 below for more information.

Table 3.8-3 NWI Features within the Orange Line Corridor

NWI Classification	Acres within Orange Line Corridor
Lake	105.6
Riverine	73.36
Freshwater Forested/Shrub Wetland	18.2
Freshwater Emergent Wetland	4.9
Freshwater Pond	1.1
Total	203.1

Source: USFWS, 2019

3.9 Historical and Archeological Resources

This section includes information on historic and archeological resources within the Orange Line Corridor.

3.9.1 Methodology

Historical Resources

An online literature review of historic resources was conducted to identify previously recorded and/or designated historic resources within the Orange Line Corridor (wholly or in part). The term historic resource refers to any building, structure, object, and historic district that is listed in, or eligible for listing in, the National Register of Historic Places (NRHP). The literature review included a search of the Texas Historic Sites Atlas (THSA), NRHP database, TxDOT historic resources databases, and the CoA Landmarks database to identify previously-recorded and/or designated historic resources including NRHP-listed properties, NRHP-eligible properties, National Historic Landmarks (NHLs), State Antiquities Landmarks (SALs), Recorded Texas Historic Landmarks (RTHLs), Official Texas Historic Markers (OTHMs), Historic Texas Cemeteries (HTCs), and recorded cemeteries with no designation.

Archeological Resources

Information on previously recorded archeological sites within the Orange Line Corridor (wholly or in part) is presented below. This information was compiled by conducting a file search of the THC's Texas Archeological Sites Atlas (TASA), and from Geographic Information System (GIS) site data provided by the Texas Archeological Research Laboratory (TARL) at the UT.

3.9.2 Results

Historical Resources

The results of the historical resources review are depicted in Appendix A and reported in Appendix D. The literature review resulted in the identification of 450 historic resources that have been previously recorded and/or designated within the Orange Line Corridor (Appendix D). Many of the resources have multiple designations. Resources that are listed in the NRHP include two NHLs as well as 88 individual properties and 14 historic districts. An additional 19 resources have been previously determined eligible for NRHP listing. Other historic resources identified as part of this review include 23 SALs, 102 RTHLs, three HTCs, and one cemetery with no designation. Additional cemetery information is provided in the archeology section below.

In addition, 302 locally designated CoA Landmarks were identified within the Orange Line Corridor. Designation as a CoA Landmark does not qualify a resource as an NRHP property; therefore, these resources would require evaluation to determine NRHP eligibility. The review also identified 66 historic markers within the Orange Line Corridor, which includes 63 OTHMs, two HTC markers, and one Centennial Marker. The Centennial Marker addressing the Meridian Highway is considered NRHP-eligible.

Archeological Resources

Previously Recorded Archeological Sites

The archeological background review revealed a total of 102 previously recorded archeological sites within the Orange Line Corridor (Appendix B). Of these, 41 sites contain only historic components; 33 sites contain only prehistoric components; 10 sites contain both prehistoric and historic components. No information was available for 18 of the site records. Eleven of the 102 previously recorded sites have been determined eligible for listing in the NRHP by the Texas State Historic Preservation Office (SHPO)/THC; 25 sites have been determined ineligible for the NRHP; 65 sites have undetermined eligibility; and four sites have been designated as SALs. None of the previously recorded archeological sites intersect the project corridor.

The Atlas search revealed four recorded cemeteries within the Orange Line Corridor (Appendix D). These include the Williamson Creek Cemetery (TV-C014), Boggy Creek Masonic Cemetery (TV-C015), Austin State Hospital Cemetery (TV-C023), and Memorial Hill Park Cemetery (TV-C071). All but the Memorial Hill Park Cemetery are designated as HTC's. Two additional cemeteries that are not listed in the cemetery database are also present within the Orange Line Corridor. These two cemeteries were documented as archeological sites and were assigned trinomials. These include the Walnut Creek Cemetery (41TV927) and the Matthews Cemetery (41TV2066). The Matthews Cemetery was relocated in 2004.

Potential for Unrecorded Archeological Sites

A review of extant site distribution in Travis County indicates that prehistoric archeological sites tend to be concentrated near water sources. Numerous streams are crossed by the Orange Line Corridor, including Boggy Creek, Williamson Creek, West Bouldin Creek, East Bouldin Creek, Blunn Creek, the Colorado River, Waller Creek, Shoal Creek, Little Walnut Creek, Walnut Creek, and Wells Branch. Depositional areas adjacent to some of these drainages should be considered high probability areas for the presence of archeological sites. At some of these crossings, it is likely that well defined floodplain and terrace morphological features are preserved with Holocene-age alluvial and/or colluvial fills, which have a high probability for containing buried cultural materials with reasonable stratigraphic integrity. To further evaluate the potential to which the Orange Line Corridor might contain intact prehistoric sites, a review of TxDOT's Austin Hybrid Potential Archeological Liability Map (HPALM) model was undertaken. The HPALM model predicts the locations of eligible prehistoric sites based upon certain geologic and pedologic integrity criteria, and ranks the areas from 0 to 9 in terms of integrity potential. Based on the HPALM data for the Orange Line Corridor, 63 percent of the Orange Line Corridor exhibits low potential overall, while 34 percent exhibits moderate potential, and only 3 percent exhibits high potential.

In terms of historic archeological sites, a review of historic topographic and Sanborn Fire Insurance maps indicated that numerous historic resources were once present within the Orange Line Corridor, including residential and commercial structures and roads. It is likely that buried features, including foundations, cisterns, wells, middens, and privies may be found beneath existing pavement. An archeological survey of these areas and a monitoring/ discovery plan may be necessary prior to construction.

3.10 Parklands

Recreational resources, including parklands, are important community features that warrant consideration during federally funded projects. These resources include parks, trails, greenbelts, and open space areas which offer opportunities for recreation, including both passive and active activities. Parks and other recreational resources were identified and evaluated within the Orange Line Corridor as discussed below.

3.10.1 Methodology

Existing and future or planned parks and recreational resources in the Orange Line Corridor were identified and evaluated through review of CoA's Parks and Recreation Department (PARC) data (CoA, 2019g), CoA Urban Trails dataset (CoA, 2019h), PARC Interactive Map (CoA, 2019i), CoA 2011-2016 "Long Range Plan for Land, Facilities, and Programs" master plan (CoA, 2010), and recent aerial imagery from Google Earth (2018). In addition, Section 6(f) properties were identified on the National Parks Service (NPS) Land and Water Conservation Fund (LWCF) project list (NPS, 2019).

3.10.2 Results

Existing Recreational Resources

Numerous existing parks, trails, greenbelts, and other recreational resources were identified within the Orange Line Corridor (wholly or in part) (Appendix A). Details and characteristics of recreational resources in the Orange Line Corridor are presented in Table 3.10-1.

Table 3.10-1 Parks and Recreational Resources Identified within the Orange Line Corridor

Resource Name	Address	Resource Type	Owner	Size (acres)
Adams-Hemphill Neighborhood Park	201 West 30 th Street, Austin, Texas 78705	Mixed-use Park	CoA	9.98
Auditorium Shores at Town Lake Metro Park	800 West Riverside Drive, Austin, Texas 78704	Mixed-use Park	CoA	47.53
Austin Recreation Center	1301 Shoal Creek Boulevard., Austin, Texas 78701	Special Use Area	CoA	5.49
Bailey Neighborhood Park	1101 West 33 rd Street, Austin, Texas 78705	Active Park	CoA	2.40
Barrington School Park	9306 Glenn Lane, Austin, Texas 78753	Active Park	Austin Independent School District (AISD)	7.68
Battle Bend Neighborhood Park	121 Sheraton Avenue, Austin, Texas 78745	Mixed-use Park	CoA	4.75
Big Stacy Neighborhood Park	700 East Live Oak Street., Austin, Texas 78704	Active Park	CoA	4.46
Blunn Creek Greenbelt	1901 East Side Drive, Austin, Texas 78704	Natural Area	CoA	13.33
Blunn Creek Nature Preserve	1200 St. Edwards Drive, Austin, Texas 78704	Nature Preserve	CoA	11.43
Brownie Neighborhood Park	10000 Brownie Drive, Austin, Texas 78753	Active Pocket Park	CoA	1.93
Butler Metro Park	1000 Barton Springs Road, Austin, Texas 78704	Mixed-use Park	CoA	20.71
Crestland Triangle	715 West Crestland Drive, Austin, Texas 78752	Natural Area	CoA	0.46
Dougherty Arts Center	1110 Barton Springs Road, Austin, Texas 78704	Special Use Area	CoA	2.34
Duncan Neighborhood Park	900 W 9 th Street, Austin, Texas 78701	Mixed-use Park	CoA	5.11
East Bouldin Creek Greenbelt	901 Bouldin Avenue, Austin, Texas 78704	Natural Area	CoA	0.64
Eastwoods Neighborhood Park	3001 Harris Park Avenue, Austin, Texas 78705	Active Park	CoA	0.04
Elizabet Ney Museum	304 East 44 th Street, Austin, Texas 78751	Historical/Cultural	CoA	2.41
Gillis Neighborhood Park	2410 Durwood Avenue., Austin, Texas 78704	Active Park	CoA	6.83
Heath Eiland and Morgan Moss BMX Skate Park	1213 Shoal Creek Boulevard., Austin, Texas 78701	Special Use Area	CoA	1.56
Highland Neighborhood Park	403 W St Johns Avenue, Austin, Texas 78752	Special Use Area	CoA	0.24
Kennemer Pool	1031 Payton Gin Road, Austin, Texas 78758	Special Use Area	CoA	1.05
Lamar Senior Activity Center	2874 Shoal Crest Avenue, Austin, Texas 78705	Special Use Area	CoA	1.99
Little Stacy Neighborhood Park	1500 Alameda Drive, Austin, Texas 78704	Active Park	CoA	6.86
Margaret Hoffman Oak Park	315 W Cesar Chavez Street, Austin, Texas 78701	Passive Park	CoA	0.22
Mary Dawson Pocket Park	650 Dawson Road, Austin, Texas 78704	Pocket Park/Natural Area	CoA	0.51
Meadowview Triangle	414 West Crestland Drive, Austin, Texas 78752	Natural Area	CoA	0.42
Nicholas Dawson Neighborhood Park	704 West James Street, Austin, Texas 78704	Mixed-use Park	CoA	3.30
North Austin Recreation Center/YMCA	1000 West Rundberg Lane, Austin, Texas 78758	Special Use Area	CoA	7.00

Resource Name	Address	Resource Type	Owner	Size (acres)
Norwood Tract at Town Lake Metro Park	1009 Edgecliff Terrace, Austin, Texas 78704	Metropolitan Special Use Area	CoA	1.39
Old Bakery	1006 Congress Avenue, Austin, Texas 78701	Historical/Cultural	CoA	0.31
Payton Gin Pocket Park	801 Payton Gin Road, Austin, Texas 78758	Passive Park	CoA	0.82
Pease District Park	1100 Kingsbury Street, Austin, Texas 78703	Mixed-use Park	CoA	0.29
Quail Creek Neighborhood Park	1101 Mearns Meadow Drive, Austin, Texas 78758	Mixed-use Park	CoA	16.36
Reilly School Park	6001 Guadalupe Street, Austin, Texas 78752	Active Park	AISD	7.17
Republic Square	422 Guadalupe Street, Austin, Texas 78701	Passive Park	CoA	1.75
Ron Rigsby Pocket Park	1110 Little Elm Park, Austin, Texas 78758	Natural Area	CoA	0.80
Ryan Planting Strip	6900 Ryan Drive, Austin, Texas 78757	Natural Area	CoA	0.24
Scofield Farms Neighborhood Park	12901 Scofield Farms Drive, Austin, Texas 78727	Mixed-use Park	CoA	20.74
Shipe Neighborhood Park	4400 Avenue G, Austin, Texas 78751	Active Park	CoA	2.46
Shoal Beach at Town Lake Metro Park	707 West Cesar Chavez Street, Austin, Texas 78701	Metropolitan Corridor	CoA	15.03
Shoal Creek Greenbelt	2600 North Lamar Boulevard Austin, Texas 78705	Natural Area	CoA	43.11
South Austin Island	2205 South Congress Avenue, Austin, Texas 78704	Special Use Area	CoA	0.07
South Boggy Creek Greenbelt	7701 Circle S Road., Austin, Texas 78745	Natural Area	CoA	8.55
Sparky Pocket Park	3701 Grooms Street, Austin, Texas 78705	Special Use Area	CoA	0.46
St. Elmo School Park	4312 S 1 st Street, Austin, Texas 78745	Active Park	AISD	3.55
T.A. Brown School Park	520 Northway Drive, Austin, Texas 78752	Active Park	CoA	2.30
The Circle ROW Greenbelt	1300 The Circle, Austin, Texas 78704	Natural Area	CoA	1.21
Triangle Commons Neighborhood Park	722 West 46 th Street, Austin, Texas 78751	Mixed-use Park	CoA	6.02
Vic Mathias Shores at Town Lake Metro Park	700 West Riverside Drive., Austin, Texas 78704	Metropolitan Special Use Area	CoA	5.77
Waller Beach at Town Lake Metro Park	30 East Ave., Austin, Texas 78701	Metropolitan Corridor	CoA	22.59
Waller Creek Greenbelt	703 East 6 th Street, Austin, Texas 78701	Natural Area	CoA	1.10
Walnut Creek Greenbelt	2611 Park Bend Road, Austin, Texas 78758	Natural Area	CoA	27.11
Walnut Creek Metro Park	12138 North Lamar Boulevard, Austin, Texas 78758	Mixed-use Park	CoA	198.26
Waterloo Neighborhood Park	500 East 12 th Street, Austin, Texas 78701	Mixed-use Park	CoA	6.44
West Bouldin Creek Greenbelt	1200 South 6 th Street, Austin, Texas 78704	Natural Area/ Mixed-use Park	CoA	0.19
Williams School Park	605 Blue Valley Drive, Austin, Texas 78748	Active Park	AISD	2.93
Williamson Creek Central Greenbelt	5120 South 1 st Street, Austin, Texas 78745	Natural Area	CoA	58.30
Wooldridge Square	900 Guadalupe Street, Austin, Texas 78701	Special Use Area	CoA	1.73

Source: CoA, 2019g, CoA, 2019i

Of the parks and recreational resources within the Orange Line Corridor, several were identified adjacent to and/or intersecting the Orange Line, including Walnut Creek Metropolitan Park, Greenbelt and Trails; Payton Gin Pocket Park and Trail; Triangle Commons Neighborhood Park and Trail; Woodbridge Square and Pedestrian Walkway; Republic Square and Pedestrian Walkways; Lady Bird Lake Metropolitan Park, and the Ann and Roy Butler Hike and Bike Trail system (hike and bike trail). Further south, the Williamson Creek Greenbelt also intersects the Orange Line (CoA, 2019g), (CoA, 2019h) (CoA, 2019i).

Future or Planned Recreational Resources

Several proposed urban trails within the Orange Line Corridor were identified in the CoA Urban Trails database (CoA, 2019h). These urban trails are at least 12 ft. wide and include concrete walkways. See Table 3.10-2 below for proposed urban trails identified within the Orange Line Corridor.

Table 3.10-2 Proposed Urban Trails Identified within the Orange Line Corridor

Urban Trail System	Extent	Location
51 st Street Trail	West 51 st Street to West 46 th Street Connector	Neighborhood Connector
Academy Drive to IH 35 SB Lady Bird Bridge West Sidewalk	Academy Drive to Alta Vista Avenue	Within Parks
Ann and Roy Butler Trail	Waller Beach at Town Lake	Within Parks
Ann and Roy Butler Trail	Sterzing Street to Riverside Drive	Within Parks
Ann and Roy Butler Trail	Rainey Street to East Avenue	Within Parks
Ann and Roy Butler Trail	Ann and Roy Butler Trail Connector	Along Roadway
Ann and Roy Butler Trail	Lamar Boulevard to Trinity Street	Within Parks
Ann and Roy Butler Trail	Riverside Drive to Congress Avenue	Within Parks
Blunn Creek Trail	Blunn Creek Preserve	Within Parks
Bowie Street Underpass	Bowie Street Underpass	Along Roadway
Central Market Connector	North Lamar Boulevard to Guadalupe Street	Neighborhood Connector
Chesterfield Ave Connector	Chesterfield Avenue Connector	Along Roadway
East Ben White Boulevard Corridor	Burleson Road to UPC/ASA Rail Trail	Along Railroad
Georgian Drive at Rundberg Lane Trail Connector	Rundberg Lane to Rock Hollow Lane	Neighborhood Connector
Lamar Boulevard to Bon Air Drive Connector	North Lamar Boulevard to Bon Air Drive Connector	Along Creek
Lamar Boulevard Trail	Lamar Transit Center Connector	Along Roadway
Lamar Boulevard Trail	Morrow Street to Airport Boulevard	Along Roadway
Little Walnut Creek Trail	North Lamar Boulevard to Geneva Drive	Along Creek
North IH 35 Service Road: Tech Ridge to Wren Avenue Connector	Tech Ridge Boulevard to Wren Avenue	Along Roadway
Northern Walnut Creek Trail	Walnut Creek Metro Park	Within Parks
Northern Walnut Creek Trail	Northern Walnut Creek Trail to North Lamar Boulevard	Within Parks
Northern Walnut Creek Trail	Walnut Bluffs Trail	Within Parks
Northern Walnut Creek Trail	Cedarbrook Court to Oak Trail	Along Creek
Northstar Greenbelt Trail	North Lamar Boulevard Connector	Along Creek
Northstar Greenbelt Trail	Northstar Greenbelt Connector	Neighborhood Connector
Northstar Greenbelt Trail	Northstar to Northern Walnut Creek Trail Connector	Neighborhood Connector
Payton Gin Pocket Park Trail	Payton Gin Pocket Park Trail	Within Parks
Quail Creek Trail	Ron Rigsby Pocket Park Connector	Within Parks
Red Line Trail	Denson Drive to Alexander Avenue	Along Roadway
Red Line Trail	North Lamar Boulevard to Howard Lane	Along Railroad
Riverside Trail	East Riverside Drive and Alameda Drive	Along Roadway
Rundberg Lane to Peyton Gin Rd Connector	Rundberg Lane to Peyton Gin Road	Along Creek
Scofield Farms Connector	Scofield Farms Connector	Within Parks
Shoal Creek Trail	Rio Grande St and 4 th to Shoal Creek Trail Bridge	Along Creek
Shoal Creek Trail	Belmont Pkwy	Along Creek
Shoal Creek Trail	West 29 th Street	Along Roadway
Shoal Creek Trail	West 3 rd Street Connector	Along Roadway
Shoal Creek Trail	West 30 th Street and North Lamar Boulevard	Within Parks
Shoal Creek Trail	West 29 th Street to West 25 th Street	Within Parks
Shoal Creek Trail	West 5 th Street to West 4 th Street	Within Parks
Shoal Creek Trail	Kingsbury Street to West 6 th Street	Within Parks
South Boggy Creek Trail	IH 35 to Onion Creek Trail	Along Creek
South Boggy Creek Trail	South 1 st Street to Stouh IH 35 SB	Along Creek
Wells Branch Trail	Bench Mark Drive to Old Cedar Lane	Along Creek

Urban Trail System	Extent	Location
Wells Branch Trail	Walnut Creek Metro Park	Within Parks
Wells Creek Trail	Creole Drive to Scofield Farms Park	Within Parks
West Bouldin Creek Trail	Riverside Drive to West Bouldin Creek Greenbelt	Along Creek
Williamson Creek Trail	South Congress Avenue Connector	Along Creek
Williamson Creek Trail	Wasson Road to Conestoga Trail	Along Creek
Williamson Creek Trail	Williamson Creek Central Greenbelt	Within Parks

Source: CoA, 2019h

Proposed urban trails that would intersect and/or cross the Orange Line include the Northern Walnut Creek Trail, Northstar Greenbelt Trail, Little Walnut Creek Trail, Central Market Connector, Lamar Boulevard to Bon Air Drive Connector, Lamar Boulevard Trail, and proposed upgrades to portions of the Ann and Roy Butler Hike and Bike Trail.

In addition, three urban trails have been proposed in South Austin that would cross the Orange Line, including the East Ben White Boulevard Corridor, Williamson Creek Trail, and South Boggy Creek Trail.

Several relevant neighborhood and combined neighborhood plans discussed in Chapter 7 of the CoA 2011-2016 “Long Range Plan for Land, Facilities, and Programs” include recreational resources within the Orange Line Corridor (CoA, 2010). No future trails or recreational resources were identified that would intersect the Orange Line Corridor; however, several plans outline improvements to existing facilities and extensions of greenbelts and trails within the Orange Line Corridor, including the Bouldin Neighborhood Plan, Brentwood/Highland Combined Neighborhood Plan, Greater South River City Combined Neighborhood Plan, North Loop Neighborhood Plan, and South Congress Neighborhood Plan (CoA, 2010).

The proposed neighborhood plans are conceptual in nature and many details are not yet available. Coordination with the local jurisdictions will continue throughout the project as plans for these recreational resources develop. Neighborhood and master plans may be updated while this project is progressing. However, efforts should be made to not preclude previous planning efforts made by local jurisdictions.

Section 4(f) Properties

Several of the parks and recreational resources within the Orange Line Corridor may be afforded protection under Section 4(f) as defined in 23 Code of Federal Regulations 774. In order to qualify as a park, recreation area, or refuge under the statute, a property must meet all the following criteria:

- It must be publicly owned
- It must be open to the public
- Its major purpose must be for park, recreation, or refuge activities
- It must be significant as a park, recreation area or refuge

In addition, among the basic types of properties protected by Section 4(f) are historic sites. In order to qualify for protection under Section 4(f), a historic site must meet the following criteria:

- It must be of national, state or local significance
- It must be on or eligible for listing on the NRHP

Historic resources are discussed in Section 3.9 and identify the sites listed on or eligible to be listed on the NRHP as well as the sites that may be eligible to be listed on the NRHP. These sites are considered Section 4(f) resources.

If one of these properties is impacted as part of the proposed Orange Line, then a Section 4(f) evaluation and coordination with the Department of Transportation may be required.

Section 6(f) Properties

Section 6(f) of the LWCF Act (36 Code of Federal Regulations 59) protects recreational lands planned, acquired, or developed with funds from the LWCF. Once an area has been funded with LWCF assistance, it is continually maintained in public recreation use unless the National Park Service approves substitution property. Section 6(f) applies to all transportation projects involving possible conversions of the LWCF property, whether or not federal funding is being used for the project.

The NPS identified one property within the Orange Line Corridor that has received LWCF grant assistance; Walnut Creek Metropolitan Park, located in the northern portion of the Orange Line Corridor adjacent to the Orange Line. Lady Bird Lake was also identified as receiving LWCF grant assistance; however, portions of the lake are located outside of the Orange Line Corridor and project details were not available. No additional resources were identified (NPS, 2019).

3.11 Hazardous Materials

This section provides a summary of properties with the potential to have recognized hazardous material issues within the Orange Line Corridor.

3.11.1 Methodology

The methodology used to identify sites with the potential for recognized hazardous material issues within the Orange Line Corridor included the following:

- Evaluation of available data from the TCEQ that pertained to releases of hazardous materials into the environment from the following databases: Industrial Hazardous Waste Corrective Action (IHWCA), Leaking Petroleum Storage Tanks (LPST), and Voluntary Cleanup Program (VCP).
- Identifying sites from the above-mentioned databases considered to have the potential for recognized environmental conditions.

For this hazardous materials assessment summary, sites within the Orange Line Corridor are identified as having known (current and historic) soil or groundwater contamination and distinguished as sites with recognized environmental conditions. Recognized environmental conditions, include sites with “the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substance or petroleum into structures on the property or into the ground, groundwater, or surface water of the property” (American Society for Testing and Materials [ASTM] 2013).

3.11.2 Results

A total of 218 sites with potential to become recognized environmental conditions were identified within the Orange Line Corridor (see Appendix A and Appendix C).

Large urban areas generally consist of areas where light industrial and commercial businesses historically or currently operate within the same area. These types of businesses, such as manufacturing plants, gasoline service stations, automotive repair facilities, and larger truck stop establishments, typically use underground storage tanks (UST) or aboveground storage tanks (AST) to store petroleum products, waste oils, and/or other hazardous materials. Such facilities are also often regulated based on their current hazardous waste generation management activities. Consequently, areas with light industrial and commercial use present a risk of having the presence of soil and groundwater contamination, as the result of past spills or releases of hazardous substances, including petroleum products.

Based on the data gathered from TCEQ, there are 42 entries considered adjoining the Orange Line Corridor. Of these entries, 37 are from the LPST database, three are from the IHWCA database, and two

are from the VCP database. These entries are considered to pose the highest risk due to proximity to the Orange Line and known past releases. There are 87 entries not considered adjoining the Orange Line but are within 0.25 mile. These entries consist of 64 LPST entries, six IHWCA entries, and 17 VCP entries. These entries may pose a risk to the Orange Line due to location and potential status of the facilities release or spill. The remaining 89 entries are located outside of 0.25 mile from the Orange Line. These consist of 70 LPST entries, seven IHWCA entries, and 15 VCP entries. These entries may pose a risk due to potential status of the facilities release or spill.

3.12 Public Safety and Security

Public safety and security are among the primary concerns regarding any transit improvement project. This section provides a summary of existing safety and security conditions for pedestrians, motorists, and for the community at large. Potential safety hazards that could occur include accidents with a transit vehicle, a motor vehicle (non-transit), fires, major structural failures, etc. Security impacts could include the potential for criminal activity near the operation of a transit system.

3.12.1 Methodology

The methodology used to identify current safety and security conditions included an evaluation of the fire, police, and medical emergency facilities within the Orange Line Corridor and a review of recent criminal activity. To evaluate the current emergency response capabilities in the Orange Line Corridor the following data were collected and their proximity to the Orange Line documented:

- Available fire and police station data from the CoA
- Available data of medical facilities that offer emergency response capabilities from the Environmental Systems Research Institute (ESRI)

Potential hazards were also analyzed through a review of crime data and included the following:

- Available crime data from the Austin Police Department

3.12.2 Results

Fire Protection and Emergency Medical Services

There is a total of eight fire stations within the Orange Line Corridor, as shown in Table 3.12-1. There are also two medical centers within the Orange Line Corridor that could provide care during a medical emergency, as shown in Table 3.12-2. The hospitals are ones where emergency medical services could be provided and where emergency vehicles (i.e., ambulances) could deliver patients in the event of a medical emergency. These fire stations and hospitals would serve as initial responders for a fire or medical emergency along the Orange Line. Fire stations outside of the Orange Line Corridor (not shown in referenced table), may also be utilized if additional resources were needed during an incident. In 2018, 90 percent of fire emergency calls were responded to in under 8:07 minutes while 90 percent of medical emergency calls were responded to in under 9:17 minutes.

Table 3.12-1 Existing Fire Emergency Stations within the Orange Line Corridor

Name	Address	Distance to Orange Line Centerline (ft.)
Austin Central Fire Station 1	401 East 5 th Street, Austin, TX	2,367
Austin Fire Station 2	506 West MLK Boulevard, Austin, TX	1,078
Austin Fire Station 2	201 West 30 th Street, Austin, TX	1,177
South Austin Central Fire Station	1705 South Congress Avenue, Austin, TX	116
Austin Fire Station 9	4301 Speedway, Austin, TX	1,649
Austin Fire Station 16	7000 Reese Lane, Austin, TX	1,409
Austin Fire Station 17	4128 South 1 st Street, Austin, TX	2,398
Austin Fire Station 18	1021 West Braker Lane, Austin, TX	1,965

Source: CoA, 2018

Table 3.12-2 Existing Medical Emergency Service Providers within the Orange Line Corridor

Name	Address	Distance to Centerline (ft.)
Seton Medical Center Austin	1201 West 38 th Street, Austin, TX 78705	2,130
Hearth Hospital of Austin	3801 North Lamar Boulevard, Austin, TX 78756	1,250

Source: ESRI, 2018

Police Protection

The Orange Line Corridor is under the jurisdiction of the Austin Police Department. There is one police station within the Orange Line Corridor, referred to the South Substation by the Austin Police Department and located at 404 Ralph Ablanado Drive (CoA, 2018). This police station is approximately 2,600 ft. from the Orange Line centerline. Police facilities and patrols located outside of the Orange Line Corridor could respond to a large incident within the Orange Line Corridor if additional support were required. Additionally, Capital Metro Security officers provide 24-hour per day coverage of the entire Capital Metro service area and respond to service calls on the agency's buses, trains, paratransit vehicles and facilities (Capital Metro, 2017).

Existing Crime

Crimes committed in the Orange Line Corridor are reported for 2018. The most common type of crime included burglaries, as shown in Table 3.12-4.

Table 3.12-3 Reported Crimes in Orange Line Corridor (2018)

Month	Murder	Aggravated Assault ¹	Robbery ²	Burglary ³	Kidnapping	Hit and Run ⁴
January		11	6	96		
February		11	5	75	1	
March		9	6	113		4
April	1	11	5	97	1	3
May		10	4	92		1
June		9	4	73		3
July		11	4	83		5
August		12	11	94		8
September		16	7	111		8
October		11	10	107		7
November		4	4	112		7
December		5	11	119		6
Total	1	120	77	1,172	2	52

Source: Austin Police Department (updated April 29, 2019)

¹ Includes: aggravated assault, aggravated assault family/date violence, aggravated assault on public servant, aggravated assault w/ motor vehicle

² Includes: aggravated robbery by assault, aggravated robbery w/ deadly weapon, robbery by assault, robbery by threat

³ Includes: burglary of non-residential sheds, burglary of residential-family, burglary of non-residence, burglary of coin-op machine, burglary of residence, burglary of vehicle

⁴ Crash and driver fails to stop and render aid

3.13 Summary of Corridor Conditions

This Corridor Conditions Report has been prepared as part of the Orange Line PEL Study to identify current transportation and environmental conditions, and anticipated constraints for consideration during the development of HCT alternatives. Key findings of the evaluation are provided by resource in Table 3.13-1.

Table 3.13-1 Key Findings of Corridor Conditions

Resource	Key Findings
Transportation	<ul style="list-style-type: none"> Several roadways are designated at a LOS of E and F, with more forecasted by 2040, which is an indicator of congestion and delay. The proposed Orange Line Corridor is currently served by the existing high frequency bus route MetroRapid 801, which runs within a corridor experiencing significantly growing levels of congestion, resulting in service delays.
Land Use and Economic Development	<ul style="list-style-type: none"> The Orange Line Corridor extends through downtown Austin, with the highest concentration of jobs in the region, and is directly adjacent to both the State Capitol of Texas and UT, which are among the top employment centers in the region. Land use development within the Orange Line Corridor is significantly growing, with over 160 emerging projects (including office, mixed use, residential multi-family, residential single family, and commercial developments) planned within the corridor.
Neighborhoods	<ul style="list-style-type: none"> The population within the Orange Line Corridor is projected to increase 65 percent from 2010 to 2040 and employment is projected to increase 93 percent over the same time period. The Orange Line Corridor contains numerous community facilities including 30 K-12 schools (including the Texas School for the Deaf, the Texas School for the Blind, various academies, preparatory schools, and charter schools), two universities (UT and St. Edward's University), four hospitals, the Austin Recreation Center, 11 museums, and nearly 100 churches or religious establishments. The Orange Line Corridor has a higher percentage of zero-car households than the CoA or Travis County. EJ communities are located throughout the Orange Line Corridor and the corridor has a significantly higher percentage of minority residents than the CoA or Travis County, as well as a slightly higher percentage of LEP households.
Visual Quality	<ul style="list-style-type: none"> The Orange Line Corridor contains areas of high aesthetic quality including unique characteristics of the State Capitol Complex, various historic resources, and Lady Bird Lake.
Noise and Vibration	<ul style="list-style-type: none"> The Orange Line would travel in proximity to numerous potential noise and vibration receptors including over 3,200 single family residential properties, over 1,000 apartment buildings, 50 religious institutions, 11 parks and cemeteries and various elementary, secondary, and higher level educational facilities, including UT.
Ecosystems	<ul style="list-style-type: none"> There is potential suitable habitat within the Orange Line Corridor for species of

Resource	Key Findings
	<p>concern including the bald eagle, golden-cheeked warbler, Barton Springs salamander, Jollyville Plateau salamander, Bee Creek Cave harvestman, Bone Cave harvestman, Tooth Cave pseudoscorpion, Tooth Cave spider, Kretschmarr Cave mold beetle, Tooth Cave ground beetle, sharpnose shiner, blue sucker, western creek chubsucker, false spike mussel, smooth pimpleback, Texas fatmucket, Texas fawnsfoot, Texas pimpleback and golden orb.</p>
Water Resources	<ul style="list-style-type: none"> Lady Bird Lake, several streams, and other drainages exist within the Orange Line Corridor. In addition, 28 NHD waterbodies and 70 NWI features are mapped within the Orange Line Corridor.
Historical and Archeological Resources	<ul style="list-style-type: none"> The corridor contains 450 previously recorded historic resources, 102 previously recorded archeological sites, and six cemeteries. High potential exists for unrecorded prehistoric and historic sites within the Orange Line Corridor.
Parklands	<ul style="list-style-type: none"> The Orange Line Corridor contains numerous existing parks, trails, greenbelts, and other recreational resources, and several proposed recreational trails subject to Section 4(f) and 6(f).
Hazardous Materials	<ul style="list-style-type: none"> A total of 218 hazardous materials sites with potential to become recognized environmental conditions were identified within the Orange Line Corridor, of which 42 are located on properties directly adjoining to the current Orange Line alignment.

These key findings and additional information as presented in this report will inform the conceptual and detailed evaluation of alternatives for the LPA, as well as serve as the base for the Environmental Impact Statement existing conditions assessment to be completed following FTA’s approval of the Orange Line PEL Study.

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GIS Data Sources

Data Layer: County Boundaries

Data File Name (Feature Class/Shapefile/Raster): CountyBoundaries5_TNRIS
Data File Type: Vector
Data Source: TNRIS
Data Current As Of: 2004
Acquired/Downloaded: April 2019
Download Link: <https://tnris.org/data-catalog/>

Data Layer: Parks

Data File Name (Feature Class/Shapefile/Raster): Parks_COA_2018
Data File Type: Vector
Data Source: City Of Austin
Data Current As Of: 2018
Acquired/Downloaded: April 2019
Download Link: <https://data.austintexas.gov/Locations-and-Maps/City-of-Austin-Parks/8f2b-a4q5>

Data Layer: Neighborhood Planning Areas

Data File Name (Feature Class/Shapefile/Raster): Neighborhood_Planning_Areas_Dissolved
Data File Type: Vector
Data Source: City Of Austin
Data Current As Of: 2019
Acquired/Downloaded: April 2019
Download Link: <https://data.austintexas.gov/Locations-and-Maps/Neighborhood-Planning-Areas-Dissolved/t2dy-2sz7>

Data Layer: Electrical Transmission Line

Data File Name (Feature Class/Shapefile/Raster): TransLine_Powermap_2012
Data File Type: Vector
Data Source: Powermap 2012 (Proprietary Dataset)
Data Current As Of: October 2012
Acquired/Downloaded: September December 2012
Download Link: L:\AGE\Projects\TRAN\Transportation\CMTA Orange Line\600_CAD GIS\620_GIS\Spatial \ OrangeLine.gdb (Local Server)

Data Layer: Streams/Rivers

Data File Name (Feature Class/Shapefile/Raster): NHDFlowline
Data File Type: Vector
Data Source: US Geological Survey, National Hydrography Dataset, NHDFlowline
Data Current As Of: September 2016
Acquired/Downloaded: April 2019
Download Link: <https://www.usgs.gov/core-science-systems/ngp/national-hydrography>

Data Layer: Water Bodies

Data File Name (Feature Class/Shapefile/Raster): NHDWaterbody
Data File Type: Vector
Data Source: US Geological Survey, National Hydrography Dataset, NHDWaterbody
Data Current As Of: September 2016
Acquired/Downloaded: April 2019
Download Link: <https://www.usgs.gov/core-science-systems/ngp/national-hydrography>

Data Layer: Element Occurrences

Data File Name (Feature Class/Shapefile/Raster): EO_TPWD_20190406
Data File Type: Vector
Data Source: Texas Parks & Wildlife
Data Current As Of: April 2019
Acquired/Downloaded: April 2019
Download Link https://tpwd.texas.gov/huntwild/wild/wildlife_diversity/txndd/

Data Layer: Wetlands

Data File Name (Feature Class/Shapefile/Raster): Wetlands_NWI
Data File Type: Vector
Data Source: United States Fish and Wildlife Service (USFWS) – National Wetland Inventory (NWI), CONUS_wet_poly
Data Current As Of: 2018
Acquired/Downloaded: April 2019
Download Link: <http://www.fws.gov/wetlands/Data/State-Downloads.html>

Data Layer: Land Use

Data File Name (Feature Class/Shapefile/Raster): LandUse_COA_2016
Data File Type: Vector
Data Source: City Of Austin
Data Current As Of: 2019
Acquired/Downloaded: April 2019
Download Link: <https://data.austintexas.gov/Locations-and-Maps/Land-Use-Inventory-Detailed/fj9m-h5qy>

Data Layer Pipelines

Data File Name (Feature Class/Shapefile/Raster): Pipe453_RRC_2008
Data File Type: Vector
Data Source: Railroad Commission of Texas
Data Current As Of: 2008
Acquired/Downloaded: 2008
Download Link: <https://www.rrc.state.tx.us/>

Data Layer: Roads/Highways

Data File Name (Feature Class/Shapefile/Raster): TxDOT_Roadways2015
Data File Type: Vector
Data Source: Texas Department of Transportation
Data Current As Of: 2015
Acquired/Downloaded: April 2019
Download Link: <http://www.tnris.org/get-data>

Data Layer: Railroads

Data File Name (Feature Class/Shapefile/Raster): Railroads_TXDOT_2014
Data File Type: Vector
Data Source: Texas Department of Transportation
Data Current As Of: 2014
Acquired/Downloaded: April 2019
Download Link: <http://www.tnris.org/get-data>

Data Layer: Half-Mile Buffer

Data File Name (Database/Shapefile): OL_Corridor_BufferHalfMile
Data File Type: Vector
Data Source: AECOM
Data Current As Of: April 2019
Acquired/Downloaded: N/A
Download Link: L:\AGE\Projects\TRAN\Transportation\CMTA Orange Line\600_CAD GIS\620_GIS\Spatial \ OrangeLine.gdb (Local Server)

Data Layer: Texas Department of Transportation Projects

Data File Name (Feature Class/Shapefile/Raster): TXDOT_Projects_2019
Data File Type: Vector
Data Source: Texas Department of Transportation (TxDOT)
Data Current As Of: April 2019
Acquired/Downloaded: April 2019
Download Link: <http://gis-txdot.opendata.arcgis.com/datasets?q=Projects>

Data Layer: Metrorail

Data File Name (Feature Class/Shapefile/Raster): cmta_metrorail
Data File Type: Vector
Data Source: Capital Metropolitan Transportation Authority
Data Current As Of: 2016
Acquired/Downloaded: April 2019
Download Link: <https://data.texas.gov/https://data.texas.gov/browse>

Data Layer: Capital Metro Transit Center

Data File Name (Feature Class/Shapefile/Raster): Transit_Hubs_CMTA_2019
Data File Type: Vector
Data Source: Capital Metropolitan Transportation Authority
Data Current As Of: 2019
Acquired/Downloaded: April 2019
Download Link: <https://data.texas.gov/Transportation/CMTA-Shapefiles-JANUARY-2019/hdy4-ti3x>

Data Layer: 2016 Mobility Bond

Data File Name (Feature Class/Shapefile/Raster): Corridor_Mobility_Projects
Data File Type: Vector
Data Source: Capital Metropolitan Transportation Authority
Data Current As Of: 2017
Acquired/Downloaded: April 2019
Download Link: <https://data.austintexas.gov/stories/s/gukj-e8fh>

Data Layer: Industrial and Hazardous Waste Corrective Action

Data File Name (Feature Class/Shapefile/Raster): TCEQ_IHWCA_POINTS,
Data File Type: Vector
Data Source: Texas Commission on Environmental Quality
Data Current As Of: 2019
Acquired/Downloaded: April 2019
Download Link: https://www.tceq.texas.gov/remediation/corrective_action/ihwca.html

Data Layer: Leaking Petroleum Storage Tank

Data File Name (Feature Class/Shapefile/Raster): TCEQ_LPST_POINTS
Data File Type: Vector
Data Source: Texas Commission on Environmental Quality
Data Current As Of: 2019
Acquired/Downloaded: April 2019
Download Link: <https://www.tceq.texas.gov/agency/data/lookup-data/download-data.html>

Data Layer: Voluntary Cleanup Program

Data File Name (Feature Class/Shapefile/Raster): TCEQ_VOLUNTARY_CLEANUP_POINTS
Data File Type: Vector
Data Source: Texas Commission on Environmental Quality
Data Current As Of: 2019
Acquired/Downloaded: April 2019
Download Link: <https://www.tceq.texas.gov/remediation/vcp/vcp.html>

Data Layer: Floodplain

Data File Name (Feature Class/Shapefile/Raster): S_FLD_HAZ_AR
Data File Type: Vector
Data Source: FEMA
Data Current As Of: 2018
Acquired/Downloaded: April 2019
Download Link: <https://msc.fema.gov/portal/advanceSearch>

Data Layer: Historic Markers

Data File Name (Feature Class/Shapefile/Raster): HistoricalMarkers
Data File Type: Vector
Data Source: Texas Historic Commission
Data Current As Of: 2019
Acquired/Downloaded: April 2019
Download Link: <https://atlas.thc.state.tx.us/Data/GISData>

Data Layer: National Register Point

Data File Name (Feature Class/Shapefile/Raster): NationalRegisterPT
Data File Type: Vector
Data Source: Texas Historic Commission
Data Current As Of: 2019
Acquired/Downloaded: April 2019
Download Link: <https://atlas.thc.state.tx.us/Data/GISData>

Data Layer: National Register District

Data File Name (Feature Class/Shapefile/Raster): NationalRegisterPY
Data File Type: Vector
Data Source: Texas Historic Commission
Data Current As Of: 2019
Acquired/Downloaded: April 2019
Download Link: <https://atlas.thc.state.tx.us/Data/GISData>

Data Layer: Archeological Site Point

Data File Name (Feature Class/Shapefile/Raster): TARLpoints_9APR2019
Data File Type: Vector
Data Source: Texas Archeological Research Laboratory (TARL)
Data Current As Of: 2019
Acquired/Downloaded: April 2019
Download Link: <https://liberalarts.utexas.edu/tarl/>

Data Layer: Archeological Site Area

Data File Name (Feature Class/Shapefile/Raster): TARLpolygons_9APR2019
Data File Type: Vector
Data Source: Texas Archeological Research Laboratory (TARL)
Data Current As Of: 2019
Acquired/Downloaded: April 2019
Download Link: <https://liberalarts.utexas.edu/tarl/>

Data Layer: Capitol View Corridor

Data File Name (Feature Class/Shapefile/Raster): ViewshedCorridors_COA
Data File Type: Vector
Data Source: City Of Austin
Data Current As Of: 2019
Acquired/Downloaded: May 2019
Download Link: <https://data.austintexas.gov/Locations-and-Maps/Combining-and-overlay-zoning-districts/8y67-8tue>

Data Layer: Cemeteries

Data File Name (Feature Class/Shapefile/Raster): Cemeteries
Data File Type: Vector
Data Source: Texas Historic Commission
Data Current As Of: 2019
Acquired/Downloaded: April 2019
Download Link: <https://atlas.thc.state.tx.us/Data/GISData>

Data Layer: Museums

Data File Name (Feature Class/Shapefile/Raster): Museums
Data File Type: Vector
Data Source: Texas Historic Commission
Data Current As Of: 2019
Acquired/Downloaded: April 2019
Download Link: <https://atlas.thc.state.tx.us/Data/GISData>

Data Layer: Daycare

Data File Name (Feature Class/Shapefile/Raster): DaycareOperations_COA_2019
Data File Type: Vector
Data Source: City Of Austin
Data Current As Of: 2019
Acquired/Downloaded: April 2019
Download Link: <https://data.texas.gov/Social-Services/HHSC-CCL-Daycare-and-Residential-Operations-Data/bc5r-88dy>

Data Layer: School

Data File Name (Feature Class/Shapefile/Raster): Schools_TEA_2018
Data File Type: Vector
Data Source: Texas Education Agency
Data Current As Of: 2019
Acquired/Downloaded: April 2019
Download Link: <https://schoolsdata2-tea-texas.opendata.arcgis.com>

Data Layer: Fire Station

Data File Name (Feature Class/Shapefile/Raster): Mun_Fire_Stations_COA_2018
Data File Type: Vector
Data Source: City of Austin
Data Current As Of: 2018
Acquired/Downloaded: April 2019
Download Link: <https://data.austintexas.gov/Public-Safety/Austin-Fire-Station-Map/szku-46rx>

Data Layer: Police Station

Data File Name (Feature Class/Shapefile/Raster): Mun_Police_Stations_COA_2018
Data File Type: Vector
Data Source: City of Austin
Data Current As Of: 2018
Acquired/Downloaded: April 2019
Download Link: <https://data.austintexas.gov/Public-Safety/Austin-Police-Stations/jmp6-p8e2>

Data Layer: Place of Worship

Data File Name (Feature Class/Shapefile/Raster): Worship_AECOM_2019
Data File Type: Vector
Data Source: ESRI
Data Current As Of: 2018
Acquired/Downloaded: April 2019
Download Link: <https://www.arcgis.com/home/item.html?id=007ff07891e34e339a6da82a5c44fd31>

Data Layer: Event Center

Data File Name (Feature Class/Shapefile/Raster): Cultural_Arts_Facilities_2018
Data File Type: Vector
Data Source: City of Austin
Data Current As Of: 2018
Acquired/Downloaded: April 2019
Download Link: <http://www.austintexas.gov/culturemapping>

Data Layer: Recreation/Community Center

Data File Name (Feature Class/Shapefile/Raster): Cultural_Arts_Facilities_2018
Data File Type: Vector
Data Source: City of Austin
Data Current As Of: 2018
Acquired/Downloaded: April 2019
Download Link: <http://www.austintexas.gov/culturemapping>

Data Layer: Medical

Data File Name (Feature Class/Shapefile/Raster): Field_Points_AECOM_2019
Data File Type: Vector
Data Source: AECOM
Data Current As Of: April 2019
Acquired/Downloaded: April 2019
Download Link: L:\AGE\Projects\TRAN\Transportation\CMTA Orange Line\600_CAD GIS\620_GIS\Spatial \ OrangeLine.gdb (Local Server)

Data Layer: Funeral

Data File Name (Feature Class/Shapefile/Raster): Field_Points_AECOM_2019
Data File Type: Vector
Data Source: AECOM
Data Current As Of: April 2019
Acquired/Downloaded: April 2019
Download Link: L:\AGE\Projects\TRAN\Transportation\CMTA Orange Line\600_CAD GIS\620_GIS\Spatial \ OrangeLine.gdb (Local Server)

Data Layer: Trails

Data File Name (Feature Class/Shapefile/Raster): Trails_COA
Data File Type: Vector
Data Source: City Of Austin Parks and Recreation Department
Data Current As Of: May 2019
Acquired/Downloaded: May 2019
Download Link: L:\AGE\Projects\TRAN\Transportation\CMTA Orange Line\600_CAD GIS\620_GIS\Spatial \ OrangeLine.gdb (Local Server)

Data Layer: Imagery

Data File Name (Feature Class/Shapefile/Raster): Multiple Rasters
Data File Type: Raster
Data Source: Texas Natural Resources Information System
Data Current As Of: January – February 2018
Acquired/Downloaded: April 2019
Download Link: L:\AGE\Projects\TRAN\Transportation\CMTA Orange Line\600_CAD GIS\620_GIS\Spatial \ OrangeLine.gdb (Local Server)

Data Layer: Population Growth

Data File Name (Feature Class/Shapefile/Raster): CAMPO_TAZ
Data File Type: Vector
Data Source: Capital Area Metropolitan Planning Organization
Data Current As Of: 2013
Acquired/Downloaded: April 2019
Download Link: L:\AGE\Projects\TRAN\Transportation\CMTA Orange Line\600_CAD GIS\620_GIS\Spatial \ OrangeLine.gdb (Local Server)

Data Layer: Employment Growth

Data File Name (Feature Class/Shapefile/Raster): CAMPO_TAZ
Data File Type: Vector
Data Source: Capital Area Metropolitan Planning Organization
Data Current As Of: 2013
Acquired/Downloaded: April 2019
Download Link: L:\AGE\Projects\TRAN\Transportation\CMTA Orange Line\600_CAD GIS\620_GIS\Spatial \ OrangeLine.gdb (Local Server)

Data Layer: Zero Vehicle Household Percentage

Data File Name (Feature Class/Shapefile/Raster): ACS_2013_2017_BG_OL
Data File Type: Vector
Data Source: US Census
Data Current As Of: 2017
Acquired/Downloaded: April 2019
Download Link: https://www2.census.gov/programs-surveys/acs/summary_file/2017/data/5_year_by_state/

Data Layer: National Housing Preservation Database

Data File Name (Feature Class/Shapefile/Raster): NHPD_2018
Data File Type: Vector
Data Source: National Historic Preservation Database, 2018
Data Current As Of: 2018
Acquired/Downloaded: April 2019
Download Link: <https://preservationdatabase.org/>

Data Layer: Low Income Population

Data File Name (Feature Class/Shapefile/Raster): ACS_2013_2017_BG_OL
Data File Type: Vector
Data Source: AECOM
Data Current As Of: 2017
Acquired/Downloaded: April 2019
Download Link: L:\AGE\Projects\TRAN\Transportation\CMTA Orange Line\600_CAD GIS\620_GIS\Spatial \ OrangeLine.gdb (Local Server)

Data Layer: Minority Population

Data File Name (Feature Class/Shapefile/Raster): ACS_2013_2017_BG_OL
Data File Type: Vector
Data Source: AECOM
Data Current As Of: 2017
Acquired/Downloaded: April 2019
Download Link: L:\AGE\Projects\TRAN\Transportation\CMTA Orange Line\600_CAD GIS\620_GIS\Spatial \ OrangeLine.gdb (Local Server)

Data Layer: Activity Centers

Data File Name (Feature Class/Shapefile/Raster): Activity Centers

Data File Type: Vector

Data Source: Imagine Austin Comprehensive Plan (2012)

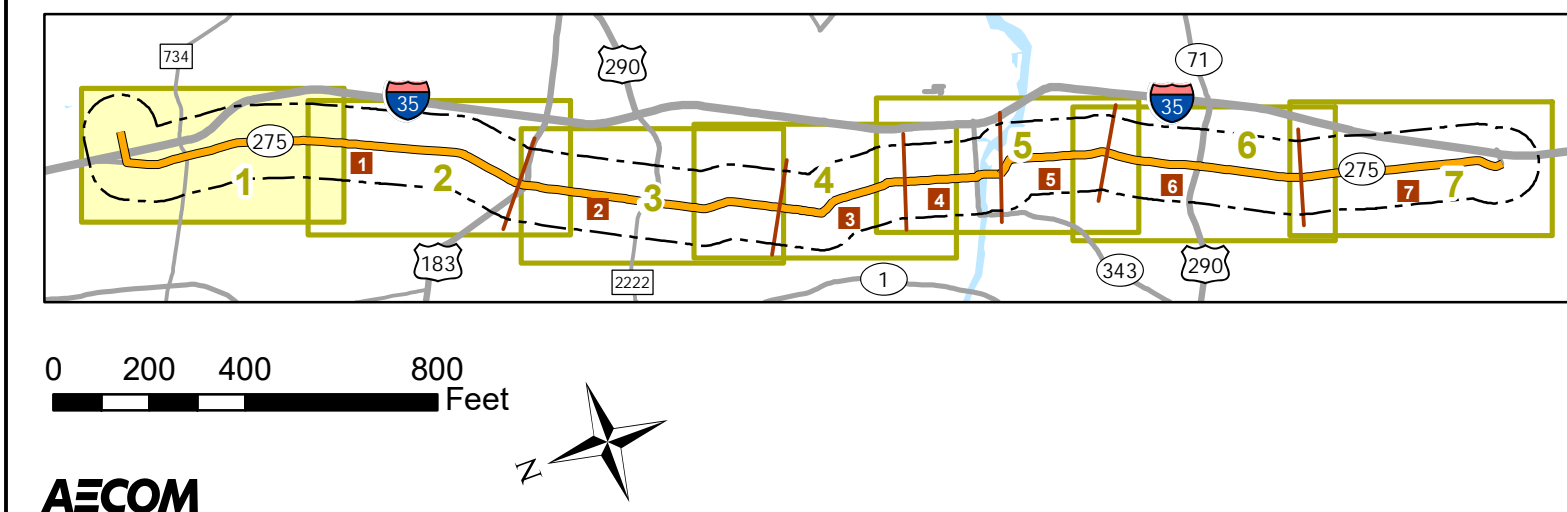
Data Current As Of: 2019

Acquired/Downloaded: April 2019

Download Link:

<https://www.arcgis.com/home/item.html?id=435f4a9ab84548639238d20953442f2e>

APPENDIX A: CONSTRAINTS MAP



Legend

- Orange Line
- Segment Divide
- Potential Station
- Half-Mile Buffer

Hydrology

- Stream
- River
- NWI Wetlands
- 100-Year Floodplain

Utilities

- Electrical Substation/Power Plant
- Electrical Transmission Line
- Pipeline - Empty
- Pipeline - Gasoline/Jet Fuel/Diesel
- Pipeline - Natural Gas
- Pipeline - Natural Gas Liquids

Cultural Resources

- Historical Marker
- National Register Point
- Museum
- National Register District
- Cemetery
- Archeological Site Point (a)
- Archeological Site Area (a)
- (a) Not For Public
- Capitol View Corridor

Municipal

- Daycare
- School
- Fire Station
- Police Station
- Place of Worship
- Event Center
- Recreation/Community Center

Funeral Home

- Funeral Home

Medical

- Medical
- Neighborhood Planning Area

Hazardous Materials

- Industrial and Hazardous Waste Corrective Action
- Leaking Petroleum Storage Tank
- Voluntary Cleanup Program

Major Land Use Areas

- Hospital
- Government Services
- Educational

Transportation

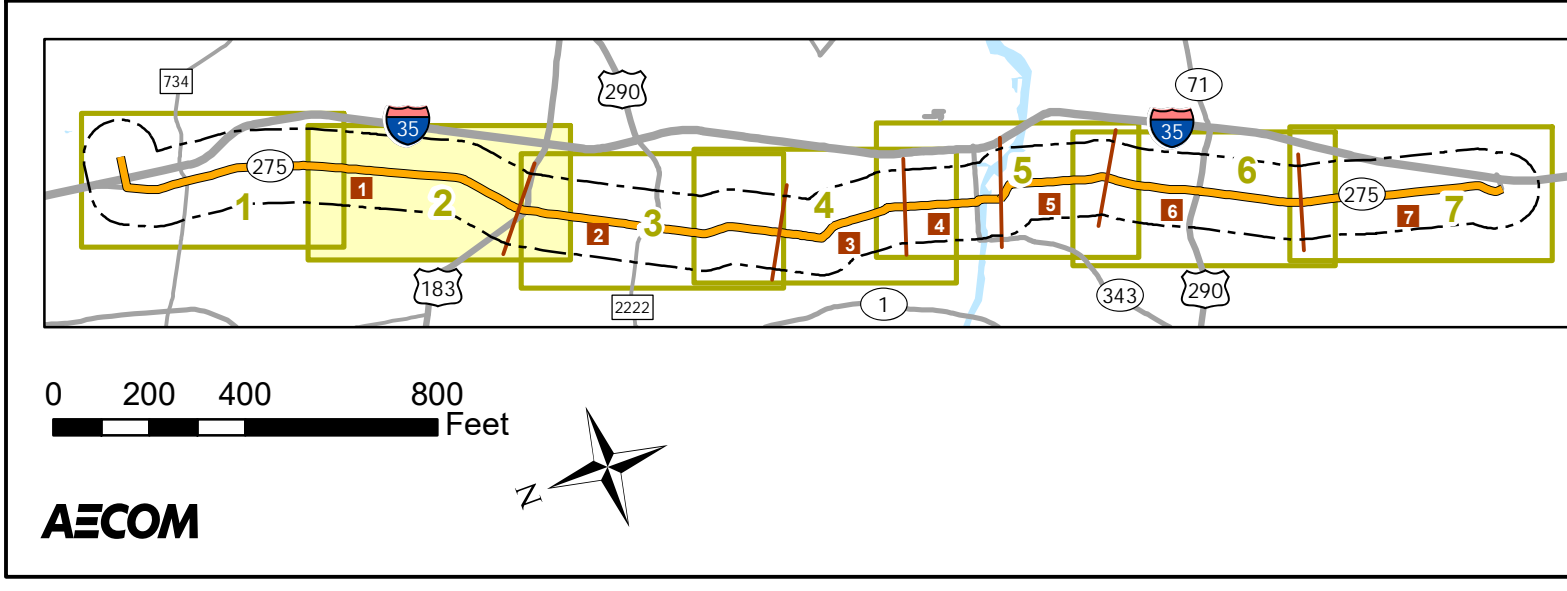
- CMTA Transit Center
- Railroad
- MetroRail
- TXDOT Project
- 2016 Mobility Bond
- Construction Program Corridors
- Preliminary Engineering Report/Design Corridors and Critical Arterials

Aerial Imagery: TNRS, January-February 2018, color imagery displayed on this map as black & white.

AECOM

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Orange Line
Environmental
Constraints
Map 1 of 7



Legend		Hydrology		Utilities		Cultural Resources		Municipal		Hazardous Materials		Transportation	
Orange Line	Segment Divide	Stream	River	Electrical Substation/Power Plant	Pipeline - Empty	Historical Marker	National Register Point	Daycare	School	Industrial and Hazardous Waste Corrective Action	Leaking Petroleum Storage Tank	CMTA Transit Center	Railroad
Potential Station	Half-Mile Buffer	NWI Wetlands	100-Year Floodplain	Pipeline - Gasoline/Jet Fuel/Diesel	Pipeline - Natural Gas	Cemetery	National Register District	Fire Station	Police Station	Voluntary Cleanup Program		MetroRail	TXDOT Project
				Pipeline - Natural Gas Liquids		Archeological Site Point (a)	Archeological Site Area (a)	Place of Worship	Event Center	Hospital	Government Services	2016 Mobility Bond	Construction Program Corridors
						(a) Not For Public	Capitol View Corridor	Recreation/Community Center		Educational		Preliminary Engineering Report/Design Corridors and Critical Arterials	
								Funeral Home	Medical				
								Park	Neighborhood Planning Area				

Aerial Imagery: TNRS, January-February 2018, color imagery displayed on this map as black & white.

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CMTA
Orange Line
Environmental
Constraints
Map 2 of 7

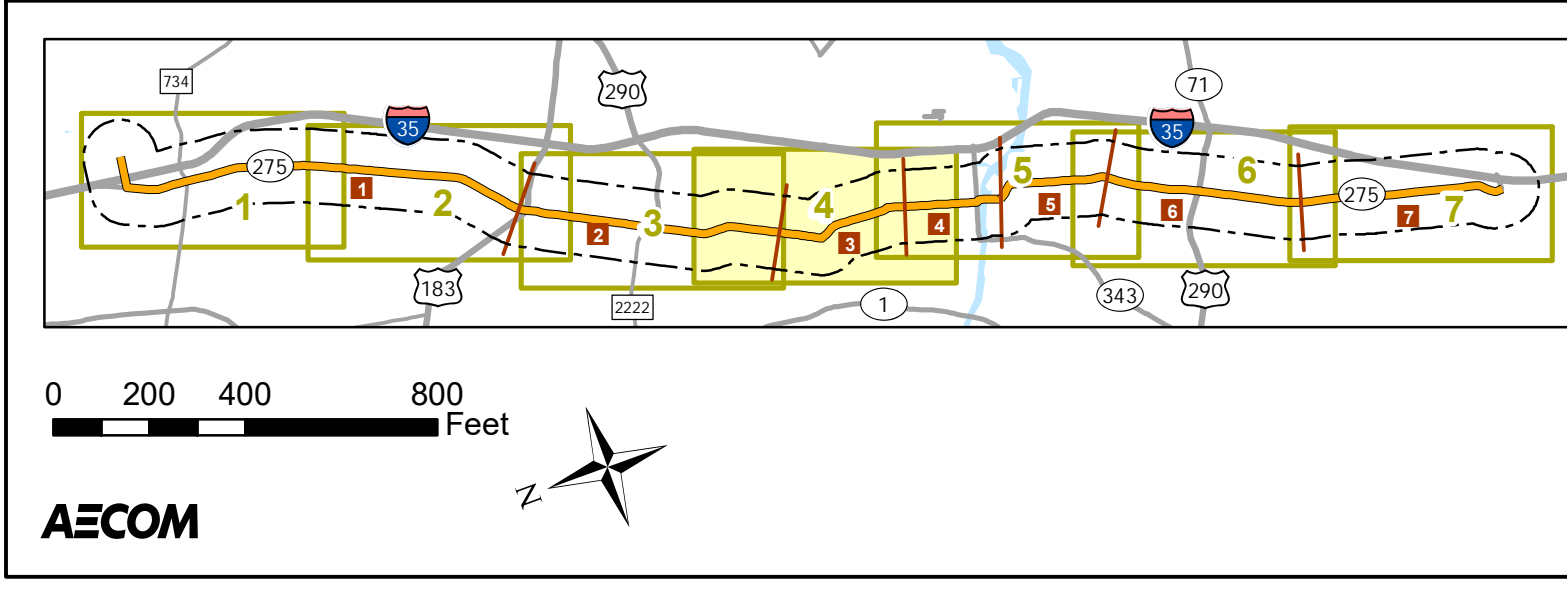


Legend		Hydrology		Utilities		Cultural Resources		Municipal		Hazardous Materials		Transportation	
Orange Line	Segment Divide	Stream	River	Electrical Substation/Power Plant	Electrical Transmission Line	Historical Marker	National Register Point	Daycare	School	Industrial and Hazardous Waste Corrective Action	Leaking Petroleum Storage Tank	CMTA Transit Center	Railroad
Potential Station	Half-Mile Buffer	NWI Wetlands	100-Year Floodplain	Pipeline - Empty	Pipeline - Gasoline/Jet Fuel/Diesel	Museum	National Register District	Fire Station	Police Station	Voluntary Cleanup Program	Hospital	MetroRail	TXDOT Project
				Pipeline - Natural Gas	Pipeline - Natural Gas Liquids	Archeological Site Point (a)	Archeological Site Area (a)	Place of Worship	Event Center	Government Services	Educational	2016 Mobility Bond	Construction Program Corridors
						(a) Not For Public	Capitol View Corridor	Recreation/Community Center				Preliminary Engineering Report/Design Corridors and Critical Arterials	

Aerial Imagery: TNRS, January-February 2018, color imagery displayed on this map as black & white.

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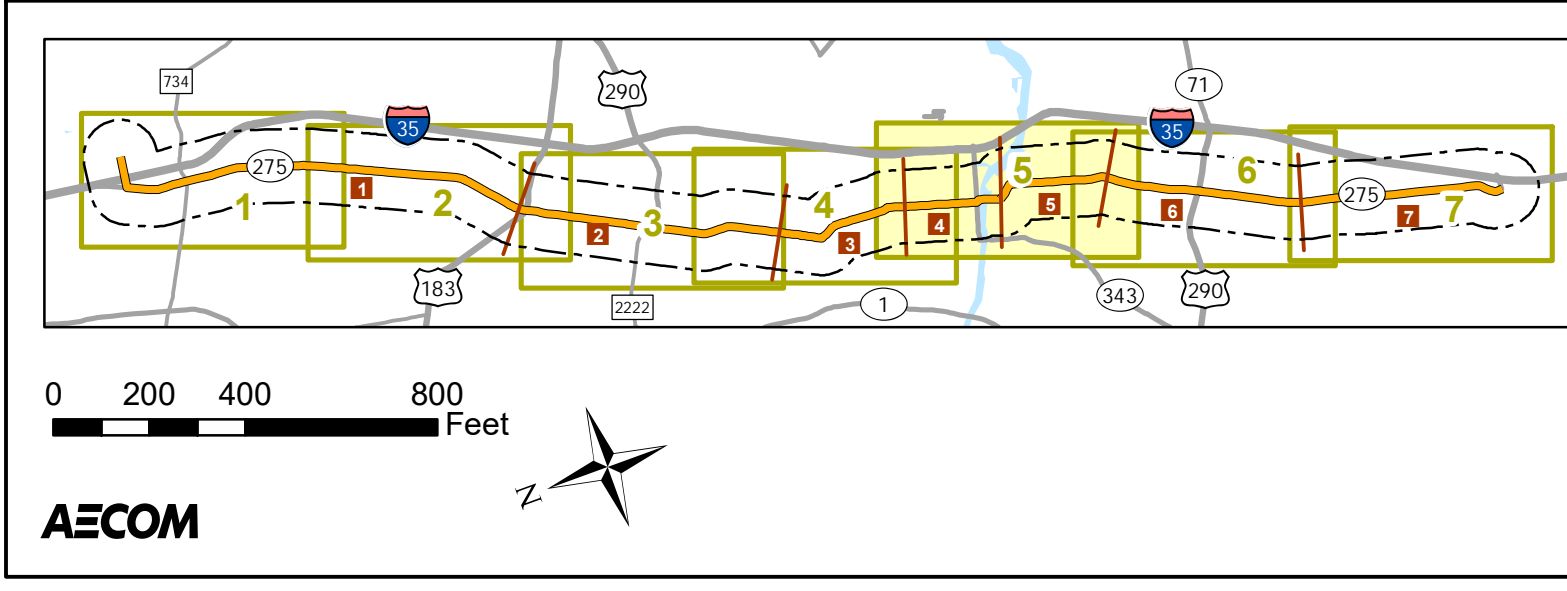
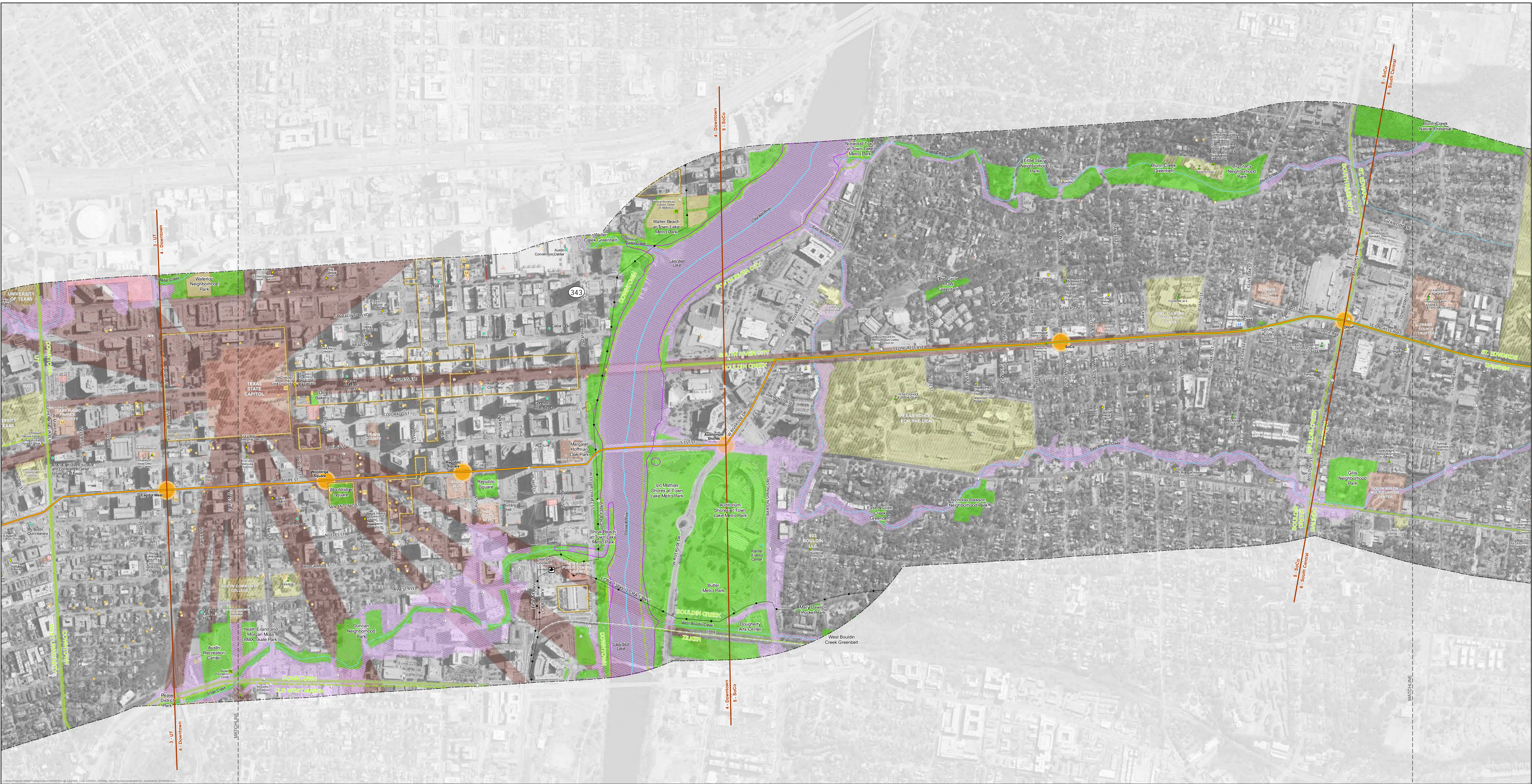
CMTA
Orange Line
Environmental
Constraints
Map 3 of 7



Legend		Hydrology		Utilities		Cultural Resources		Municipal		Hazardous Materials		Transportation	
Orange Line	Segment Divide	Stream	River	Electrical Substation/Power Plant	Electrical Transmission Line	Historical Marker	National Register Point	Daycare	School	Industrial and Hazardous Waste Corrective Action	Leaking Petroleum Storage Tank	Voluntary Cleanup Program	CMTA Transit Center
Potential Station	Half-Mile Buffer	NWI Wetlands	100-Year Floodplain	Pipeline - Empty	Pipeline - Gasoline/Jet Fuel/Diesel	Museum	Cemetery	Fire Station	Police Station	Government Services	Educational	Railroad	
				Pipeline - Natural Gas	Pipeline - Natural Gas Liquids	National Register District	Archeological Site Point (a)	Place of Worship	Event Center			TXDOT Project	
						Archeological Site Area (a)	Archeological Site Area (a)	Recreation/Community Center	Funeral Home			2016 Mobility Bond	
						(a) Not For Public	Capitol View Corridor		Neighborhood Planning Area			Construction Program Corridors	
												Preliminary Engineering Report/Design Corridors and Critical Arterials	

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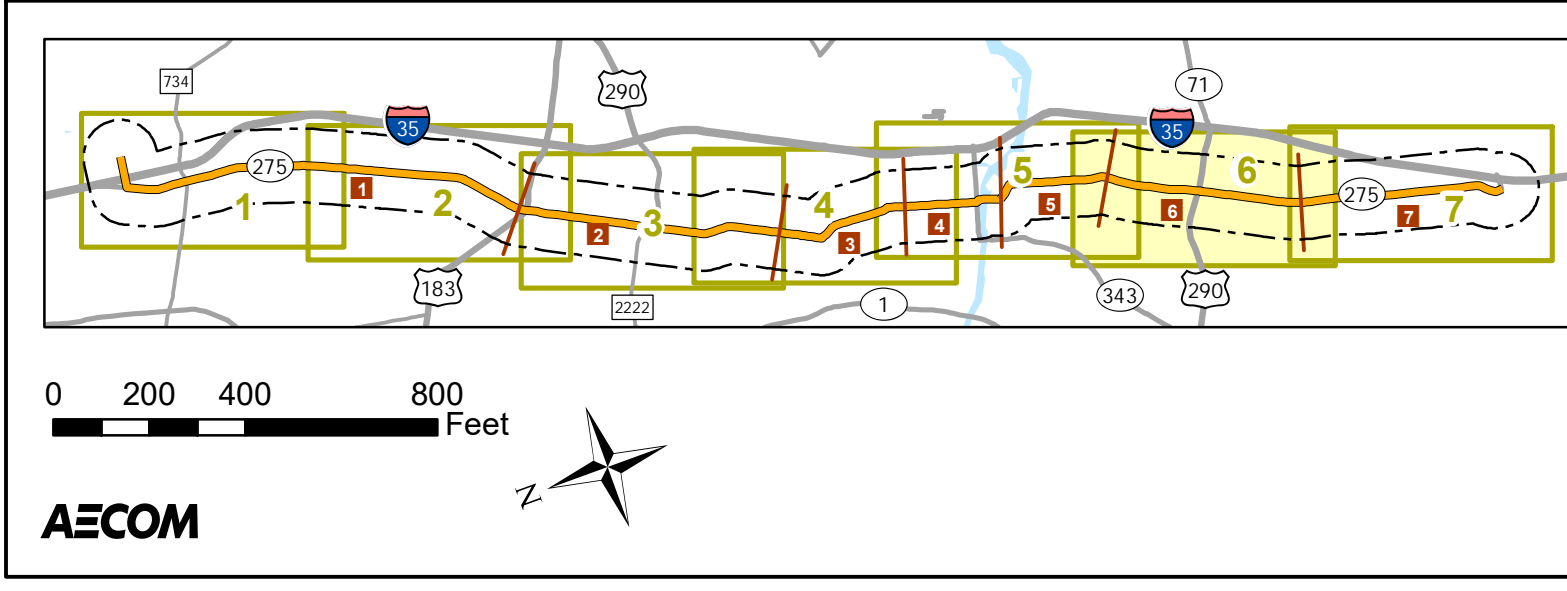
CMTA
Orange Line
Environmental
Constraints
Map 4 of 7



Legend	Hydrology	Utilities	Cultural Resources	Municipal	Hazardous Materials	Transportation
Orange Line	Stream	Electrical Substation/Power Plant	Historical Marker	Daycare	Industrial and Hazardous Waste Corrective Action	CMTA Transit Center
Segment Divide	River	Electrical Transmission Line	National Register Point	School	Leaking Petroleum Storage Tank	Railroad
Potential Station	NWI Wetlands	Pipeline - Empty	Museum	Fire Station	Voluntary Cleanup Program	MetroRail
Half-Mile Buffer	100-Year Floodplain	Pipeline - Gasoline/Jet Fuel/Diesel	Cemetery	Police Station	Major Land Use Areas	TXDOT Project
		Pipeline - Natural Gas	National Register District	Place of Worship	Hospital	2016 Mobility Bond
		Pipeline - Natural Gas Liquids	Archeological Site Point (a)	Event Center	Government Services	Construction Program Corridors
			Archeological Site Area (a)	Recreation/Community Center	Educational	Preliminary Engineering Report/Design Corridors and Critical Arterials
			(a) Not For Public			
			Capitol View Corridor			

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CMTA
Orange Line
Environmental
Constraints
Map 5 of 7

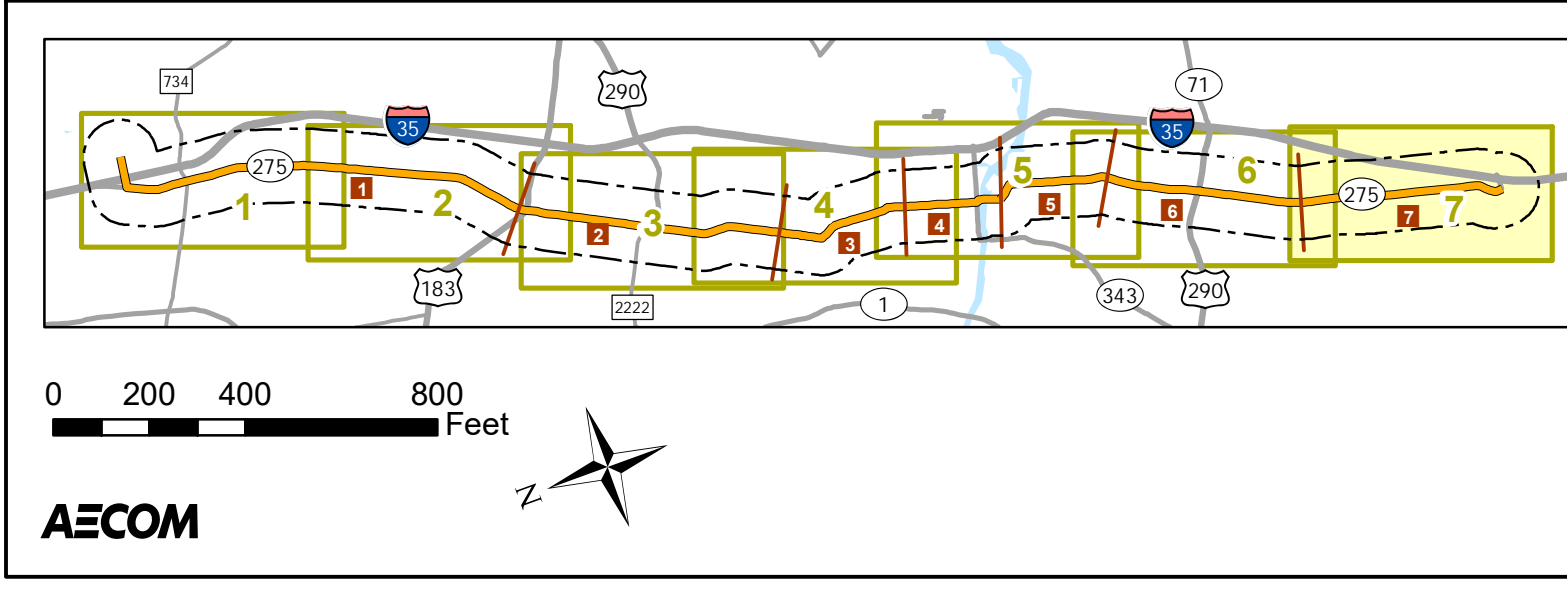


Legend

<ul style="list-style-type: none"> Orange Line Segment Divide Potential Station Half-Mile Buffer 	<p>Hydrology</p> <ul style="list-style-type: none"> Stream River NWI Wetlands 100-Year Floodplain 	<p>Utilities</p> <ul style="list-style-type: none"> Electrical Substation/Power Plant Electrical Transmission Line Pipeline - Empty Pipeline - Gasoline/Jet Fuel/Diesel Pipeline - Natural Gas Pipeline - Natural Gas Liquids 	<p>Cultural Resources</p> <ul style="list-style-type: none"> Historical Marker National Register Point Museum Cemetery National Register District Archeological Site Point (a) Archeological Site Area (a) (a) Not For Public Capitol View Corridor 	<p>Municipal</p> <ul style="list-style-type: none"> Daycare School Fire Station Police Station Place of Worship Event Center Recreation/Community Center 	<ul style="list-style-type: none"> Funeral Home Medical Park Neighborhood Planning Area 	<p>Hazardous Materials</p> <ul style="list-style-type: none"> Industrial and Hazardous Waste Corrective Action Leaking Petroleum Storage Tank Voluntary Cleanup Program <p>Major Land Use Areas</p> <ul style="list-style-type: none"> Hospital Government Services Educational 	<p>Transportation</p> <ul style="list-style-type: none"> CMTA Transit Center Railroad MetroRail TXDOT Project 2016 Mobility Bond Construction Program Corridors Preliminary Engineering Report/Design Corridors and Critical Arterials
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Aerial Imagery: TNRS, January-February 2018, color imagery displayed on this map as black & white.

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5/30/2019



Legend	Hydrology	Utilities	Cultural Resources	Municipal	Hazardous Materials	Transportation
Orange Line	Stream	Electrical Substation/Power Plant	Historical Marker	Daycare	Industrial and Hazardous Waste Corrective Action	CMTA Transit Center
Segment Divide	River	Electrical Transmission Line	National Register Point	School	Leaking Petroleum Storage Tank	Railroad
Potential Station	NWI Wetlands	Pipeline - Empty	Museum	Fire Station	Voluntary Cleanup Program	MetroRail
Half-Mile Buffer	100-Year Floodplain	Pipeline - Gasoline/Jet Fuel/Diesel	Cemetery	Police Station	Major Land Use Areas	TXDOT Project
		Pipeline - Natural Gas	National Register District	Place of Worship	Hospital	2016 Mobility Bond
		Pipeline - Natural Gas Liquids	Archeological Site Point (a)	Event Center	Government Services	Construction Program Corridors
			Archeological Site Area (a)	Recreation/Community Center	Educational	Preliminary Engineering Report/Design Corridors and Critical Arterials
			(a) Not For Public			
			Capitol View Corridor			
				Funeral Home		
				Medical		
				Park		
				Neighborhood Planning Area		

Aerial Imagery: TNRS, January-February 2018, color imagery displayed on this map as black & white.

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CMTA
Orange Line
Environmental
Constraints
Map 7 of 7

APPENDIX B: TPWD SPECIES OF CONCERN

Species	Federal Status	State Status	Description	Suitable Habitat Potential
Birds				
Bald eagle (<i>Haliaeetus leucocephalus</i>)	BGEPA	ST	Found primarily near rivers and large lakes; nests in tall trees or on cliffs near water; communally roosts, especially in winter; hunts live prey, scavenges, and pirates food from other birds.	Suitable Habitat. Suitable nesting habitat may be present along the Colorado River; however this species is not known to nest along this section of the river and no known nests are present within or immediately surrounding the Study Area.
Black Rail (<i>Laterallus jamaicensis</i>)	PT	NL	Found in salt, brackish, and freshwater marshes, pond borders, wet meadows, and grassy swamps. Nests in or along the edges of marshes; nests are usually hidden in marsh grass or at the base of <i>Salicornia</i> spp.	No Nesting Habitat. Species may occur as extremely rare migrant or transient, however, no marshes or ponds were identified within the Study Area.
Black-capped Vireo (<i>Vireo atricapilla</i>)	DL	SE	Oak-juniper woodlands with distinctive patchy, 2-layered aspect; shrub and tree layer with open, grassy spaces; requires foliage reaching to ground level for nesting cover; return to same territory, or one nearby, year after year; deciduous and broad-leaved shrubs and trees provide insects for feeding; species composition less important than presence of adequate broad-leaved shrubs, foliage to ground level, and required structure; nesting season March-late summer.	No Nesting Habitat. Species may occur as migrant or transient; however, no oak-juniper woodlands with distinct patchy habitat are likely present within the Study Area.
Golden-cheeked Warbler (<i>Setophaga chrysoparia</i>)	FE	SE	Juniper-oak woodlands; dependent on Ashe juniper (also known as cedar) for long fine bark strips, only available from mature trees, used in nest construction; nests are placed in various trees other than Ashe juniper; only a few mature junipers or nearby cedar brakes can provide the necessary nest material; forage for insects in broad-leaved trees and shrubs; nesting late March-early summer.	Potential Nesting Habitat. Based on vegetation characteristics provided by TPWD, suitable nesting habitat may be present within the Study Area at Walnut Creek Metropolitan Park. However, the BCCP did not include this area as mapped habitat. This species could also occur as a migrant/transient within the Study Area.
Interior Least Tern (<i>Sterna antillarum athalassos</i>)	FE	SE	Subspecies is listed only when inland (more than 50 miles from a coastline); nests along sand and gravel bars within braided streams, rivers; also known to nest on man-made structures (inland beaches, wastewater treatment plants, gravel mines, etc.); eats small fish and crustaceans, when breeding forages	No Nesting Habitat. No gravel bars within braided streams or rivers are present in the Study Area. In addition, the proposed project is not a wind energy project.

Species	Federal Status	State Status	Description	Suitable Habitat Potential
Piping Plover (<i>Charadrius melodus</i>)	FT	ST	within a few hundred feet of colony. Beaches, sandflats, dunes, and spoil islands along coastal areas; prefers sand flats and algal flats; beaches used as secondary habitat. Species is a winter resident along Texas coast and breeds outside of the state.	No Nesting Habitat. Species may occur as a migrant/transient; however, no suitable coastlines, beaches, sand flats, or algal flats were identified within the Study Area; this species breeds outside of the state.
Red Knot (<i>Calidris canutus rufa</i>)	FT	NL	Red knots migrate long distances in flocks northward through the contiguous U.S. mainly April-June, southward July-October. The Red Knot prefers the shoreline of coast and bays and also uses mudflats during rare inland encounters. Wintering Range includes-Aransas, Brazoria, Calhoun, Cameron, Chambers, Galveston, Jefferson, Kennedy, Kleberg, Matagorda, Nueces, San Patricio, and Willacy. Habitat: Primarily seacoasts on tidal flats and beaches, herbaceous wetland, and Tidal flat/shore.	No Nesting Habitat. Species may occur as a rare migrant. No nesting habitat is present in the Study Area and lacks the connection to the coast lines or bays with beaches. In addition, the proposed project is not a wind energy project.
Swallow-tailed Kite (<i>Elanoides forficatus</i>)	NL	ST	Nests mostly in east Texas within lowland forested regions, especially swampy areas, ranging into open woodlands along rivers, lakes and ponds. Nests in tall trees; usually pine, cypress, or large deciduous tree.	No Nesting Habitat. The species may occur as a migrant/transient; however, no lowland forested regions along rivers, lakes, or ponds are located within the Study Area.
White-faced Ibis (<i>Plegadis chihi</i>)	NL	ST	Prefers freshwater marshes, sloughs, and irrigated rice fields; found primarily near the coast in Texas. Nests in marshes, in low trees, on the ground in bulrushes or reeds, or on floating mats.	No Nesting Habitat. Species may occur as a migrant/transient; however, no marshes, sloughs, or irrigated rice fields are located within the Study Area. Additionally, the Study Area is outside of this species' known breeding range.
Whooping Crane (<i>Grus americana</i>)	FE	SE	Potential migrant via plains throughout most of state to coast; winters in coastal marshes of Aransas, Calhoun, and Refugio counties.	No Nesting Habitat. The species may occur as a migrant; however no nesting habitat is present in the Study Area.
Wood Stork (<i>Mycteria americana</i>)	NL	ST	Prefers to nest in large tracts of bald cypress (<i>Taxodium distichum</i>) or red mangrove (<i>Rhizophora mangle</i>); forages in prairie ponds, flooded pastures, or fields, ditches, and other shallow standing water. Breeds in Mexico and moves into Gulf states post-breeding; formerly nested in Texas, but no breeding records since 1960.	No Nesting Habitat. Species may occur as a migrant/transient; however Texas is outside of this species currently known breeding range.

Species	Federal Status	State Status	Description	Suitable Habitat Potential
Zone-tailed Hawk (<i>Buteo albonotatus</i>)	NL	ST	Found in arid, open country, including deciduous or pine-oak woodlands, mesas, or mountain country; often near watercourses. Nets is various sites, ranging from small trees in lower desert, giant cottonwoods, in riparian areas, to mature conifers in high mountains,	No Nesting Habitat. Species may occur as a migrant or transient; however no nesting habitat was identified within the Study Area.
Amphibians				
Austin Blind Salamander (<i>Eurycea waterlooensis</i>)	FE	SE	Mostly restricted to subterranean cavities of the Edwards Aquifer; dependent upon water flow/quality from the Barton Springs segment of the Edwards Aquifer; only known from the outlets of Barton Springs (Sunken Gardens (Old Mill) Spring, Eliza Spring, and Parthenia (Main) Spring which forms Barton Springs Pool); feeds on amphipods, ostracods, copepods, plant material, and (in captivity) a wide variety of small aquatic invertebrates.	No Suitable Habitat. A small area in the northern portion of the Study Area is located in Karst Zone 1 (areas known to contain endangered cave fauna). However, The outlets of Barton Springs are located approximately 0.85 mile from the Study Area. Therefore this species is not expected to occur withn the Study Area
Barton Springs Salamander (<i>Eurycea sosorum</i>)	FE	SE	Dependent upon water flow/quality from the Barton Springs pool of the Edwards Aquifer; known from the outlets of Barton Springs and subterranean water-filled caverns; found under rocks, in gravel, or among aquatic vascular plants and algae, as available; feeds primarily on amphipods.	Suitable Habitat. A portion of the Study Area near Walnut Creek is located within Karst Zone 1 (areas known to contain endangered cave fauna). Karst Zones 2 and 3 are also mapped within the central portion of the Study Area.
Houston Toad (<i>Anaxyrus houstonensis</i>)	FE	SE	Primary habitat is sandy soil supporting pine and post oak savannas and woodlands ponds and ephemeral pools, stock tanks, etc. Breeds February-June.	No Suitable Habitat. The Study Area does not contain sandy soils with pines and/or post oak near water. The Study Area is also outside of this species' known range.
Jollyville Plateau Salamander (<i>Eurycea tonkawae</i>)	FT	NL	Known from springs and waters of some caves north of the Colorado River.	Suitable Habitat. A portion of the Study Area near Walnut Creek is located within Karst Zone 1 (areas known to contain endangered cave fauna). Karst Zones 2 and 3 are also mapped within the central portion of the Study Area.
Arachnids				

Species	Federal Status	State Status	Description	Suitable Habitat Potential
Bee Creek Cave/Reddell Harvestman (<i>Texella reddelli</i>)	FE	NL	Small, blind, cave-adapted harvestman endemic to a few caves in Travis and Williamson counties.	Suitable Habitat. A portion of the Study Area near Walnut Creek is located within Karst Zone 1 (areas known to contain endangered cave fauna). Karst Zones 2 and 3 are also mapped within the central portion of the Study Area.
Bone Cave Harvestman (<i>Texella reyesi</i>)	FE	NL	Small, blind, cave-adapted harvestman endemic to several caves in Travis and Williamson counties; weakly differentiated from <i>Texella reddelli</i> .	Suitable Habitat. A portion of the Study Area near Walnut Creek is located within Karst Zone 1 (areas known to contain endangered cave fauna). Karst Zones 2 and 3 are also mapped within the central portion of the Study Area.
Tooth Cave Pseudoscorpion (<i>Tartarocreagris texana</i>)	FE	NL	Small, cave-adapted pseudoscorpion known from small limestone caves of the Edwards Plateau.	Suitable Habitat. A portion of the Study Area near Walnut Creek is located within Karst Zone 1 (areas known to contain endangered cave fauna). Karst Zones 2 and 3 are also mapped within the central portion of the Study Area.
Tooth Cave Spider (<i>Tayshaneta myopica</i>)	FE	NL	Very small, cave-adapted, sedentary spider.	Suitable Habitat. A portion of the Study Area near Walnut Creek is located within Karst Zone 1 (areas known to contain endangered cave fauna). Karst Zones 2 and 3 are also mapped within the central portion of the Study Area.
Fishes				
Blue Sucker (<i>Cycleptus elongatus</i>)	NL	ST	Found in channels and flowing pools with moderate current of larger portions of major rivers in Texas; bottoms of exposed bedrock but generally intolerant of turbid waters.	Suitable Habitat. The Colorado River, a major river of Texas, is present within the Study Area.
Sharpnose Shiner (<i>Notropis oxyrhynchus</i>)	FE	NL	Species endemic to the Brazos River drainage and apparently introduced into the Colorado River drainage; found in large turbid rivers.	Suitable Habitat. The Colorado River is present within the Study Area.
Smalleye Shiner (<i>Notropis buccula</i>)	FE	NL	Endemic to upper Brazos River system and its tributaries (Clear Fork and	Suitable Habitat. The Colorado River is present

Species	Federal Status	State Status	Description	Suitable Habitat Potential
			Bosque); apparently introduced into adjacent Colorado River drainage; medium to large prairie streams with sandy substrate and turbid to clear warm water; presumably eats small aquatic invertebrates.	within the Study Area.
Western Creek Chubsucker (<i>Erimyzon claviformis</i>)	NL	ST	Found in pools of clear headwaters, creeks and small rivers over silt sand and gravel substrates; often near vegetation.	Suitable Habitat. Creeks surrounded by vegetation are present in the Study Area.
Insects				
Kretschmarr Cave Mold Beetle (<i>Texamaurops reddelli</i>)	FE	NL	Small, cave-adapted beetle found under rocks buried in silt; small, Edwards Limestone caves in of the Jollyville Plateau, a division of the Edwards Plateau.	Suitable Habitat. A portion of the Study Area near Walnut Creek is located within Karst Zone 1 (areas known to contain endangered cave fauna). Karst Zones 2 and 3 are also mapped within the central portion of the Study Area.
Tooth Cave Ground Beetle (<i>Rhadine persephone</i>)	FE	NL	Resident, small, cave-adapted beetle found in small Edwards Limestone caves in Travis and Williamson counties.	Suitable Habitat. A portion of the Study Area near Walnut Creek is located within Karst Zone 1 (areas known to contain endangered cave fauna). Karst Zones 2 and 3 are also mapped within the central portion of the Study Area.
Mollusks				
Golden Orb (<i>Quadrula aurea</i>)	FC	NL	Probably medium to large rivers; substrates unknown; one study indicated willows (<i>Salix</i> spp.) were present where golden orbs were found in mud; San Antonio, Guadalupe, Colorado, Brazos, Nueces, and Frio (historic) river basins.	Suitable Habitat. The Colorado River is located within the Study Area.
False Spike Mussel (<i>Quadrula mitchelli</i>)	NL	ST	Possibly extirpated in Texas; probably medium to large rivers; substrates varying from mud through mixtures of sand, gravel and cobble; one study indicated water lilies were present at the site; Rio Grande, Brazos, Colorado, and Guadalupe (historic) river basins.	Suitable Habitat. The Colorado River is located within the Study Area.
Smooth Pimpleback (<i>Quadrula houstonensis</i>)	FC	ST	Small to moderate streams and rivers as well as moderate size reservoirs; mixed mud, sand, and fine gravel, tolerates very slow to moderate flow rates, appears not to tolerate dramatic water level fluctuations, scoured bedrock substrates, or shifting sand bottoms, lower Trinity (questionable), Brazos, and Colorado River basins.	Suitable Habitat. Small to moderate streams in the Colorado River basin are present in the Study Area.
Texas Fatmucket (<i>Lampsilis bracteata</i>)	FC	ST	Streams and rivers on sand, mud, and gravel substrates; intolerant of impoundment; broken bedrock and	Suitable Habitat. Streams within the Colorado River basin are present in the

Species	Federal Status	State Status	Description	Suitable Habitat Potential
			course gravel or sand in moderately flowing water; Colorado and Guadalupe River basins.	Study Area.
Texas Pimpleback (<i>Quadrula petrina</i>)	FC	ST	Mud, gravel and sand substrates, generally in areas with slow flow rates; Colorado and Guadalupe river basins.	Suitable Habitat. Waters with slow flow rates within the Colorado River Basin are present in the Study Area.
Reptiles				
Texas Horned Lizard (<i>Phrynosoma cornutum</i>)	NL	ST	Open, arid and semi-arid regions with sparse vegetation, including grass, cactus, scattered brush or scrubby trees; soil may vary in texture from sandy to rocky; burrows into soil, enters rodent burrows, or hides under rock when inactive; breeds March-September.	No Suitable Habitat. No open arid regions with sparse vegetation are present within the Study Area.
Texas Tortoise (<i>Gopherus berlandieri</i>)	NL	ST	Found in open brushlands with grassy understory; avoids bare ground and open grass.	No Suitable Habitat. No open brushlands with grassy understory are present within the Study Area.
Timber Rattlesnake (<i>Crotalus horridus</i>)	NL	ST	Found in swamps, floodplains, upland pine and deciduous woodlands, riparian zones, and abandoned farmland. Prefers limestone bluffs, sandy soils, or black clay with dense ground cover (i.e. grapevines, palmetto)	Suitable Habitat. Riparian zones and clay soils are present; however, this species would be considered rare and is not known to range as far west as the Study Area.
Plants				
Bracted Twistflower (<i>Streptanthus bracteatus</i>)	FC	R	Texas endemic; shallow, well-drained gravelly clays and clay loams over limestone in oak-juniper woodlands and associated openings, on steep to moderate slopes and in canyon bottoms; several known soils include Tarrant, Brackett, or Speck over Edwards, Glen Rose, and Walnut geologic formations; flowering mid-April to late May, fruit matures and foliage withers by early summer. This species is closely tied to geologic positions that occur along the Balcones Fault Zone. Known populations occur within 0.6 miles of this zone.	Suitable Habitat. Tarrant, Brackett, and Speck soils are present in the Study Area. This species has been observed east of the Edwards Plateau and portions of the study area occur within the Balcones Fault Zone.

Source: TPWD, 2018

DL-Delisted; ST-State Threatened; SE-State Endangered; FE-Federally Endangered; FC-Federal Candidate Species; NL-Not Listed

APPENDIX C: HAZARDOUS MATERIALS WITHIN ORANGE LINE CORRIDOR

Site Name	Address	Program	Registration Number	ID Number	Distance from Orange Line Centerline (miles)
7 Eleven 25445	8900 North Lamar Boulevard	LPST	RN102008117	97544	0.00
Chevron Station 107149	2817 Guadalupe Street	LPST	RN102789633	93212	0.00
Zippy Food Store	6600 North Lamar Boulevard	LPST	RN106972763	91169	0.00
Proposed CVS Pharmacy	5526 South Congress Avenue	IHWCA	RN104921812	T2087	0.00
Austin Museum of Art	400 Block West 3rd Street	VCP	RN101461853	1322	0.00
Mobil SS 12d93	2401 South Congress Avenue	LPST	RN101494698	91811	0.00
Former SS 12 D93	2401 South Congress Avenue	LPST	RN101494698	96497	0.00
Exxon 67450	1901 Guadalupe Street	LPST	RN101474179	111047	0.01
Austin Homestead 451	819 West North Loop Boulevard	LPST	RN102382157	104122	0.01
Swanns Garage Radiator	6203 North Lamar Boulevard	LPST	RN100621788	104480	0.01
Aarons Auto Parts Austin	8409 South Congress Avenue	IHWCA	RN103099990	T1674	0.01
7 Eleven 23295	1814 Guadalupe Street	LPST	RN102018819	115013	0.01
Pacific Southwest Bank Property	907 South Congress Avenue	LPST	RN102400306	102685	0.01
A-Aabat Storage Facility	6705 North Lamar Boulevard	LPST	RN106494073	118958	0.01
Woods Honda Fun Center	6509 North Lamar Boulevard	LPST	RN100562412	104753	0.01
Former 7 Eleven Store 20079	6702 South Congress Avenue	LPST	RN102253721	117722	0.01
Diamond Shamrock Station 80	3909 Guadalupe Street	LPST	RN102375953	91720	0.01
American Tree Co. Coxville	4311 South Congress Avenue	LPST	RN104424833	96195	0.01
964	12600 North Lamar Boulevard	LPST	RN101698058	107165	0.01
	806 W Rundberg Ln.	LPST	RN102370343	110737	0.01
Floyds Auto Sales Service	5253 North Lamar Boulevard	LPST	RN100555283	100889	0.01
7 Eleven Store 30467	10111 North Lamar Boulevard	LPST	RN102033123	117647	0.01
Jack Brown Cleaners	2215 South Congress Avenue	LPST	RN101445021	104533	0.01
Vacant Building	12800 North Lamar Boulevard	LPST	RN104350392	98946	0.01
Cen Tex Nissan	1400 South Congress Avenue	LPST	RN100598390	108915	0.01
Ding Dong Auto Center	6916 North Lamar Boulevard	LPST	RN103772646	107367	0.01
Environmental Impact	3800 South Congress Avenue	LPST	RN106987282	114811	0.01
Sunbeck Automotive	4139 South Congress Avenue	LPST	RN102046869	105496	0.01
Fast Stop Store 11	5526 South Congress Avenue	LPST	RN102473899	116040	0.01
Texan Market 5	2700 South Congress Avenue	LPST	RN102429867	91135	0.01
Dodd Automotive	4227 Guadalupe Street	LPST	RN101493195	104780	0.01
Laidlaw Transit Inc.	4300 South Congress Avenue	LPST	RN102024221	98480	0.01
Diamond Shamrock 963	3706 Guadalupe Street	LPST	RN102370129	115608	0.01
Diamond Shamrock Corner Store 9	3706 Guadalupe Street	LPST	RN102370129	91646	0.01
Pats Lawnmower Service	7205 North Lamar Boulevard	LPST	RN101492130	107259	0.01
Austin State Hospital	4110 Guadalupe Street	LPST	RN100553759	109725	0.01
Texas Dept Of Mental Health and Mental Retardation Austin State Hospital	4110 Guadalupe Street	IHWCA	RN100553759	61330	0.01
Gaskins Real Estate Brokerage	2718 Guadalupe Street	LPST	RN101490258	94905	0.01
Soco Center	3630 South Congress Avenue	VCP	RN102870243	2337	0.01
Ballards Drive In Grocery 5	7545 North Lamar Boulevard	LPST	RN101375996	91422	0.01
Former Evans Texaco	4712 South Congress Avenue	LPST	RN101494490	95403	0.01

Site Name	Address	Program	Registration Number	ID Number	Distance from Orange Line Centerline (miles)
Thurman Warehouse	4714 South Congress Avenue	LPST	RN101488369	99861	0.01
3 Star Texaco	5630 North Lamar Boulevard	LPST	RN101488583	91290	0.02
Austin Four Corners Old Stop N Go	111 W William Cannon Dr.	LPST	RN102490885	105550	0.02
7 Eleven Store 23295	1814 Guadalupe Street	LPST	RN102018819	119942	0.02
Riverside Chevron	400 South Congress Avenue	LPST	RN103730206	107107	0.02
Stones Texaco	2300 South Congress Avenue	LPST	RN101496990	110045	0.02
Lamar Food Mart	8545 North Lamar Boulevard	LPST	RN101499358	120073	0.02
7 Eleven Store 36656	620 West 29th Street	LPST	RN102369428	119478	0.02
Taco Bell	2801 Guadalupe Street	LPST	RN102465234	93370	0.02
American Cleaners Facility	309 West 5th Street	VCP	RN100698174	188	0.02
Diamond Shamrock Corner Store 2	3630 South Congress Avenue	LPST	RN102870243	109867	0.02
Joe Daywood	3512 Guadalupe Street	LPST	RN101495919	102227	0.02
Tetco 1144	8911 North Lamar Boulevard	LPST	RN102269362	118246	0.02
7 Eleven 16996	2600 Guadalupe Street	LPST	RN102020625	102858	0.02
Houston Convenience Store 901	2105 South Congress Avenue	LPST	RN101698793	115195	0.02
7 Eleven 12683	808 West Koenig Ln.	LPST	RN102065653	99954	0.02
University Texaco	3016 Guadalupe Street	LPST	RN102430089	116474	0.02
Texaco	1900 Guadalupe Street	LPST	RN102246113	97075	0.02
Shoppers Mart 24	10500 North Lamar Boulevard	LPST	RN102759008	104147	0.02
S Food Mart	6301 North Lamar Boulevard	LPST	RN102393139	112387	0.02
Circle K 3216	4619 South Congress Avenue	LPST	RN101640480	109419	0.03
Giant Food Mart	8700 North Lamar Boulevard	LPST	RN102454790	91369	0.03
7 Eleven Store 36653	5630 North Lamar Boulevard	LPST	RN101488583	120052	0.03
7 Eleven 22245	2103 South Congress Avenue	LPST	RN102057890	104821	0.03
Cash American Pawn Shop	3402 Guadalupe	LPST	RN106980204	104444	0.03
7 Eleven Store 24008	5101 North Lamar Boulevard	LPST	RN102015401	120589	0.03
Shop N Carry Food Store	8514 South Congress Avenue	LPST	RN101493062	111287	0.03
Furniture Rejuvenators	605 W 37th Street	LPST	RN106842057	119240	0.04
Phillips 66 SS 26286	11100 North Lamar Boulevard	LPST	RN101431609	99432	0.04
Texas Dept of Public Safety	5805 North Lamar Boulevard	LPST	RN101721728	94079	0.04
Western Auto	9316 North Lamar Boulevard	LPST	RN101506301	97847	0.04
7121 N. Lamar Boulevard	7121 North Lamar Boulevard	VCP	RN106360175	2481	0.04
7 Eleven 39068	120 West Slaughter Ln.	LPST	RN102901220	118297	0.04
Majestic Products Co. Austin	118 East Alpine Rd.	IHWCA	RN100615277	38485	0.05
Neelley Vending Co.	813 West North Loop Boulevard	LPST	RN106974264	92244	0.05
Austin Sales	825 Prairie Trail	LPST	RN101510055	95261	0.05
Scarborough House Tract	2612 Whitis Avenue	VCP	RN101053221	1414	0.05
Proposed Chick Fil A Restaurant 2992	503 West Martin Luther King Jr. Boulevard	VCP	RN106313539	2468	0.05
North Loop Soc	819 West No Loop Boulevard	LPST	RN102382157	91504	0.05
Rreef Hemphill Park	2810 Hemphill Park	LPST	RN106989494	117561	0.05
Crestview Station	7114 North Lamar Boulevard	VCP	RN104686134	1830	0.05
Huntsman Petrochemical Corp Austin	7114 North Lamar Boulevard	IHWCA	RN100726215	30688	0.05
Diamond Shamrock 2066	160 East Riverside Dr.	LPST	RN102370186	115780	0.06
Jims Conoco	1308 Lavaca Street	LPST	RN102042611	97790	0.06

Site Name	Address	Program	Registration Number	ID Number	Distance from Orange Line Centerline (miles)
Commercial Title Building	910 Lavaca Street	LPST	RN106975642	95340	0.06
7 Eleven Store 12705	408 West 15th Street	LPST	RN102021409	118292	0.06
Cold Inc.	704 West Powell Ln.	LPST	RN101642965	108068	0.06
Vacant Property	11902 North Lamar Boulevard	LPST	RN101696896	104576	0.06
North Park Shopping Center	9616 North Lamar Boulevard	VCP	RN102743630	406	0.06
Austin American Statesman	305 South Congress Avenue	LPST	RN101489169	104432	0.07
Ryder Truck Rental Fac	8305 North Lamar Boulevard	LPST	RN102238698	94088	0.07
Exxon 60015	343 South Congress Avenue	LPST	RN102655388	91595	0.07
M D Pharmacy	1701 Lavaca Street	LPST	RN102233913	103931	0.08
Hyatt Regency Hotel	208 Barton Springs Rd.	VCP	RN104778188	1872	0.08
Crescent Machinery	127 East Riverside Dr.	VCP	RN104700117	1835	0.08
Central Texas Equipment Co.	127 East Riverside Dr.	LPST	RN104700117	93963	0.08
Southwestern Bell Telephone Co.	817 West North Loop Boulevard	LPST	RN100708882	91998	0.09
Green Water Trtmt Plant - CoA Pub Works	600 West Cesar Chavez Street	IHWCA	RN105377568	T2229	0.09
Former Chotes Chevron	500 West Martin Luther King Jr. Boulevard	LPST	RN101494763	117820	0.09
Firestone Tire Service Center	311 South Congress Avenue	LPST	RN101499291	106686	0.10
Comfort Supply Railton Manufacture	906 Justin Ln.	LPST	RN101490324	99116	0.10
C J C Holdings	7211 Circle S Rd.	LPST	RN102413382	105722	0.10
Block 4, 100 Colorado Street	100 Colorado Street	VCP	RN100247758	1110	0.10
Southwestern Bell Telephone Hickory	201 Cumberland Rd.	LPST	RN102387115	105778	0.11
Austin Executive Airpark	811 West Howard Ln.	VCP	RN101054823	941	0.12
Austin Water Wastewater Ser. Bldg.	901 West Koenig Ln.	LPST	RN103061800	115765	0.12
Pompa Trucking Austin	9203 Cullen Ln.	IHWCA	RN104615810	T1726	0.13
Western Auto Store	137 West Oltorf Street	LPST	RN102269081	97478	0.14
Starr Building Historical SS	No Address Available	LPST	RN106989213	118164	0.14
Water Trtmt Plant - CoA Pub Works	600 West Cesar Chavez Street	VCP	RN105377568	2199	0.15
Austin Greenwood Condo	909 Colorado Street	LPST	RN102390275	105043	0.15
Butch Wooten Investment Motors	315 East Saint Elmo Rd.	LPST	RN101493872	104781	0.15
Jack Brown Cleaners	615 West Martin Luther King Jr. Boulevard	VCP	RN102798402	1658	0.16
Lincoln Property Austin	100 Congress Avenue	IHWCA	RN100594738	66361	0.16
South Austin Service Center	3815 Woodbury Dr.	LPST	RN104091822	102299	0.17
Laidlaw Transit Services Inc. Austin	8300 South IH 35	IHWCA	RN101496354	T1680	0.17
29WAT R907222	4th	LPST	RN102130325	105655	0.17
Ivory Cleaners & Alterations	1901 Rio Grande Street	VCP	RN102018033	2578	0.17
Mlk/Rio Grande Site	1901 Rio Grande Street	LPST	RN102018033	119160	0.17

Site Name	Address	Program	Registration Number	ID Number	Distance from Orange Line Centerline (miles)
Texas School for Deaf	1102 South Congress Avenue	LPST	RN100691435	108546	0.20
Cornerstone Place Apartments	2308 Rio Grande Street	VCP	RN101055473	371	0.21
Acc Rio Grande Campus	1212 Rio Grande Street	LPST	RN100558378	113790	0.21
Cothrons Texaco Service	701 West 6th Street	LPST	RN101488872	98124	0.21
Ben White U Haul Co.	304 East Ben White Boulevard	LPST	RN101696359	110012	0.21
Scarborough Building	101 West 6th Street	VCP	RN101053650	638	0.22
Former RTC Property	206 Congress Avenue	LPST	RN102451283	103123	0.22
Austin Energy-Energy Control Center	301 West Avenue	VCP	RN106321532	2485	0.23
Stone Industrial Solvents	301 Industrial Boulevard	VCP	RN100675339	1138	0.23
Chevron Station	IH 35	LPST	RN106972490	91070	0.25
Castleberry Instruments Avionics	817 West Howard Ln.	LPST, IHWCA	RN101492189	95273	0.25
Snead Bus Barn	5901 Guadalupe Street	LPST	RN100597277	101331	0.26
Kolpack Property	901-905 Barton Springs Road.	LPST	RN106984511	112262	0.26
Vacant Texaco Station	North IH 35	LPST	RN106978786	100857	0.26
CoA Electric Utility Dept	800 West Cesar Chavez Street	VCP, IHWCA	RN102744109	283	0.27
Littlefield Driskill Ghost Tank	106 East 6th Street	VCP	RN105527584	2172	0.27
Littlefield Building	106 East 6th Street	LPST	RN105527584	117973	0.27
St Elmo	502 West Saint Elmo Rd.	LPST	RN101491868	104325	0.27
HLD Food Mart	1112 West Koenig Ln.	LPST	RN101699114	108443	0.27
Yager	505 West Yager Lane	LPST	RN102279734	99146	0.27
Former Seth Engine Parts Facility	617 East 3rd Street	LPST	RN102067188	94728	0.27
Fire Station 16	7000 Reese Lane	LPST	RN102237229	103200	0.28
Century South Shopping Center	801 East William Cannon Drive	VCP	RN102743697	611	0.28
Austin Community College Rio Grande Campus	1212 Rio Grande Street	IHWCA	RN100558378	66189	0.28
ACC Book Store	801 West 12th Street	LPST	RN102409869	104949	0.28
Continental Cars	6757 Airport Boulevard	LPST	RN100708072	105936	0.28
Electric Utility	300 West Avenue	LPST	RN102338076	96554	0.28
Austin Toyota Inc.	805 West 5th Street	LPST	RN102443637	99907	0.28
Austin Energy Pole Yard	300 West Avenue	VCP	RN102644226	880	0.29
Phillips Building	103 East 5th Street	VCP	RN101055549	690	0.29
Diamond Shamrock 2070	628 East Oltorf Street	LPST	RN102370640	116084	0.29
Strait Music	805 West 5th Street	VCP	RN101053700	1333	0.29
Goodrich Aerospace Component Overhaul & Repair	817 West Howard Lane	IHWCA	RN103029864	72925	0.29
Brooks Perry Parking Garage	720 Brazos Street	LPST	RN101494144	101630	0.29
Muldoon Interests	6210 Crow Lane	VCP	RN102479920	2074	0.30
Zumwalt Property	1214 South 1st Street	LPST	RN101495869	104920	0.31
Littlefield Parking Garage	508 Brazos Street	VCP	RN102617198	673	0.31
Koenig Lane 66	1200 West Koenig Lane	LPST	RN101697019	96197	0.31
Former Broaddus Koenig Lane Chevron	1200 West Koenig Lane	LPST	RN101697019	117699	0.31
Seaholm Substation	800 West Cesar Chavez	VCP	RN100217348	2324	0.31

Site Name	Address	Program	Registration Number	ID Number	Distance from Orange Line Centerline (miles)
NCNB Texas	201 East 5th Street	LPST	RN106997265	99343	0.32
George Torres Texaco	301 West Koenig Lane	LPST	RN101510295	116141	0.32
Circle K 3245	3201 North Lamar Boulevard	LPST	RN102790789	105084	0.33
Diamond Shamrock Corner Store 1	3515 North Lamar Boulevard	LPST	RN102376910	110658	0.33
NCNB Texas	219 East 6th Street	LPST	RN106997257	99342	0.33
Quick Lube	3401 North Lamar Boulevard	LPST	RN100625771	91708	0.33
Pecan Food Mart	2101 South 1st Street	LPST	RN101382018	120452	0.33
North Loop Plaza Shopping Cent	5220 Burnet Road	VCP	RN101055812	598	0.33
Sub Way	3724 North Lamar Boulevard	LPST	RN101488302	106533	0.34
McMorris Ford	808 West 6th Street	LPST	RN100587419	109726	0.34
Austin Energy Crescent Tract	No Address Available	VCP	RN106268352	2451	0.35
Red Arrow Freight Lines Inc.	8080 Purnell Drive	LPST	RN101698389	94319	0.35
Quix 492	13641 North IH 35	LPST	RN102401098	99597	0.36
State Property	1518 San Jacinto Boulevard	LPST	RN103054102	111590	0.36
State Service Station	1502 San Jacinto Boulevard	LPST	RN104805403	97342	0.36
First Texas Honda	1301 West Koenig Lane	LPST	RN100523851	104653	0.37
Exxon 6 1483	530 West Ben White Boulevard	LPST	RN100656776	96813	0.37
Cen-Tex Plating	509 East Saint Elmo Rd.	IHWCA	RN100694405	66010	0.38
Stop N Go 2154	102 West Powell Lane	LPST	RN102372182	91221	0.38
Former Truck City Dealership	502 East Ben White Boulevard	LPST	RN106980840	107201	0.39
Former Shoppers Mart 8	525 West Ben White Boulevard	LPST	RN102833407	97504	0.39
Capitol Metal Finishing Inc. Austin	3909 Warehouse Row	IHWCA	RN100686591	31593	0.39
Former Andys Food Mart	611 West Stassney Lane	LPST	RN102651957	117469	0.39
Safe Way Rental Tower Site	311 Bowie Street	VCP, LPST	RN101053411	1266	0.39
South 1st Street Service Ctr Tow	3616a South 1st Street	LPST	RN102379963	109091	0.39
Apple Tract	811 West 6th Street	VCP	RN102061397	780	0.40
Former Rick Hoff Auto Service	4333 South 1st Street	LPST	RN101491512	104510	0.40
Chisholm Corner Store 7	600 East Ben White Boulevard	LPST	RN102846789	105147	0.41
Former Property H167	5011 East 1st Street	LPST	RN102464278	118148	0.41
Stop N Go 2062	539 West Oltorf Street	LPST	RN102368990	113083	0.42
Closed Gasoline Station	2803 San Jacinto Boulevard	LPST	RN101492007	96737	0.42
Shoppers Mart 23	800 E William Cannon Drive	LPST	RN102321288	96235	0.43
Proposed Spring Condominiums	302 Bowie Street	IHWCA	RN105023113	T2118	0.43
Old Sears Warehouse	108 Denson Drive	LPST	RN101490084	96481	0.43
Former Quikie Pickie	600 West Ben White	LPST	RN101697043	105609	0.43
Service Center 2	600 River Street	LPST	RN102125515	91466	0.43
Wenco Distributing	600 Industrial Boulevard	LPST	RN100721265	100669	0.43
7 11 Store 26353	601 West Ben White Boulevard	LPST	RN102041019	100227	0.44
Continental Cars	200 West Huntland Dr.	LPST	RN100556224	101182	0.44
Old Townsends Texaco	2511 San Jacinto	LPST	RN106982275	106331	0.44
Mr G Texaco Station	6515 Airport Boulevard	LPST	RN102466745	101816	0.45
Fire Station 1	401 East 5th Street	LPST	RN102239019	113612	0.45
Terminix International of	1206 Parkway	LPST	RN100616499	107715	0.45

Site Name	Address	Program	Registration Number	ID Number	Distance from Orange Line Centerline (miles)
Austin					
7 Eleven 21884	917 North Lamar Boulevard	LPST	RN102019692	103888	0.46
Holt Machinery Co. Service Bldg Vehicle Refuel Stn.	9601 South IH 35 304 East 24th Street	LPST	RN102033370	95789	0.46
Perry Rose Tire Highland Mall	6401 Airport Boulevard	LPST	RN103762134	96480	0.46
Kwik Mart 1	1200 North Lamar Boulevard	LPST	RN101497279	102170	0.46
Texan Market 9	1200 Kramer Lane	LPST	RN102870136	103025	0.47
Seton Medical Center	1201 West 38th Street	LPST	RN102484243	102762	0.47
Texaco	5600 South 1st Street	LPST	RN102338217	97017	0.47
Travis County Fleet Maint 5	1000 North Lamar Boulevard	LPST	RN102793460	105337	0.47
Texaco One Stop	6500 South IH 35	LPST	RN102476082	114336	0.48
Drake Condominiums	68 Rainey Street	VCP	RN102860269	92956	0.48
Service Center 11	3616 South 1st Street	LPST	RN105195408	2036	0.48
Fire Station 17	702 West Ben White Boulevard	LPST	RN103154134	93394	0.49
Austin Energy Wye Tract	No Address Available	VCP	RN102236379	103902	0.49
Capitol Chevrolet Inc.	501 North Lamar Boulevard	LPST	RN105157986	2019	0.50
			RN100526912	95067	0.50

Source: TCEQ, 2019a

APPENDIX D: CULTURAL RESOURCES WITHIN THE ORANGE LINE CORRIDOR

Cemeteries within the Orange Line Corridor 2

Previously Recorded Archeological Sites within the Orange Line Corridor..... 2

Previously Identified Historic Properties within the Orange Line Corridor 7

Cemeteries within the Orange Line Corridor

Cemetery Name	Description	Status
Williamson Creek Cemetery (TV-C014)	Burial dates from 1870s to present; located off I-35, one block south of Stassney Lane on Little Texas Drive	Designated as HTC on 5/08/2001
Boggy Creek Masonic Cemetery (TV-C015)	Burial dates 1859 to present; located on Circle South Road, two blocks south of William Cannon Drive and I-35	Designated as HTC on 4/17/2001
Austin State Hospital Cemetery (TV-C023)	Burial dates mid-19 th century to present; located on West 51 st Street	Designated as HTC on 3/8/2002
Memorial Hill Park Cemetery (TV-C071)	Located north on I-35 from Austin, exit Howard Lane, entrance on frontage road	No designation
Walnut Creek Cemetery (41TV927)	Established in early 1850s after founding of Walnut Creek Baptist Church; located at rear of church	No designation
Matthews Cemetery (41TV2066) (no longer extant)	Historic family cemetery dating from 1851 to 1941; three burials relocated to Live Oak Cemetery in 2004; located along Turk Lane between Cullen Lane and I-35 Frontage Road	No designation

Source: TASA, 2019

Previously Recorded Archeological Sites
within the Orange Line Corridor

Site Number	Cultural Period	Site Description	Designations
41TV7	No data	No data	Undetermined
41TV12	Prehistoric	Midden	Undetermined
41TV100	Prehistoric	Midden containing dart points and flakes	Site determined ineligible for the NRHP on 2/28/2003
41TV107	Prehistoric	Scatter with small point, metate fragment, utilized flakes, knife fragments, scrapers	Undetermined
41TV126	Prehistoric and Historic	Prehistoric scatter of metate fragments, flint flakes, utilized flakes, hearth stones, burned soil; historic scatter of modern glass, ceramic, metal	Undetermined
41TV137	Historic (late 19 th to early 20 th century)	Lamar Street Dump Site; ceramics, glass, metal	Undetermined
41TV151	Prehistoric	Open campsite containing burned rock midden, dart points, arrow points, knife, bone, pottery, snail shells, burned rock	Site determined ineligible for the NRHP on 2/28/2003
41TV152	Prehistoric	Scatter of burned rock, flint, snail shells	Undetermined
41TV191	Historic (1853)	Carrington-Covert House; two-story limestone block house	Undetermined
41TV194	Historic (1881-1888)	Old Capital Building; scatter of Mexican coins, glass, pottery; porcelain, bottle fragments, brick fragments, molten lead, brass fork, coal, square nails	Undetermined
41TV260	Historic (1881-1888)	Old Capitol Building; wall foundation	Undetermined
41TV329	Prehistoric	Scatter with projectile point, utilized core	Site within Right-of-Way (ROW) determined ineligible for the NRHP on 8/22/2001

Site Number	Cultural Period	Site Description	Designations
41TV358	Prehistoric	Scatter of projectile points, cores, bifaces, flakes	Undetermined
41TV366	Prehistoric	Scatter of flint flakes, cores, burned rock	Undetermined
41TV367	Prehistoric	Campsite, midden, lithic scatter	Undetermined
41TV368	Prehistoric	Campsite, midden, lithic scatter of projectile points, mano, polished bone	Undetermined
41TV369	Prehistoric	Potential Archaic Period campsite; lithic scatter of burned rock, chipped stone, dart points, snail shells	Undetermined
41TV371	Prehistoric	Possible Paleoindian through Late Prehistoric Period midden and lithic processing station; scatter of numerous projectile points, point fragments, biface thinning flakes	Site determined eligible for the NRHP on 8/5/1983 Designated as a SAL on 8/5/1983
41TV375	Historic (20 th century)	Ruins of shack/lean-to; historic scatter of scrap tin, wire nails, beer bottles, tin cans	Undetermined
41TV376	Historic (20 th century)	Historic scatter of glass, stoneware, ironstone, wood stove parts, metal	Undetermined
41TV377	Historic	Remains of plank structure; historic scatter of wire nails, tin cans, liquor bottles	Undetermined
41TV378	Historic	Farmhouse, outbuildings, and historic scatter	Undetermined
41TV380	Historic	Remains of plank structure; scatter of glass, metal, ceramics	Undetermined
41TV381	Historic (19 th century)	Scatter of whiteware, stove parts, buckles and harness, metal bands, glass (pink, clear, aquamarine, purple, brown), tin cans	Undetermined
41TV474	No data	No data	Undetermined
41TV517	Prehistoric and Historic	Prehistoric surface scatter of lithic flakes; historic scatter of glass	Undetermined
41TV523	No data	No data	Undetermined
41TV546	Prehistoric	Lithic scatter of flint flakes, burned rock, biface, snail shells	Undetermined
41TV548	Historic (late 19 th to early 20 th century)	Historic Museum Site (Elizabeth Ney Museum Restoration); museum consists of several constructions of limestone erected between 1892 and 1902	Site determined eligible for the NRHP on 8/7/2009
41TV549	Prehistoric	Possibly Middle Archaic midden site; chert cores, flake, burned rock, burned snail shells	Undetermined
41TV550	Prehistoric	Scatter of burned and unburned limestone slabs; burned quartzite, flakes, charcoal staining, possible quartzite hammerstone	Undetermined
41TV551	Prehistoric	Burned rock hearth, with scatter of chert flakes, and quartzite grinding stone	Undetermined
41TV552	Prehistoric	Campsite with scatter of burned rock, chert flakes	Undetermined
41TV848	Historic (1870-1880)	Commercial bakery and privy; scatter of bottles dating from 1870s and 1880s; ceramics, faunal remains	Undetermined

Site Number	Cultural Period	Site Description	Designations
41TV858	Historic (early 20 th century)	Bryant Dairy; buildings, cisterns, pens, artifact scatter of glass, ceramics, farm machinery parts, bricks, nails	Undetermined
41TV860	Prehistoric	Campsite containing debitage, tools, burned rocks, grinding slabs, snail shells	Site determined eligible for the NRHP on 7/25/1997 Designated as a SAL on 7/25/1997
41TV866	Prehistoric	Lithic scatter of debitage, projectile points, burned rocks	Undetermined
41TV867	Prehistoric	Lithic scatter/open campsite containing lithic flakes, burned rock	Undetermined
41TV870	Prehistoric	Lithic scatter containing projectile points, biface fragments, chert flakes	Designated as SAL (unknown date)
41TV871	Historic (late 19 th and early 20 th century)	Farmstead/ranch site containing standing barns, barn remnants, metal cistern, concrete cistern, wells, cellars, scatter of metal, glass, nails	Undetermined
41TV873	Prehistoric	Open campsite containing chert debitage, biface fragment, edge-modified flake, burned rocks	Undetermined
41TV876	Prehistoric and Historic	Midden site with chert flakes and possible cores; historic deposits of glass, concrete, clay pipe fragments, coins, nails, bone, ceramics	Undetermined
41TV927	Historic (mid-19 th century to present)	Walnut Creek Cemetery within a fenced boundary; established in early 1850s after founding of Walnut Creek Baptist Church	Undetermined
41TV948	No data	No data	Undetermined
41TV1000	Prehistoric	Lithic scatter containing chert debitage, utilized flakes	Site determined ineligible for the NRHP on 5/7/1998
41TV1020	Historic (ca. 1880-1920)	Human skeletal remains and historic glass, metal, ceramics	Site determined ineligible for the NRHP on 1/15/2003
41TV1134	Prehistoric and Historic	Prehistoric lithic scatter with dart point and biface fragments, flakes, burned rocks; historic home site/farm complex with historic scatter of logs, nails, glass, ceramics, household items	Undetermined
41TV1135	Prehistoric and Historic (early 20 th century)	Prehistoric lithic scatter with burned rock, flakes; historic scatter of purple glass, whiteware, metal	Undetermined
41TV1136	Prehistoric and Historic	Lithic scatter with flakes, modified flake; historic scatter of clear and brown glass, rusted cans, wire	Undetermined
41TV1205	No data	No data	Undetermined
41TV1293	No data	No data	Undetermined
41TV1331	Prehistoric	Open campsite with possible buried midden; dart point, flakes, tools	Site determined ineligible for the NRHP on 5/7/1998
41TV1332	Prehistoric	Open campsite with burned rock	Undetermined
41TV1374	Historic	Cistern, privy, remnants of houses; historic scatter of bottles, glass, metal	Undetermined
41TV1380	Historic (1863-1864)	Fort Magruder; Civil War fort only occupied a few weeks	Undetermined
41TV1493	Historic (1870s-1930s)	Structural foundations, piers, trash pits,	Site determined eligible for

Site Number	Cultural Period	Site Description	Designations
		privies, cut limestone-lined pit; historic artifact scatter	the NRHP on 7/06/2006
41TV1494	Historic (1870s-1930s)	Structural remains and artifact scatter; foundation and pier remnants, cistern, well, privies, fountain, brick walks, retaining walls	Site determined eligible for the NRHP on 7/06/2006
41TV1497	Historic (1860s-1930s)	Historic structural remains; limestone foundations, piers, brick piers, limestone retaining wall, cisterns, stone-lined well, privies, historic artifact scatter	Site determined eligible for the NRHP on 7/06/2006
41TV1553	No data	No data	Undetermined
41TV1554	No data	No data	Undetermined
41TV1555	No data	No data	Undetermined
41TV1556	No data	No data	Undetermined
41TV1581	Prehistoric	Lithic scatter and open campsite containing chert flakes	Undetermined
41TV1603	Historic (1890s)	Structural remains; artifact scatter of faunal remains, glass, bricks, bottles, household items	Site determined ineligible for the NRHP on 1/15/2003
41TV1604	Historic	House site; historic artifacts	Site determined ineligible for the NRHP on 1/15/2003
41TV1605	Historic	House site; historic artifacts	Site determined ineligible for the NRHP on 1/15/2003
41TV1614	Prehistoric	Paleoindian through Late Prehistoric Periods; possible burned rock midden; projectile points, flakes, tested cobbles, cores, burned bison bone, burned rock, snail shells	Undetermined
41TV1624	Historic (19 th century)	Christianson-Leberman House foundation	Site determined eligible for the NRHP on 3/02/1995
41TV1718	No data	No data	Undetermined
41TV1729	Historic (late 19 th through 20 th century)	Historic scatter of glass, wire, nails, paving bricks, coal fragments, faunal remains, earthenware	Site determined ineligible for the NRHP on 1/15/2003
41TV1730	Prehistoric and Historic (19 th century)	Prehistoric lithic flakes; historic structural remains, including limestone wall foundation and brick piers; historic bottle and window glass, ceramics, marbles, utensils, personal effects	Site determined ineligible for the NRHP on 1/15/2003
41TV1731	Historic (late 19 th through 20 th century)	Ash pit and burned materials; historic scatter of cut and wire nails, broken glass, charcoal, ceramics	Site determined ineligible for the NRHP on 1/15/2003
41TV1732	Historic (19 th through 20 th century)	Privy; bottles, dishes, coins, jugs, faunal materials, bricks	Site determined ineligible for the NRHP on 1/15/2003
41TV1786	No data	No data	Undetermined
41TV1787	No data	No data	Undetermined
41TV1790	Historic (ca. 1935-1965)	Pit feature and historic glass, bottles, nails, metal, ceramics, bricks	Undetermined
41TV1799	Prehistoric and Historic (1860-1970s)	Prehistoric scatter of cores, flakes, and fire-cracked rock; Historic component consists of Brizendine-Gordon House;	Site determined eligible for the NRHP on 11/14/1997

Site Number	Cultural Period	Site Description	Designations
		scatter of bone, ceramics, construction items, coal, household materials	
41TV1814	No data	No data	Undetermined
41TV1819	No data	No data	Undetermined
41TV1831	Historic (19 th century)	Cistern; urban house site	Site determined ineligible for the NRHP on 5/08/1998
41TV1861	No data	No data	Undetermined
41TV1872	Historic (1856)	Texas Governor's Mansion; original privy containing ceramics, glass, buttons, stoneware, nails, horseshoes, faunal material, lime, mortar, household items	Site determined eligible for the NRHP on 5/28/1999
41TV1875	Prehistoric and Historic	No data	Site determined ineligible for the NRHP on 11/15/1999
41TV1887	Prehistoric	Lithic scatter	Undetermined
41TV1899	Historic (1855-1861)	Guytown, Block 22; Schnieder Beer vaults; historic artifact scatter of bottles, ceramics, coins, buttons, dolls, cutlery, metal, bone, bullets, household items	Site determined eligible for the NRHP on 8/19/2002 Designated as a SAL on 7/16/2004
41TV1950	Prehistoric	Lithic scatter of debitage and fire-cracked rock	Site determined ineligible for the NRHP on 11/07/2001
41TV2060	Historic	Scatter of bottle glass, window glass, buttons, ceramics, tin cans	Site determined ineligible for the NRHP on 12/16/2003
41TV2066	Historic (ca. 1851-1941)	Historic Matthews Family homestead; 3 burials removed from cemetery and reinterred in January 2004	Undetermined
41TV2126	Prehistoric	Campsite with biface fragment, fire-cracked rock, flakes	Site determined eligible for the NRHP on 10/05/2007
41TV2127	Prehistoric	Campsite containing fire-cracked rock, biface, flake	Site determined ineligible for the NRHP on 05/17/2006
41TV2189	Historic (late 19 th and 20 th century)	Privy, structural footings, cedar fence post, brick foundation pier; historic scatter of horseshoes, glass, metal, bricks, nails	Site determined ineligible for the NRHP on 08/18/2006
41TV2190	Historic (early 20 th century)	Trash pit and cedar post or fence support; historic scatter of glass, metal, ceramics, aluminum, plastic	Site determined ineligible for the NRHP on 08/18/2006
41TV2191	Historic (late 19 th to mid-20 th century)	Historic scatter and trash pit with horseshoes, glass bottles, whiteware, metal, bricks	Site determined ineligible for the NRHP on 08/18/2006
41TV2304	Historic	Structural features of brick piers; historic trash midden of marbles, bottles, pennies, glass, metal	Site determined ineligible for the NRHP on 10/13/2008
41TV2385	Historic (1860s-1940)	House foundation; cistern; pit features; nails, screws, bolts, window glass, bottle glass, ceramics, household items	Undetermined
41TV2391	Historic (mid-1800s)	Cistern behind historic home	Undetermined
41TV2408	Prehistoric	Hearth feature, lithics, burned rock	Site within ROW was determined ineligible for the NRHP on 4/01/2013

Site Number	Cultural Period	Site Description	Designations
41TV2440	Prehistoric and Historic (20 th century)	Prehistoric lithic scatter; historic structural remnants	Site determined ineligible for the NRHP on 2/04/2014
41TV2442	Historic (early 19 th to mid-20 th century)	Foundations from former residential structures and churches; glass, whiteware, cast iron	Site determined ineligible for the NRHP on 12/04/2013
41TV2454	Prehistoric	Quarry site; procurement site; chert and quartzite cobbles, cores, flakes, bifaces, unifaces	Undetermined
41TV2545	No data	No data	Undetermined
41TV2580	No data	No data	Undetermined

TASA, 2019

Previously Identified Historic Properties
within the Orange Line Corridor

Name	Address	THC Atlas ID #	Designation (With Criteria)
National Historic Landmarks (NHL)			
Governor's Mansion	1010 Colorado Street, Austin	Atlas # 2070000896 (NHL), Atlas #2070000896(NRHP) Atlas #8200000613 (SAL)	NHL Listed(A and C), NRHP Listed Historic District (A and C), SAL, CoA Landmark
Texas State Capitol	Congress and 11 th Streets, Austin	Atlas #2070000770 (NHL), Atlas #2070000770 (NRHP), Atlas #8200000641(SAL), Marker #14150 (RTHL)	NHL Listed (C), NRHP Listed Historic District (C), SAL, RTHL, CoA Landmark
NRHP-Listed Properties			
Robert H. and Edith Ethel McCauley House	4415 Avenue A, Austin	Atlas #2090001236	NRHP Listed (C)
Hyde Park Presbyterian Church	3915 Avenue B, Austin	Atlas #2090001175	NRHP Listed (C)
Missouri, Kansas and Texas Land Company House	3908 Avenue C, Austin	Atlas #2090001179	NRHP Listed (C)
Charles Ledbetter House	3904 Avenue C, Austin	Atlas #2090001178	NRHP Listed (C)
Oliphant Walker House	3900 Avenue C, Austin	Atlas #2090001177	NRHP Listed (C), CoA
James and Susie Parker House	3906 Avenue D, Austin	Atlas # 2090001181	NRHP Listed (C), CoA
Frank and Annie Covert House	3912 Avenue G, Austin	Atlas # 2090001185	NRHP Listed (C), CoA Landmark
Colonel Monroe M Shipe House	3816 Avenue G, Austin	Atlas # 2083003167 (NRHP), Marker #14361(RTHL)	NRHP Listed (B and C), RTHL, CoA Landmark
Littlefield House	24th Street and Whitis Avenue, Austin	Atlas #2070000767 (NRHP), Atlas #8200000625 (SAL), Marker #14889 (RTHL)	NRHP Listed (A and C), SAL, RTHL
Kappa Kappa Gamma House	2001 University Avenue, Austin	Atlas #2013000602 (NRHP), Marker #14452 (RTHL)	NRHP (A and C), RTHL, CoA
Bertram Building	1601 Guadalupe Street,	Atlas 2012000590	NRHP Listed (A), CoA

Name	Address	THC Atlas ID #	Designation (With Criteria)
Carrington Covert House	Austin 1511 Colorado Street, Austin	Atlas #2070000765 (NRHP), Atlas # 8200000737 (SAL), Marker #6423 (RTHL)	Landmark NRHP Listed (C), SAL, RTHL, CoA Landmark
Gethsemane Lutheran Church	1510 Congress Avenue, Austin	Atlas #2070000766 (NRHP), Marker #14770 (RTHL)	NRHP Listed (A and C), RTHL, CoA Landmark
Scholz Garden	1607 San Jacinto Street, Austin	Atlas #2079003015 (NRHP), Marker#12245 (RTHL)	NRHP Listed (A), RTHL, CoA Landmark
Smith-Clark and Smith-Bickler Houses	502 and 504 West 14 th Street, Austin	Atlas #2079003016	NRHP Listed (C)
Wahrenberger House	208 West 14 th Street, Austin	Atlas #2078002995 (NRHP), Marker #6421 (RTHL)	NRHP Listed (A and C), RTHL, CoA Landmark
John Hancock House	202 West 13 th Street	Atlas 2073001977	NRHP Listed (C)
Goodman Building	202 West 13 th Street, Austin	Atlas 2073001976	NRHP Listed (C), CoA Landmark
Henry Hirshfeld House and Cottage	303 and 305 West 9 th Street, Austin	Atlas #2073001978 (NRHP), Atlas #8200000615 (SAL), Marker #6441 (RTHL), Marker #6440 (RTHL)	NRHP Listed(C), SAL, RTHL, CoA Landmark
Louise and Mathilde Reuter House	806 Rosedale Terrace, Austin	Atlas #2087002100 (NRHP), Marker # 14457 (RTHL)	NRHP Listed (B and C), RTHL, CoA Landmark
Austin "Moonlight Towers"	Northwest corner of Leland and Eastside Drive	Atlas #2076002071 (NRHP), Atlas # 8200000627 (SAL)	NRHP Listed (A and C), SAL,CoA Landmark
Austin "Moonlight Towers"	Southwest corner of South First and West Monroe Streets	Atlas #2076002071 (NRHP), Atlas # 8200000627 (SAL)	NRHP Listed (A and C), SAL, CoA Landmark
Austin "Moonlight Towers"	West 4th Street and Nueces Street	Atlas #2076002071 (NRHP), Atlas # 8200000627 (SAL)	NRHP Listed (A and C), SAL ,CoA Landmark
Austin "Moonlight Towers"	Southeast corner of West 9th and Guadalupe Streets	Atlas #2076002071 (NRHP), Atlas # 8200000627 (SAL)	NRHP Listed (A and C), SAL ,CoA Landmark
Austin "Moonlight Towers"	Northwest corner of 12th and Rio Grande Streets	Atlas #2076002071 (NRHP), Atlas # 8200000627 (SAL)	NRHP Listed (A and C), SAL ,CoA Landmark
Austin "Moonlight Towers"	Southwest corner of West 15th and San Antonio Streets	Atlas #2076002071 (NRHP), Atlas # 8200000627 (SAL)	NRHP Listed (A and C), SAL, CoA Landmark
Austin "Moonlight Towers"	Southwest corner of 22nd and Nueces Streets	Atlas #2076002071 (NRHP), Atlas # 8200000627 (SAL)	NRHP Listed (A and C), SAL, CoA Landmark
Austin "Moonlight Towers"	Southwest corner of 41st Street and Speedway	Atlas #2076002071 (NRHP), Atlas # 8200000627 (SAL)	NRHP Listed (A and C), SAL, CoA Landmark
Austin "Moonlight Towers"	Southeast corner of 11th and Trinity Streets	Atlas #2076002071 (NRHP), Atlas # 8200000627 (SAL)	NRHP Listed (A and C), SAL, CoA Landmark
Austin Central Fire	401 East Fifth Street, Austin	Atlas #2000000454	NRHP Listed (A and C),

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Station #1			
Austin Fire Drill Tower	201 W Cesar Chavez, Austin	Atlas #2016000720	NRHP Listed (Criteria not available)
J.P. Schneider Store	401 West 2 nd Street, Austin	Atlas #2079003014 (NRHP), Atlas #8200000630 (SAL) Marker #6450 (OTHM)	NRHP Listed (A and C), SAL, OTHM, CoA Landmark
Southwestern Telegraph and Telephone Building	410 Congress Avenue, Austin	Atlas # 2078002993 (NRHP), Marker #14090 (RTHL)	NRHP Listed (C), RTHL, CoA Landmark
Royal Arch Masonic Lodge, Lone Star Chapter No. 6	311 West Seventh Street, Austin	Atlas #2005000362	NRHP Listed (A and C), CoA Landmark
Norwood Tower	114 West 7 th Street, Austin	Atlas #2010001224 (NRHP), Marker #13620 (RTHL)	NRHP Listed (C), RTHL, CoA Landmark
Brown Building	708 Colorado, Austin	Atlas #2097000364 (NRHP), Marker #17512 (RTHL)	NRHP Listed (A and C), RTHL, CoA Landmark
Gilfillan House	603 West 8 th Street, Austin	Atlas #2080004153 (NRHP), Marker #14373 (RTHL)	NRHP Listed (C), RTHL, CoA Landmark
Robinson-Macken House	702 Rio Grande Street, Austin	Atlas 2085002300 (NRHP), Marker #4309 RTHL	NRHP Listed (C), RTHL, CoA Landmark
Austin U.S. Courthouse	200 West 9 th Street, Austin	Atlas #2001000432	NRHP Listed (A and C)
U.S. Post Office and Federal Building	126 West 6 th Street, Austin	Atlas #2070000771	NRHP listed (C)
St. David's Episcopal Church	304 East 7 th Street, Austin	Atlas #2078002994 (NRHP), Marker #14196 (RTHL)	NRHP Listed (A and C), RTHL, CoA Landmark
Federal Office Building	300 East 8 th Street, Austin	Atlas # 2011000211	NRHP Listed (A and B)
Millett Opera House	110 9 th Street, Austin	Atlas #2078002991 (NRHP), Atlas #8200000622 (SAL)	NRHP Listed (A and C), SAL, CoA Landmark
St. Mary's Cathedral	201-207 10 th Street, Austin	Atlas #2073001981 (NRHP), Marker # 14676 (RTHL)	NRHP Listed (A and C), RTHL, CoA Landmark
1918 State Office Building and 1933 State Highway Building	1019 Brazos and 125 E 11 th Streets, Austin	Atlas # 2097001625 (NRHP), Marker #12247 (OTHM)	NHRP Listed (A and C), OTHM, CoA Landmark
Old Bakery (Lundberg)	1006 Congress Avenue, Austin	Atlas # 2069000214 (NRHP), Atlas #8200000621 (SAL), Marker #14949 (RTHL)	NRHP Listed (A), SAL, RTHL, CoA Landmark
Austin Daily Tribune Building	920 Colorado, Austin	Atlas # 2000001358	NRHP Listed (C)
Wooldridge Park (Square)	Guadalupe Street, Austin	Atlas #2079003018 (NRHP), Atlas #8200000638(SAL)	NRHP Listed (C), SAL, CoA Landmark
Fannie Moss Miller House	900 Rio Grande Street, Austin	Atlas #2008000318	NRHP Listed (C)
Boardman-Webb-Bugg House	602 West 9 th Street, Austin	Atlas #2080004152 Marker #14502 RTHL	NRHP Listed (B and C), RTHL, CoA Landmark
Fischer House	1008 West Avenue, Austin	Atlas # 2082001741 (NRHP), Marker #6452	NRHP Listed (C), RTHL, CoA Landmark

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		(RTHL)	
George W. Sampson House	1003 Rio Grande, Austin	Atlas # 2082004526	NRHP Listed (C), CoA Landmark
Old Land Office Building (General Land Office Building)	108 E 11 th Street, Austin	Atlas # 2070000769 (NRHP), Atlas #8200002912 (SAL)	NRHP Listed (A, B and C), SAL, CoA Landmark
Westgate Tower	1122 Colorado Street, Austin	Atlas # 2010000820 (NRHP), Marker #17182 (RTHL)	NRHP Listed (A and C), RTHL
Tucker Apartment House	1105 Nueces Street, Austin	Atlas #2100001379	NRHP Listed (No Criteria available on Atlas)
Central Christian Church	1110 Guadalupe Street, Austin	Atlas #2092000889 (NRHP), Marker #6417 (OTHM)	NRHP Listed (C), OTHM
Delta Kappa Gamma Society International Headquarters Building	416 West 12 th Street, Austin	Atlas #2012000198	NRHP Listed (A and C)
Daniel Caswell House	1404 West Avenue, Austin	Atlas #2075002004 (NRHP), Marker #6454 (RTHL)	NRHP Listed (B and C), RTHL, CoA Landmark
William T. Caswell House	1502 West Avenue, Austin	Atlas #2075002004	NRHP Listed (B and C)
Granger House and the Perch	805 West 16 th Street, Austin	Atlas #2006001083 (NRHP), Marker #16353 (RTHL)	NRHP Listed (C), RTHL, CoA Landmark
Cambridge Tower	1801 Lavaca Street, Austin	Atlas # 2100002603	NRHP Listed Historic District (Criteria not available on Atlas)
West Hill	1703 West Avenue	Atlas #2079003017 (NRHP), Marker #6458 (RTHL)	NRHP Listed (C), RTHL, CoA Landmark
Goodall Wooten House	700 West 19 th Street	Atlas # 2075002008 (NRHP), Marker #6455 (RTHL)	NRHP Listed (C), RTHL, CoA Landmark
University Church	2130 Guadalupe Street, Austin	Atlas #2098000955	NRHP Listed (C)
Battle Hall	South Mall, University of Texas Campus	Atlas #2070000763	NRHP Listed (C)
Neill-Cochran House	2310 San Gabriel Street, Austin	Atlas #2070000768 (NRHP) Marker #15134 (RTHL)	NRHP Listed (C), RTHL, CoA Landmark
Texas Federation of Women Clubs Headquarters	2312 San Gabriel Street, Austin	Atlas #2085003377 (NRHP), Marker #6460 (RTHL)	NRHP Listed (A and C), CoA Landmark
Scottish Rite Dormitory	210 West 27 th Street, Austin	Atlas # 2098000404 (NRHP), Marker #15644 (RTHL)	NRHP Listed (A and C), RTHL
Arthur N. and Jane Y. McCallum House	613 West 32 nd Street, Austin	Atlas #2096000936	NRHP Listed (B), CoA Landmark
W.T. and Clotilde V. Williams House	3820 Avenue F, Austin	Atlas #2090001182	NRHP Listed (C)
Page-Gilbert House	3913 Avenue , Austin	Atlas #2090001186	NRHP Listed (C), CoA Landmark
Hildreth-Flanagan – Heierman House	3909 Avenue G	Atlas #2090001184	NRHP Listed (C), CoA Landmark

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Peter Mansbendel and Clotilde Shipe House	3824 Avenue F, Austin	Atlas #2090001183 (NRHP), Atlas #5507017721 (RTHL)	NRHP Listed(C), RTHL
Reverend Henry and Jennie Sears House	209 West 39 th Street, Austin	Atlas #2090001174	NRHP Listed (C,) CoA Landmark
Smith-Marcuse-Lowry House	3913 Avenue C, Austin	Atlas #2090001180	NRHP Listed (C), CoA Landmark
State Hospital (Lunatic Asylum)	4110 Guadalupe Street, Austin	Atlas #2087002115 (NRHP), Atlas #8200000598 (SAL) Marker #15648 (RTHL)	NRHP Listed (A and C),SAL, RTHL
Commercial Building at 4113 Guadalupe Street	4113 Guadalupe Street, Austin	Atlas #2090001187	NRHP Listed (C)
Elisabet Ney Studio and Museum	304 East 44 th Street, Austin	Atlas #2072001374 (NRHP), Atlas #8200000624 (SAL), Marker #13828 (RTHL)	NRHP Listed (A and B), SAL, RTHL, CoA Landmark
Alice H. Robbins House	4311 Avenue A, Austin	Atlas #2090001235	NRHP Listed (C)
Bluebonnet Tourist Camp	4407 Guadalupe Street, Austin	Atlas #2090001188	NRHP Listed (C)
F.T. and Belle Ramsey House	4412 Avenue B, Austin	Atlas # 2090001176	NRHP Listed (B and C)
Gethsemane Lutheran Church	200 West Anderson Lane, Austin	Atlas #2011000983	NRHP Listed (C)
Bridge over Shoal Creek at West Sixth Street	West Sixth Street at Shoal Creek	Atlas # 2014000499	NRHP Listed (C)
William Sidney Porter House	409 East 5 th Street, Austin	Atlas #2073001979	NRHP (B and C), CoA Landmark
Brizendine House	507 West 11 th Street	Atlas# 2074002090 (NRHP), Atlas #8200000600 (SAL), Marker #6453 (RTHL)	NRHP Listed (C), SAL, RTHL, CoA Landmark
Paramount Theatre	713 Congress Avenue, Austin	Atlas #2076002072 (NRHP), Marker #14684 (RTHL)	NRHP Listed (A and C), RTHL, CoA Landmark
Austin Public Library	810 Guadalupe Street, Austin	Atlas #2093000389 (NRHP), Marker #6425 (RTHL)	NRHP Listed (C), RTHL CoA Landmark
Mather-Kirkland House	402 Academy, Austin	Atlas #2078002990 (NRHP),Marker #14493(RTHL)	NRHP Listed (A and C), RTHL CoA Landmark
Driskill Hotel	117 East 7 th Street, Austin	Atlas #2069000212 (NRHP), Marker #13930 (OTHM), Marker #13931 (RTHL)	NRHP Listed (C), OTHM, RTHL, CoA Landmark
Shadow Lawn Historic District	Roughly bounded by Avenue, 38 th Street, Duval Street, and 39 th Street, Austin	Atlas # 2090001192	NRHP Listed Historic District (C)
Hyde Park Historic District	Roughly bounded by Avenue A, 45 th Street, Duval Street, and 40 th Streets, Austin	Atlas #2090001191	NRHP Listed Historic District (C)
All Saints Chapel	209 West 29 th Street, Austin	Atlas #2015000543 (NRHP), Marker #15108 (OTHM)	NRHP Listed Historic District (No NRHP Criteria information available), OTHM, CoA Landmark
Congress Avenue Historic	Congress Ave from 1 st to 11 th	Atlas #2078002989	NRHP Listed Historic District

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District	Streets		(A and C)
Bremond Block Historic District	Roughly bounded by Guadalupe, San Antonio, 7 th and 8 th Streets, Austin	Atlas 2070000764	NRHP Listed Historic District (C)
Sixth Street Historic District	Roughly bounded by 5 th , 7 th Lavaca Streets and I-35	Atlas #2075002132	NRHP Listed Historic District (A and C)
St. Edwards' University Main Building and Holy Cross Dormitory	3001 South Congress Avenue, Austin	Atlas #2073001980	NRHP Listed Historic District (A and C)
Seaholm Power Plant	800 West Cesar Chavez, Austin	Atlas #2013000614 (NRHP), Marker #13974 (RTHL)	NRHP Listed Historic District (A and C), RTHL CoA Landmark
Gethsemane Lutheran Church and Luther Hall	105 West 16 th Street, Austin	Atlas #2004001398	NRHP Listed Historic District
Old West Austin	Roughly bounded by West 13 th , Lamar Boulevard, West 35 th and Mopac Expressway	Atlas #2003000937	NRHP Listed Historic District (A and C)
Rainey Street	70-97 Rainey Street, Austin	Atlas # 2085002302	NRHP Listed Historic District (C)
NRHP-Eligible Properties			
Wasson Road -Road Segment	-97.7719, 30.2077	CSJ 1200-05-010	NRHP Eligible
Flood Marker		No ID # available	NRHP Eligible (D)
Public Works	South of West Cesar Chavez Street near Seaholm Plant	Property #11	NRHP Eligible (C)
Public Works	South of West Cesar Chavez Street near Seaholm Plant	Property #12	NRHP Eligible (C)
Transportation (bridge over Lady Bird Lake)	30.265923 -97.753976	Property #10	NRHP Eligible (C)
MHMR State Cemetery	30.317333, -97.723514	Property #1	NRHP Eligible (A)
Mental Hospital/Dormitory	30.310562, -97.735691	Property #519	NRHP Eligible (A and C)
Commercial Building	30.310275,-97.738513	Property #540	NRHP Eligible (C)
Mental Hospital/ Dormitory 2	30.310034, -97.736260	Property #552	NRHP Eligible (C)
School	30.344322, -97.710102	Property #1	NRHP Eligible (A and C)
Markers			
Texas Confederate Woman's Home (Blind School Annex)	3710 Cedar Street, Austin	Atlas #8200000599 Marker #17561(OTHM)	SAL, OTHM, CoA Landmark
Onion Creek Lodge 220, A.F. and A.M.	North of William Cannon and West of I-35	Marker # 14905	RTHL, CoA Landmark
Robert S. Stanley House	1811 Newton, Austin	Marker #15037	RTHL, CoA Landmark
Walter Tips House	2336 South Congress, Austin	Marker #13775	RTHL, CoA Landmark
J. L. Buas Building	407 East 6 th Street, Austin	Marker #14635	RTHL
Paggi Carriage House	421 East 6 th Street, Austin	Marker #15638	RTHL
Hotel Provident and Heierman Building	115-117 East 5 th Street, Austin	Marker #14733	RTHL
Scarborough Building	101 East 6 th Street, Austin	Marker #12733	RTHL, CoA Landmark
O. Henry Hall	601 Colorado Street, Austin	Marker #15479	RTHL
Claudia Taylor Johnson Hall	210 W 6 th Street, Austin	Marker #14916	RTHL
West Bremond Cottage	607 Nueces Street, Austin	Marker 14858	RTHL
Emma's West Flats	511 West 7 th Street, Austin	Marker # 6451	RTHL
Joseph and Mary Robinson Martin House	600 West 7 th Street, Austin	Marker #12793	RTHL

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McNeal Home	706 Rio Grande Street, Austin	Marker #14448	RTHL
Eugene Bremond House	404 West 7 th Street, Austin	Marker #6434	RTHL, CoA Landmark
Mrs. Alfred Robinson, Sr. Home	404 West 7 th Street, Austin	Marker #4306	RTHL
Pierre Bremond Home	402 West 7 th Street, Austin	Marker #6433	RTHL, CoA Landmark
B. J. Smith Property	610 Guadalupe Street, Austin	Marker #6439	RTHL, CoA Landmark
John Bremond Jr, House	700 Guadalupe Street, Austin	Marker #6435	RTHL
Catherine Robinson House	705 San Antonio Street, Austin	Marker #6431	RTHL
Walter Bremond Home	711 San Antonio Street, Austin	Marker #6432	RTHL
Sampson Building	303 West 9 th Street, Austin	Marker #14087	RTHL
Littlefield Building	618-622 Congress Avenue, Austin	Marker #12734	RTHL, CoA Landmark
St. Charles House	601 North Congress Avenue, Austin	Marker #14909	RTHL
Goodman Building	12006 Congress Avenue, Austin	Marker #6438	RTHL
901 Rio Grande, Austin	1300 Colorado Street, Austin	Marker #12243	RTHL
Pease School Building	1106 Rio Grande Street, Austin	Marker #17181 (RTHL), Marker # 6413 (OTHM)	RTHL, OTHM
Edward Clark House Outbuilding	604 West 11 th Street, Austin	Marker #17293	RTHL
Platt-Simpson Building	310 East 6 th Street, Austin	Marker #14334	RTHL
Adams Ziller House	1306 Guadalupe Street, Austin	Marker #15867	RTHL, CoA Landmark
Christianson-Leberman Home	1306 Colorado Street, Austin	Marker #6437	RTHL, CoA Landmark
Mauthe-Myrick Mansion	408 West 14 th Street, Austin	Marker #6420	RTHL, CoA Landmark
Smith-Clark-Smith House	504 West 14 th Street, Austin	Marker #6419	RTHL
Herblin-Shoe House	712 West 16 th Street, Austin	Marker #6459	RTHL, CoA Landmark
Sparks House	1510 West Avenue, Austin	Marker #183701	RTHL
St. David's Rectory	1603 Pearl Street, Austin	Marker #16345	RTHL, CoA Landmark
McClendon-Price House	1606 Pearl Street, Austin	Marker #17513	RTHL, CoA Landmark
Jacob Larmour House	1711 Rio Grande, Austin	Marker #14246	RTHL, CoA Landmark
Hugh B. Hancock House	1717 West Avenue, Austin	Marker #6457	RTHL, CoA Landmark
J.W. and Cornelia Rice	1801 West Avenue, Austin	Marker #16289	RTHL, CoA Landmark
Scarborough House			
Denny-Holliday House	1803 West Avenue, Austin	Marker #14668	RTHL, CoA Landmark
Matsen House	1800 San Gabriel Street, Austin	Marker #16803	RTHL, CoA Landmark
Gerhard-Schoch House	2212 Nueces Street, Austin	Marker #15632	RTHL, CoA Landmark
Edmund and Emily Miller House	910 Poplar Street, Austin	Marker #12592	RTHL
Beriah Graham House	2605 Salado, Austin	Marker #13926	RTHL, CoA Landmark
Buen Retiro	300 West 27 th Street, Austin	Marker #15258	RTHL
Zeta Tau Alpha House	2711 Nueces Street, Austin	Marker #16954	RTHL, CoA Landmark
Brueggeman- Sandbo House	200 East 30 th Street, Austin	Marker #15080	RTHL
Penn and Nellie Wooldridge House	3124 Wheeler Street, Austin	Marker 14313	RTHL, CoA Landmark
Buddington-Benedict-Sheffield Compound	500-508 West 34 th Street, Austin	Marker #13232	RTHL, CoA Landmark
Wm and Valerie Mansbendel Williams House	3820 Avenue F, Austin	Marker #17589	RTHL, CoA Landmark

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Jacob Leser House	3506 West Avenue, Austin	Marker #14254	RTHL, CoA Landmark
Elvira Manor Davis House	4112 Avenue B, Austin	Marker #15042	RTHL, CoA Landmark
Philquist Wood House	4007 Avenue G, Austin	Marker #15196	RTHL, CoA Landmark
Kopperl House	4212 Avenue F, Austin	Marker #13941	RTHL, CoA Landmark
Wells-Larue House	4524 Avenue F, Austin	Marker #14592	RTHL, CoA Landmark
Walnut Creek Baptist Church	12200 North Lamar Boulevard, Austin	Marker #15435	RTHL
Hodnette House	4300 Avenue F, Austin	Marker #12242	RTHL, CoA Landmark
Saint Edward's University Main Building	3001 South Congress, Austin	Marker #14821	RTHL
Stephen F. Austin Hotel	701 North Congress Avenue, Austin	Marker #13141	RTHL, CoA Landmark
Whitley-Keltner House	200 East 32 nd Street, Austin	Marker #18690	RTHL, CoA Landmark
Hale Houston Home	706 Guadalupe Street, Austin	Marker #6436	RTHL, CoA Landmark
Austin Woman's Club	708 San Antonio Street, Austin	Marker #6430	RTHL
J.L. Buass Building	407 East 6 th Street, Austin	Marker #14635	RTHL, CoA Landmark
Openheimer-Montgomery Building	105-109 West 8 th Street, Austin	Marker #14111	RTHL, CoA Landmark
Moore-Flack House	901 Rio Grande Street, Austin	Marker #12243	RTHL, CoA Landmark
Walter Tips Company Building	710-712 Congress Avenue, Austin	Marker #13774	RTHL, CoA Landmark
Swedish Consulate and Swante Palm Library	816 Congress Avenue, Austin	Marker # 14680	OTHM
M. M. Long 's Livery Stable and Opera House	901 Congress Avenue, Austin	Marker #14469	OTHM
Fort Magruder, CSA	3900 S Congress Avenue, Austin	Marker #13159	OTHM
Moses Austin	1700 North Congress Avenue, Austin	Marker 16141	OTHM
Austin Presbyterian Theological Seminary Campus	100 East 27 th Street, Austin	Marker #12757	OTHM
Price Daniel	209 West 14 th Street, Austin	Marker 13094	OTHM
Site of Swedish Evangelical Free Church	1604 Colorado Street, Austin	Marker 15046	OTHM
Diocese of Austin	1600 North Congress Avenue, Austin	Marker 14420	OTHM
Governors James E. and Miriam Ferguson	Southwest corner of 11 th and Congress Avenue	Marker 14797	OTHM
Espinosa-Olivares-Aguirre Expedition, Site reached	No address available	Marker #14903/Atlas # 5507014903	OTHM
Texas School for the Deaf	1102 South Congress Avenue, Austin	Marker #13458	OTHM
The Austin Statesman	305 South Congress Avenue, Austin	Marker #14219	OTHM
Austin, C.S.A.	North Congress and West 1 st Street, Austin	Marker #12690	OTHM
Congress Avenue	Congress Avenue, Austin	Marker #14389	OTHM
O. Henry	409 East 5 th Street, Austin	Marker 14859	OTHM
Texas Newspapers C.S.A.	718 West 5 th Street, Austin	Marker 12687	OTHM
Original Site of Frist Methodist Church of Austin	Austin (northeast corner of Congress Avenue and 4 th Street), Austin	Marker #11783	OTHM

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Site of John Bremond and Company	115 East Sixth Street, Austin	Marker #13153	OTHM
Ira Hobart Evans	708 San Antonio Street, Austin	Marker #6429	OTHM
Texas and Civil War State Military Board	124 West 8 th Street Austin	Marker #12696	OTHM
Sixth Street	6 th and Brazos Streets, Austin	Marker #15449	OTHM
Central Presbyterian Church	200 8 th Street, Austin	Marker #13928	OTHM
Austin High School –John T. Allan Campus	901 Trinity Street, Austin	Marker #15360	OTHM, CoA Landmark
Governor Andrew Jackson Hamilton	Southwest Corner of 11 th and Congress, Austin	Marker # 15101	OTHM
African Americans in the Texas Revolution	Southwest Corner of 11 th Street and Congress Avenue, Austin	Marker # 13929	OTHM
Governor Elisha M. Pease	Southwest corner of 11 th and Congress Avenue, Austin	Marker #14643	OTHM
Henry Smith	Southwest Corner of 11 th and Congress, Austin	Marker #15055	OTHM
The Woman Suffrage Movement in Texas	Southwest Corner of 11 th and Congress, Austin	Marker # 15026	OTHM
Second Travis County Courthouse, Walton Building	Southeast Corner of 11 th and Congress, Austin	Marker # 15063	OTHM
Original Site of First Baptist Church of Austin	Northeast corner of West 10 th and Colorado Street, Austin	Marker #14191	OTHM
Zachary Taylor Fulmore	11 th and Guadalupe Streets, At Travis County Courthouse	Marker # 6427	OTHM
Travis County Courthouse, 11 th and Guadalupe Streets, Austin	Third Site for Travis County Government	Marker # 6426	OTHM
Austin High School, Rio Grande Campus	1212 Rio Grande Campus	Marker #6416	OTHM
Confederate Texas Legislatures	Northeast Texas State Capitol Grounds, Austin	Marker #12685	OTHM
The Archive War	1201 Brazos Street, Austin	Marker #14722	OTHM
Texas and Civil War Secession Convention	1201 Brazos Street, Austin	Marker #12693	OTHM
Site of Saint Martin's Evangelical Lutheran Church	Texas State Capitol grounds, Austin	Marker #15486	OTHM
Tyler Rose	Texas State Capitol Grounds, Austin	Marker #15263	OTHM
Site of Swedish Central Methodist Church	14 th and Colorado Streets, Austin	Marker #15330	OTHM
State Bar of Texas	1414 Colorado Street, Austin	Marker #6422	OTHM
Site of Haynie-Cook House	1122 Colorado Street, Austin	Marker #16346	OTHM
First United Methodist Church	1201 Lavaca Street, Austin	Marker #6418	OTHM
Site of Edward Mandell House Home	1704 West Avenue, Austin	Marker #6456	OTHM
Clara Driscoll	2312 San Gabriel Street, Austin	Marker #6461	OTHM

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DeWitt Clinton Baker Home Site	2620 Rio Grande, Austin	Marker #14392	OTHM
Rebecca Kilgore Stuart Red	100 East 27 th Street, Austin	Marker #15556	OTHM
Jane Yelvington McCallum	613 West 32 nd Street, Austin	Marker #15417	OTHM
Hyde Park	4301 Speedway, Austin	Marker #14424	OTHM
First Cumberland Presbyterian Church of Austin	6800 Woodrow Avenue, Austin	Marker 13106	OTHM
Fiskville	8830 North Lamar Boulevard, Austin	Marker #13095	OTHM
Boggy Creek Masonic Cemetery	7485 Circle Road, Austin	Marker #14186	OTHM
Meridian Highway	South Congress Avenue at St Edwards bus stop Austin	Atlas # 3023000847	NRHP-Eligible, Centennial Marker
NRHP Listed or Eligible Bridges			
Circle S Road at Boggy Creek Bridge	Circle S Road, 0.90 Miles south of Williams Cannon, Austin	Bridge ID #142270B03647001	NRHP-Eligible
East Monroe Street at Blunn Creek Bridge	East Monroe Street, 0.35 Miles east of Congress Avenue, Austin	Bridge ID #142270B01005001	NRHP-Eligible
West 5 th Street at Shoal Creek Bridge	West 5 th Street, 0.1 mile east of north Lamar Boulevard, Austin	Bridge ID # 142270B00015001	NRHP-Eligible
West 6 th Street at Shoal Creek Bridge	West 6 th Street, 0.1 mile northeast of North Lamar Boulevard, Austin	Bridge ID # 142270B00018085	NRHP-Eligible
San Jacinto Boulevard at Waller Creek Bridge	San Jacinto Blvd, 0.78 Mile south of east 30 th Street, Austin	Bridge ID# 142270B01320002	NRHP-Eligible
Speedway at West Waller Creek Bridge	Speedway, 0.9 mile North of MLK Boulevard, Austin	Bridge ID# 142270B01381002	NRHP-Eligible
Shoal Creek Boulevard at Shoal Creek Bridge	Shoal Creek Boulevard near Claire Avenue, Austin	Bridge ID # 142270B01356006	NRHP Listed
West 30 th Street at West Waller Creek Bridge	West 30 th Street, 0.20 mile East of Guadalupe Street, Austin	Bridge ID# 142270B00082001	NRHP-Eligible
West 29 th Street at Shoal Creek Bridge	West 29 th Street, West of Lamar Boulevard, Austin	Bridge ID# 142270B00004001	NRHP Listed
San Jacinto Boulevard at Waller Creek	Waller Creek at San Jacinto Boulevard	Bridge ID# 142270B01320001	NHRP-Eligible
Shoal Creek Boulevard at Shoal Creek	Shoal Creek Boulevard at Shoal Creek	Bridge ID# 142270B01356005	NRHP-Listed
CoA Landmarks			
James H. Robertson Building	416 Congress Avenue		CoA Landmark
Crow - Tenant House	805 Rio Grande Street		CoA Landmark
Campbell-Miller House	900 Rio Grande Street		CoA Landmark
Mitchell-Robertson Building	909 Congress Avenue		CoA Landmark
Phillips Building	105 East 5th Street		CoA Landmark
Padgett-Painter House	105 West 32nd Street		CoA Landmark
Eckhardt-Potts House	209 East 34th Street		CoA Landmark
Davis (Nelson)	107 West 4th Street		CoA Landmark

Name	Address	THC Atlas ID #	Designation (With Criteria)
Warehouse			
Jacoby - Pope Building	200 East 6th Street		CoA Landmark
Padgitt - Warmoth	208 East 6th Street		CoA Landmark
Wells (Willie) House	1705 Newton Street		CoA Landmark
McDonald - McGowan House	1802 Lavaca Street		CoA Landmark
Spurgeon Bell House (Bell-Falvey House)	106 West 32nd Street		CoA Landmark
Thornton House	1909 Nueces Street		CoA Landmark
Nichols - Gellman home	201 East 6th Street		CoA Landmark
Brueggmann House	200 e 30th Street		CoA Landmark
Hannig Building	206 East 6th Street		CoA Landmark
Parlin House	105 West 33rd Street		CoA Landmark
Larmour (Jacob) block (B)	908 Congress Avenue		CoA Landmark
Larmour (Jacob) block (H)	920 Congress Avenue		CoA Landmark
Bergen - Todd House	1403 South Congress Avenue		CoA Landmark
Pendexter (George) House	2806 Nueces Street		CoA Landmark
Steiner Building	807 Congress Avenue		CoA Landmark
Larmour (Jacob) Block (I)	922 Congress Avenue		CoA Landmark
Koppel Building	318 Congress Avenue		CoA Landmark
Webb - Simms- Aldridge House	108 West 32nd Street		CoA Landmark
Seekatz - Gardner House	1101 West 31st Street		CoA Landmark
Wooten Medical Offices	109 East 10th Street		CoA Landmark
Finch House	109 West 33rd Street		CoA Landmark
Seiders - Peterson House	1105 West 40th Street		CoA Landmark
St. Charles House	316 East 6th Street		CoA Landmark
Cotton Exchange	401 East 6th Street		CoA Landmark
Brogan House	3018 West Avenue		CoA Landmark
Johns - Hamilton Building	716 Congress Avenue		CoA Landmark
Bremond (Eugene) Building	801 Congress Avenue		CoA Landmark
Sauter - Alley House	4012 Avenue F		CoA Landmark
Chicago (Mcangus) House	607 Trinity Street		CoA Landmark
Grandberry Building	907 Congress Avenue		CoA Landmark
Townsend - Thomson Building	718 Congress Avenue		CoA Landmark
Larmour (Jacob) block (E)	914 Congress Avenue		CoA Landmark
Larmour (Jacob) block (G)	918 Congress Avenue		CoA Landmark
Allen - Von Boeckmann Building	811 Congress Avenue		CoA Landmark
Dickinson - Hannig House	411 East 5th Street		CoA Landmark
Brush - Turner - Hirshfeld Building	709 Congress Avenue		CoA Landmark
Moore - Williams House	1312 Newning Avenue		CoA Landmark
Robertson-trice House	110 West 33rd Street		CoA Landmark
Brunson House	200 The Circle		CoA Landmark
Suehs House	600 Bellevue Place		CoA Landmark
Ocie Speer House	108 West 33rd Street		CoA Landmark
Fruth House	3500 Speedway		CoA Landmark
Del curto-Nowotny House	102 Laurel Lane		CoA Landmark
Herbert and Alice Bohn	1301 West 29th Street		CoA Landmark
Harrell-Perkins House	113 West 33rd Street		CoA Landmark
Gissell Home	513 East Annie Street		CoA Landmark

Name	Address	THC Atlas ID #	Designation (With Criteria)
Cabaniss-Tate-Chunn House	612 West Monroe Street		CoA Landmark
Kocurek	511 East 41st Street		CoA Landmark
Adams House	4300 Avenue G		CoA Landmark
Clarkson-Crutchfield House	4001 Avenue G		CoA Landmark
Webb-Shaw Building	214 East 6th Street		CoA Landmark
McClendon-Kozmetsky	1001 West 17th Street		CoA Landmark
James - Mathews House	3001 Washington Square		CoA Landmark
Curl-Crockett House	213 West 4th Street		CoA Landmark
Schenken-Oatman House	311 W 41st Street		CoA Landmark
Quast Building	412 East 6th Street		CoA Landmark
Warner - Lucas House	303 Academy Drive		CoA Landmark
Metz Building	706 Congress Avenue		CoA Landmark
San Antonian	702 San Antonio Street		CoA Landmark
Bremond (Walter) House	711 San Antonio Street		CoA Landmark
Keeling (Walter) House	3120 Wheeler Street		CoA Landmark
Caswell (William T.) House	1502 West Avenue		CoA Landmark
Ross - Moore House	405 East Monroe Street		CoA Landmark
Brass - Milam House	1409 Newning Avenue		CoA Landmark
Badger (Walter) House	4112 Speedway		CoA Landmark
John and Lela Gay House	4108 Avenue D		CoA Landmark
Lowry (Mary) House	4001 Avenue C		CoA Landmark
Holland - Klipple House	4100 Avenue F		CoA Landmark
Woodburn House	4401 Avenue D		CoA Landmark
Webb - Shaw Building	212 East 6th Street		CoA Landmark
Clark - Emmert House	4300 Avenue D		CoA Landmark
Allen - Williams House	1206 San Antonio Street		CoA Landmark
Bailey - Newgren House	4108 Speedway		CoA Landmark
North Austin Sub-station	3701 Grooms Street		CoA Landmark
Thomas (Roy) House	1510 San Antonio Street		CoA Landmark
Kuehne - Moore House	2303 Rio Grande Street		CoA Landmark
Robinson (Catherine) House	705 San Antonio Street		CoA Landmark
North - Evans Chateau	708 San Antonio Street		CoA Landmark
Mclaughlin (J. W.) House	800 San Antonio Street		CoA Landmark
Hurt House	2210 San Gabriel Street		CoA Landmark
Miller - Crockett House	112 Academy Drive		CoA Landmark
Heierman Building	115 East 5th Street		CoA Landmark
Burt House	612 West 22nd Street		CoA Landmark
Schuwirth House (aka 423 East. 6th Street)	512 Neches Street		CoA Landmark
Pompee - Clarke - Cook House	506 West 22nd Street		CoA Landmark
Dabney - Horne House	507 West 23rd Street		CoA Landmark
Kirby Hall	306 West 29th Street		CoA Landmark
Hill - Searight House	410 East Monroe Street		CoA Landmark
Lewis - Thomas House	1508 Newning Avenue		CoA Landmark
Schneider Vaults	400 West 2nd Street		CoA Landmark
Manning-Udden-Bailey House	901 West 31st Street		CoA Landmark
Dr. Walter Bacon Black House	401 West 32nd Street		CoA Landmark
Miller -Roberdeau House	310 East 34 Street		CoA Landmark

Name	Address	THC Atlas ID #	Designation (With Criteria)
Mccaleb House	609 West 32nd Street		CoA Landmark
Eby-Potts House	609 West 33rd Street		CoA Landmark
Simms House	212 West 33rd Street		CoA Landmark
Steck House	305 East 34th Street		CoA Landmark
Ruggles - Smith House	1600 Rio Grande Street		CoA Landmark
White -Springfield House	2112 Rio Grande Street		CoA Landmark
Maverick - Miller House	910 Poplar Street		CoA Landmark
Hauke House	1409 Trinity Street		CoA Landmark
Heritage House	3112 West Avenue		CoA Landmark
Bremond (John) House	700 Guadalupe Street		CoA Landmark
Bosche Building	804 Congress Avenue		CoA Landmark
Woody House	709 Bouldin Avenue		CoA Landmark
Franzetti Store Building	2402 San Gabriel Street		CoA Landmark
Montgomery House	808 West Avenue		CoA Landmark
Howson House	700 San Antonio Street		CoA Landmark
Tips (Edward) Building	708 Congress Avenue		CoA Landmark
Republic Square - 400 block (West side)	400 Guadalupe Street		CoA Landmark
Swift Building	315 Congress Avenue		CoA Landmark
Scarborough Building	522 Avenue C		
Sampson - Henricks Building	620 Congress Avenue		CoA Landmark
Kreisle (Mathias) Building	400 East 6th Street		CoA Landmark
Weisiger - White House	4104 Avenue F		CoA Landmark
Bell House	4200 Avenue F		CoA Landmark
Monroe Building	300 East 6th Street		CoA Landmark
Dignan - Mickey House	1504 West Avenue		CoA Landmark
Zimmerli - Rosenquist House	4014 Avenue H		CoA Landmark
Ramsdell - Wolff House	4002 Avenue H		CoA Landmark
Bailey - Houston House	4110 Speedway		CoA Landmark
Rutherford House	2102 Nueces Street		CoA Landmark
Dozier - Beal House	1503 West Avenue		CoA Landmark
Badger (Robert T.) House	4006 Speedway		CoA Landmark
Mckean - Eilers Building	323 Congress Avenue		CoA Landmark
Risher - Nicholas Building	422 East 6th Street		CoA Landmark
Platt building	304 East 6th Street		CoA Landmark
Morgan House	2101 Nueces Street		CoA Landmark
Nagle-Harrington House	1615 Pearl Street		CoA Landmark
Brady House	1601 Pearl Street		CoA Landmark
Watson (A.O.) House	402 West 12th Street		CoA Landmark
Smith House	502 West 13th Street		CoA Landmark
Larmour (Jacob) Block (A)	906 Congress Avenue		CoA Landmark
Smith-Phillips Houses	502 West 14th Street		CoA Landmark
Bickler (Max) House	901 West 16th Street		CoA Landmark
Steussey - Skinner House (aka 1705 Nueces Street)	510 West 17th Street		CoA Landmark
West Hill carriage	707 West 18th Street		CoA Landmark
Kenney House	611 West 22nd Street		CoA Landmark
Larmour (Jacob) Block (C)	910 Congress Avenue		CoA Landmark
Larmour (Jacob) Block (D)	912 Congress Avenue		CoA Landmark
Larmour (Jacob) Block (F)	916 Congress Avenue		CoA Landmark
Bartholomew - Robinson Building	1415 Lavaca Street		CoA Landmark
Hill House	2104 Nueces Street		CoA Landmark

Name	Address	THC Atlas ID #	Designation (With Criteria)
Dos Banderos	410 East 6th Street		CoA Landmark
Continental Club	1315 South Congress Avenue		CoA Landmark
Kreisle Building	412 Congress Avenue		CoA Landmark
Hume-Rowe House	4002 Avenue C		CoA Landmark
Caruthers-Pierce-Richard House	500 East Monroe Street		CoA Landmark
Mcmillian-Falk House	4213 Avenue D		CoA Landmark
Potter-Pincoffs House	2607 Wooldridge Drive		CoA Landmark
Oscar and Floy Robinson House	1711 San Gabriel Street		CoA Landmark
T. N. and Edythe Porter House	3009 Washington Square		CoA Landmark
Byrne Reed House	1410 Rio Grande Street		CoA Landmark
North cottage	706 San Antonio Street		CoA Landmark
North Austin Fire Station	3002 Guadalupe Street		CoA Landmark
Wilkins - Heath House	1208 Newning Avenue		CoA Landmark
Dittlinger Building	302 East 6th Street		CoA Landmark
Driskill hotel - Day - Ford Building	604 Brazos Street		CoA Landmark
Meroney - Isaacs Building	404 East 6th Street		CoA Landmark
Hamilton Building	419 East 6th Street		CoA Landmark
John House (Louis and Flossie John House)	1924 Newning Avenue		CoA Landmark
Pearl House Bar	221 Congress Avenue		CoA Landmark
Smith (W.B.) Building	316 Congress Avenue		CoA Landmark
Morley Brothers Drug	209 East 6th Street		CoA Landmark
Stanley Homestead - Outbuilding	1809 Newton Street		CoA Landmark
Preston - Garcia House	1214 Newning Avenue		CoA Landmark
Austin Municipal Building (City Hall)	124 West eighth Street		CoA Landmark
Gullett House	1304 Newning Avenue		CoA Landmark
Mueller House	1308 West Avenue		CoA Landmark
Mayer - Howse House	810 West 10th Street		CoA Landmark
Hatzfeld House	604 West 11th Street		CoA Landmark
Pope - Watson House	1806 Rio Grande Street		CoA Landmark
Ginsburg Building	219 East 6th Street		CoA Landmark
Crawford (J.M.) Company. Building	1412 South Congress Avenue		CoA Landmark
Red - Purcell House	210 Academy Drive		CoA Landmark
Davis (W.H.) House	1203 Newning Avenue		CoA Landmark
Robinson - Rosner Building	504 Congress Avenue		CoA Landmark
Millican House	1610 West Avenue		CoA Landmark
Dumble - Boatright House	1419 Newning Avenue		CoA Landmark
Gerhardt - Street House	508 Bellevue Place		CoA Landmark
Adkins - Tharp House	506 Bellevue Place		CoA Landmark
Kleberg House	501 West 12th Street		CoA Landmark
Coon - Gilbert - Doggett House	1402 West Avenue		CoA Landmark
Day Building	319 Congress Avenue		CoA Landmark
Allan Jr. High School	1212 Rio Grande Street		CoA Landmark
Huron Mills House	2603 Wooldridge drive		CoA Landmark
Mueller - Danforth House	1400 West Avenue		CoA Landmark
Smith - Hage Building	325 East 6th Street		CoA Landmark
Mcdonald Building	607 San Jacinto Street		CoA Landmark

Name	Address	THC Atlas ID #	Designation (With Criteria)
Martin House	600 West 7th Street		CoA Landmark
Rambo Building	406 East 6th Street		CoA Landmark
Nalle (Joseph) Building	409 East 6th Street		CoA Landmark
Paggi Carriage Shop	421 East 6th Street		CoA Landmark
Brown Dumas Blacksmith Shop	104 West 2nd Street		CoA Landmark
Sayers House	709 Rio Grande Street		CoA Landmark

Source: THC 2019, TxDOT 2019b, 2019c, and CoA 2019f

APPENDIX E: ORANGE LINE CORRIDOR TRANSPORTATION NETWORK IMPACTS ANALYSIS TECHNICAL MEMORANDUM

Orange Line Transportation Network Impacts

Active Transportation Analysis



October 30, 2019



Active Transportation Assessment Overview

The Orange Line corridor active transportation assessment provides an analysis of the existing and proposed active transportation and supporting facilities as it relates to accessing Orange Line station areas. This analysis provides an overview of existing and planned facilities within travel sheds of proposed Orange Line station areas, identifies opportunities and constraints within each station area for pedestrian and bicycle access and identifies critical gaps in the active transportation network where future recommendations should be made to enhance station area connectivity.

This assessment was completed at the station area level. As such, the document is broken out by individual station areas for the purpose of analysis. Each station area was analyzed for the following:

- Planned document overview
- Existing and planned pedestrian facilities and gaps
- Pedestrian opportunities and constraints
- Existing and planned bicycle facilities and gaps
- Bicycle opportunities and constraints

For existing and planned facilities, specific metrics were developed and analyzed to illustrate the connectedness of each station area.

This assessment provides a summary of existing and planned facilities using available existing data sources for pedestrian and bicycle facilities. This document does not provide corridor or system-level recommendations, but will guide the project team in identifying specific facility recommendations for both connectivity to station areas and along the entire Orange Line Corridor after a final alignment is identified, dependent on discussions with the City of Austin on potential ROW availability and impact of the alignment on ROW.

Planning Document Overview

Plan Review

The Project Team reviewed documents related to planning active transportation facilities along the corridor. These documents provided insight into how the corridor as a whole and individual neighborhoods/subareas along the corridor see active transportation facilities supporting the transportation network.

Waller Creek District Master Plan (2010)

City of Austin

Waller Creek Plan provides better connections to the downtown area over and along Waller Creek, which traverses the eastern side of downtown. The plan calls for upgrades and additions to bike and pedestrian facilities making connections to jobs, the University of Texas, and surrounding areas from downtown. This will enhance connectivity from future Orange Line stations in the downtown area.

Urban Trails Master Plan (2014)

City of Austin

The Urban Trails Master Plan calls for an increase to the number of regional connections for people who walk and bike via off street, high comfort facilities. Future trail networks are categorized in Tier I and Tier II facilities. Tier I facilities prioritize connections to destinations such as transit and high employment areas. Major planned trails include:

- Red Line Corridor
- Walnut Creek Corridor
- Shoal Creek Trail
- E Ben White Blvd. Rail Corridor

Sidewalk Master Plan/ADA Transition Plan Update (2016)

City of Austin

The City of Austin's plan sets the goal of ensuring pedestrian safety and encourages walking as a viable and important mode of transportation and prioritizes the ability for people to walk to transit stops. The plan sets 10-year targets for existing and planned sidewalks with investment budgets per year. Many of the very high priority

new sidewalk facilities have been identified within ½-mile buffer of the Orange Line proposed stations.

South Central Waterfront Vision Framework Plan (2016)

City of Austin

The South Central Waterfront Vision Plan aims to direct investments along Lady Bird Lake by the City of Austin and its partners to ensure the built environment is pedestrian friendly. The plan calls for a transportation network in line with the City of Austin's Complete Streets policy, ensuring roadways serve all users. The plan area is recognized in the document as an already established transit hub, and with potential upgrades for MetroRapid.

Pedestrian Safety Action Plan (2018)

City of Austin

The City of Austin Pedestrian Safety Action Plan (APSAP) found that more than half of pedestrian fatalities occurred on streets with 45mph or more speed limits. Several similar roadways exist in the Orange Line service area. An action plan provides direct action items to improve the pedestrian environment, calling out specifically CMTA as a partner to improve pedestrian safety around transit stops. The plan also illustrates highest demand for pedestrian safety improvements within the Orange Line service area. Action item #20 specifically encourages the cooperation of the City of Austin and CMTA to support the Bus Stop Accessibility and Connectivity Improvements Program, along with sharing data to support necessary improvements.

North Lamar/Burnet Corridor Development Program (2013)

City of Austin

The purpose of this program is to develop recommendations to improve roadway safety, mobility and quality of life on Burnet road (Koenig Ln to MoPac) and North Lamar Blvd (US 183 to I-35). The program acknowledges many residents use of active transportation modes and

incorporates recommendations for all users. Recommendations related to pedestrian improvements for Burnet Rd include:

- Pedestrian Hybrid Beacon (PHB) crossings at 7 locations
- Moving 4 bus stops closer to PHB crossings

Recommendations for North Lamar Blvd related to pedestrian improvements include:

- Crossing with PHBs at 9 locations
- Moving 1 bus stop closer to PHB crossing

North Lamar/Guadalupe Connector Corridor (2018)

Capital Metro

Stretching from Tech Ridge to Downtown Austin, the North Lamar/Guadalupe corridor advanced into phase 2 along with 8 other Connector corridors. This document is an initial look at the corridor to determine corridor characteristic and potential options and opportunities to create a high capacity transit corridor.

South Congress Connector Corridor (2018)

Capital Metro

Reaching from Downtown Austin to Slaughter Lane on South Congress Avenue, the document explores corridor characteristics and provides options for high capacity transit along segments of the corridor. Lower and higher investment scenarios were considered, with higher investment scenarios having elevated sections at several major intersections. The document concludes with a comparison of investment options and station areas to gain a better understanding of how high capacity transit will benefit the corridor.

Austin Bicycle Plan (2014)

City of Austin

Austin Bicycle Plan was adopted by Austin City Council November 6th 2014. In a response to the

public input received during the planning process the City has identified routes to connect outlying areas to the central city. The bike facilities for all ages and abilities includes routes in all directions from the center of the city:

- Northwest: Shoal Creek / HW 183
- North: North Lamar
- Northeast: Berkman / Cameron, 290 Toll, Southern Walnut Creek and Austin to Manor Trail
- East: FM 969
- Southeast: Bergstrom Expressway / HW71, Pleasant Valley
- South: South Congress
- Southwest: South Mopac, Violet Crown, and YBC
- West: HW 360 and connections to core

The City of Austin identified a need to improve access to schools and encourage biking to school and physical activity for students. The plan recommends working with stakeholders from schools and the surrounding community to assess the feasibility of all ages and abilities facilities to provide students with safe access to schools. Changes would include new bicycle facilities, changes to existing on-street parking, and a wholistic look at all streets that connect to schools. The City of Austin's developed the following goals:

- Increase bicycle ridership
- Reduce bicycle deaths and injuries
- Create a bicycle network that provides connectivity for people of all ages and abilities
- Provide equitable bicycling access.

A complete list of bicycle facility recommendations is available in Appendix A of the City of Austin Bicycle Plan.

Little Walnut Creek Greenbelt Master Plan (2019)

Austin Parks and Recreation Department
The Little Walnut Creek Greenbelt Community Master Plan was prepared in 2019 for the Pecan Springs/Springdale Hills Neighborhood Association. The Plan identifies an opportunity for

improving access to the park, adding a two-way bike lane starting at the Springdale entrance near Hycreek Dr. through Little Walnut Creek Greenbelt and adding three bicycle parking locations in the park.

Draft Austin Street Design Guide (2017)

City of Austin

The Draft Austin Street Design Guide released in 2017 by the City of Austin. The design guide references mode specific plans including:

- 2014 Austin Bicycle Plan
- City of Austin Sidewalk Master Plan/ ADA Transition Plan Update
- Project Connect
- Connections 2025
- Urban Trails Master Plan
- ERC Regulating Plan
- Lamar-Justin Regulating Plan
- MLK Regulating Plan
- North Burnet-Gateway Regulating Plan
- Plaza-Salttillo Regulating Plan

The Plan identifies street elements including recommendations for incorporating Transit-Supportive Design Elements into street designs for different street levels. The Plan includes a Multimodal Design Table that identifies treatments based on roadway type, traffic volume, number of lanes, speed, transit frequency, pedestrian facilities, bike facilities, transit facilities, and parking facilities.

Downtown Austin Plan (2011)

City of Austin

The Downtown Austin Plan was adopted by the Austin City Council December 8th, 2011. The Plan identifies a Transportation Framework Plan for the Austin Downtown area. The Transportation Framework Plan identifies pedestrian priority streets/paths, automobile priority streets, bus priority streets, first phase urban rail priority streets, bicycle priority streets, off-street multi-use trails, CMTA Commuter Rail/Station, Lone Star Regional Rail, and multimodal priority on Congress Ave. The Plan identifies inadequate or missing pedestrian facilities. The DAP Bicycle Framework Plan includes:

- Bowie and Henderson Streets to connect
- Pfluger Bridge with the Shoal Creek Greenway. Including design and construction of the railroad undercrossing at Bowie and 3rd Streets
- Red River Street to connect the trail systems of Lady Bird Lake and Waller Creek with UT
- Colorado Street, once it is converted to two-way. In the meantime, “sharrows” (designated shared vehicular/bicycle lanes), are recommended on both Brazos and Colorado in their current one-way configuration.
- 11th Street to connect East Austin with the Capitol and Downtown.

In addition to implementing these recommended facilities for bike priority streets the Plan states it will introduce shared lane markings on streets where cyclists can safely share the lane with automobiles, create a more continuous system of off-street and multi-use trails, and increase bicycle parking in Downtown.

Austin Strategic Mobility Plan (2019)

The Austin Strategic Mobility Plan was adopted by Austin City Council April 2019. The Plan provides a Sidewalk System Policy includes:

- Policy 1: Complete the sidewalk system
- Policy 2: Make the sidewalk system accessible and comfortable for all
- Policy 3: Maintain the usability of the sidewalk system
- Policy 4: Ensure new development connects to the sidewalk system

The Plan provides a Sidewalk Prioritization Map for the City of Austin that ranks sidewalks from very high need to very low need. The City of Austin Complete Streets policies was consulted in the process of the sidewalk prioritization.

The Plan provides Bicycle System Policies including:

- Policy 1: Make streets safe for bicycling
- Policy 2: Complete the bicycle priority network
- Policy 3: Remove significant infrastructure gaps in the bicycle system

- Policy 4: Provide a comfortable bicycle system with end-of-trip facilities
- Policy 5: Work with partner agencies and other jurisdictions to develop a regional bicycle system
- Policy 6: Maintain the usability of the bicycle system

The Plan provides a Bicycle System Map for the City of Austin that identifies Urban Trails, Bicycle Facilities for All Ages and Abilities, and the Bicycle Priority Network.

The Plan provides Urban Trail System Policies including:

- Policy 1: Recognize the urban trail system as an integral part of the transportation network.
- Policy 2: Provide high-quality urban trails that can serve all users.
- Policy 3: Pursue opportunities to connect to and expand the urban trail system.

The Urban Trail Plan identified 47 miles of Tier I urban trails for transportation and recreation purposes, and they connect significant and dense populations of people. The Plan provides Emerging Mobility Solution Policies including:

- Policy 1: Evaluate emerging mobility solutions to meet community needs.
- Policy 2: Integrate emerging mobility solutions into existing transportation infrastructure systems.
- Policy 3: Invest in infrastructure that enables the adoption of emerging mobility technologies.

The Plan identifies Emerging Mobility Solutions as new modes of vehicular travel, like scooters, connected and automated vehicles, low speed electric vehicles, pedicabs and more. An example of integrating emerging mobility solutions into our existing transportation infrastructures is using our existing Bicycle Priority Network to accommodate electric scooters.

Downtown Great Streets Master Plan (2001)

City of Austin

The Downtown Great Streets Master Plan was prepared for City of Austin Transportation, Planning, and Sustainability Department in 2001. The Great Streets Program provides a Great Streets 2025 Year Plan Map defining primary street uses including:

- Pedestrian Dominant Street
- Mixed Mode Street
- Rapid Transit Street
- Bicycle & Local Access Street
- Commuter Street
- Commuter Boulevard
- Pedestrian Promenade (Bicycle compatible)
- Dedicated Bicycle Lane

The follow streets have been identified in the Plan:

- Second Street is Pedestrian Dominant Street.
- Fourth Street is a multimodal Rapid Transit Street
- Cesar Chavez is a Gateway Boulevard with Pedestrian Promenade

Imagine Austin Comprehensive Plan (2012)

City of Austin

The Imagine Austin Comprehensive Plan was adopted by Austin City Council June 2012 and Amended Annually, most recently in 2018. The Plan references the Bicycle Master Plan's recommendations for 900 miles of bicycle lanes (130 miles currently existing) and 350 miles of multi-use trails (50 miles currently existing). The Plan references the Sidewalk Master Plan's statements of approximately 3,500 linear miles of roads without sidewalks. The Sidewalk Master Plan found that about 10 percent of gaps in sidewalks were along arterials and 90 percent were along collectors or residential streets. The Plan references the Capital Area Metropolitan Plan Organization's 2035 Regional Transportation Plan which recommends \$3.6 billion in regionally funded roadway projects, \$2.9 billion in public transportation projects, and

\$444 million in bicycle and pedestrian projects. The MPO's Regional Transportation Plan notes that projects are prioritized based on funding availability.

2019 Mobility Annual Plan

City of Austin

The City of Austin 2019 Mobility Annual Plan noted that the 2016 Mobility Bond dedicated \$37.5 million of Local Mobility funding to implement 2016 Sidewalk Master Plan/ ADA Transition Plan with a focus on the very high or high priority sidewalk gaps. The Plan provides a list of 2019 Sidewalk Projects and 2020-2024 Potential Sidewalk Projects. The Plan provides a list of the 2019 Safe Routes to School Projects and the status of each project. The Plan noted that the 2016 Mobility Bond dedicated \$26 million for the design and construction of various Tier I Urban Trails. A list of the Urban Trail Projects is provided. The Plan noted that the 2016 Mobility Bond dedicated \$20 million of Local Mobility funding for bikeways for mobility purposes. The plan provides a list of priority projects for all ages and abilities. The Plan identifies Multimodal Coordination Projects that often leverage street resurfacing work.

Bike Facility Metrics:

Bike facility calculations were made based upon the Austin Strategic Mobility Plan's Bicycle Priority Network shapefile. Existing facility classifications listed below were used to find miles of existing bike facilities for each of the facility type metrics.

Bike Lanes

Bike lanes include those facilities classified as Bike Lane, Bike Lane Climbing, Bike Lane with Parking, Shoulder, and Wide Shoulders.

Shared Lanes

Share lanes include those facilities classified as Neighborhood Bikeway, Shared Lane, Sharrow, and Wide Curb Lane.

Protected Bikeway

Protect bikeways include those facilities classified as Bike Lane Protected 1, Bike Lane Protected 2, and Protected Bike Lane.

Buffered Bike Lanes

Buffered bike lanes include those facilities classified as Bike Lane Buffered

Undefined

No existing facility classification provided in shapefile.

Trails

The City of Austin 2014 Urban Trails Master Plan shapefile was used to calculate miles of urban trails. All existing facilities were used in the metrics analysis. All existing, Tier I or funded Tier II trails were included in the maps based up the Urban Trails Master Plan estimated timeline for completion and to provide context with the constraints and opportunities analysis.

Pedestrian Metrics:

Pedestrian metrics were calculated using the City of Austin Sidewalk data that includes sidewalks, sidewalk gaps, and driveway information. Block length was calculated using the street network. The trail data was developed using the City of Austin 2014 Urban Trails Master Plan. Signalized intersection and crossing metrics were developed using Austin Transportation Department data. Bike Share Kiosk data was provided by Austin BCycle.

Opportunities and Constraints

The opportunities and constraints analysis assessed current and future bicycle and pedestrian infrastructure as it relates to accessing the proposed station locations. The analysis identified major gaps or network deficiencies that are barriers to access and where opportunities exist to improve access to the station locations. In addition, key constraints that need to be mitigated were identified. This assessment provides the framework for station area mobility and access improvements related to shared mobility, walking, and wheeling. Two maps showing opportunities and constraints, one for bicycle and one for pedestrian facilities, were developed for each station. Each station location opportunity and constraint map refers to Table 1, Table 2, Table 3, and Table 4 where more detailed explanations of each of the identified opportunities and constraints exists. Each map includes the basic pedestrian and bicycle opportunity and constraint categories. Pedestrian station area access constraints or barriers are described in Table 1 and the opportunities are outlined in Table 2. Bicycle station area access constraints are listed in Table 3, and the opportunities are listed in Table 4.

Table 1: Station Area Pedestrian Constraints

Pedestrian Constraints		
Number	Category	Description
1	Long Block Lengths	Walkability
2	Low Density	Low density provides challenges for pedestrian access to transit station
3	Sidewalk Network Concerns	Sidewalk network contains missing segments, poor quality, or does not exist
4	Safety Concerns	Pedestrian environment contains high potential for conflict with motor vehicles such as sidewalk segments with many

Pedestrian Constraints		
		driveways, high speed roadways, or poor visibility
5	Built Environment Barrier	Access to transit station restricted by highway, freeway, or other pieces of built environment
6	Land Use Barrier	Designated land use restricts pedestrian access and prevents direct access to transit station

Table 2: Station Area Pedestrian Opportunities

Pedestrian Opportunities		
Number	Category	Description
1	High Employment Density	Transit station is in close proximity to dense commercial activity
2	High Residential Density	Transit station is in close proximity to dense residential housing
3	Multimodal Connections	Connections from transit station to multiple modes including walking, shared mobility devices, bike facilities, or other transit facilities
4	Access to Key Destinations	Transit station is in close proximity to key destinations
5	Access to Urban Trails	Transit station is in close proximity to urban trails

Table 3: Station Area Bicycle Constraints

Bicycle Constraints		
Number	Category	Description
1	Lack of High Comfort Facilities	Roadways approaching transit station lack All Ages and Abilities facilities to access transit station by bicycle
2	Lack of High Comfort Crossing	Roadway or intersection approaching transit station lacks All Ages and Abilities facilities
3	Limited Right-of-Way	ROW may not allow for widening for installation of bike facility
4	Built Environment Barrier	Access to transit station restricted by highway, freeway, or land use limiting bike access

Table 4: Station Area Bicycle Opportunities

Bicycle Opportunities		
Number	Category	Description
1	High Employment Density	Transit station is in close proximity to dense commercial activity
2	High Residential Density	Transit station is in close proximity to dense residential housing
3	Multimodal Connections	Connections from transit station to multiple modes including walking, shared mobility devices, bike facilities, or other transit facilities
4	Access to Key Destinations	Transit station is in close proximity to key destinations

Bicycle Opportunities		
5	Access to Urban Trails	Transit station is in close proximity to urban trails
6	Existing High Comfort Facility	Transit station is in close proximity to existing high comfort bike facility including protected, or buffered bike lanes
7	Potential Parallel Bike Facility	Potential Alternative route parallel to Orange Line Corridor

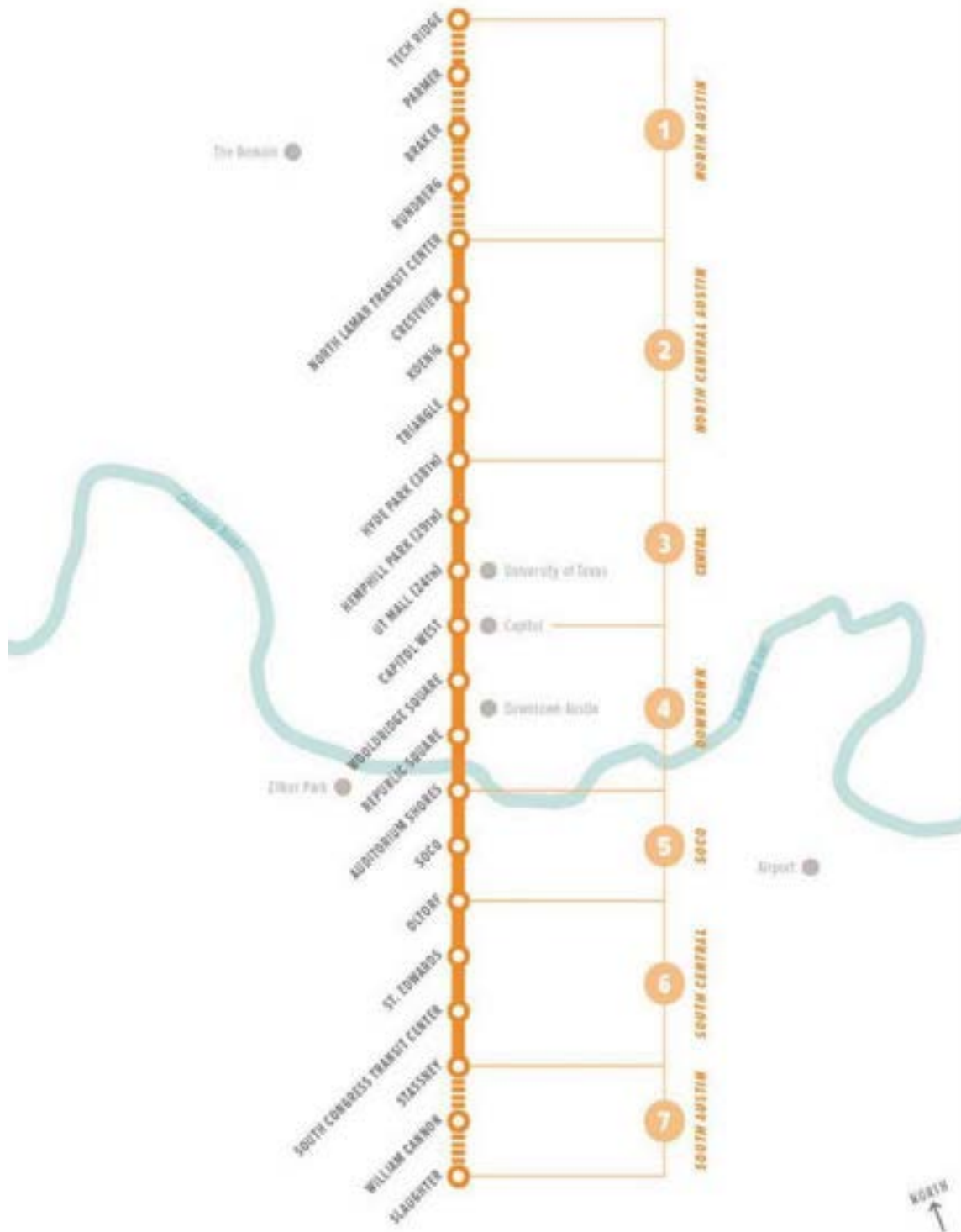
Station Areas

The Orange Line corridor is broken up into seven distinct segments. The following map outlines those segments and the station areas within those segments. This active transportation assessment provides a detailed analysis on the connectedness of each station area to the active transportation network and identifies specific areas of improvement for each station.

For each of the tables in this section related to pedestrian and bicycle facility metrics, please note that "--" indicates that no data was available to calculate that specific metric and that any value of "0" indicates the actual number of features or feet/miles, etc. illustrated in the data.

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Figure 1: Corridor Segmentation



Tech Ridge Station

The Tech Ridge Station is located at the northern terminus of the Orange Line. The station area is an existing CMTA Park and Ride facility east of I-35 that is centered in a suburban setting surrounding by office buildings and commercial/retail businesses. The station area is not well connected to the active transportation network and is mostly auto oriented.

Existing and Planned Pedestrian Facilities Assessment

The Tech Ridge station includes approximately 7.03 miles of existing sidewalks and gaps of about 1.42 miles. Those gaps only highlight public ROW as there are a significant number of both sidewalks and sidewalk gaps on private property. Overall, this location has limited pedestrian accessibility due to its suburban setting and placement.

Table 5: Tech Ridge Pedestrian Metrics

Characteristic	within 1/2 Mile of Station
Existing Sidewalks (Miles)	7.0
Good Condition	--
Fair Condition	--
Poor Condition	--
Sidewalk Gaps (Miles)	1.4
Average Block Length (Feet)	923
Sidewalk to Roadway Ratio (%)	0.65
Trails (Miles)	0
# of Pedestrian Signalized Intersections	3
# of Signalized Midblock Crossings	1
% ADA Crosswalks relative to # of Intersections	--
Shared Mobility Services	

# of Bike Shares Kiosks	0
# of Car Share Location	--
# of Parking Spaces	--
Multimodal Connectivity	
# of Key Destinations	0
# of Local Bus Stops within 1/2 Mile	13
# of HCT Stations within 1/2 Mile	0

Pedestrian Opportunities and Constraints

A number of opportunities and constraints exist for the Tech Ridge station. Constraints include long blocks with parking lots, lack of sidewalk facilities, lack of vegetation, large industrial buildings, and freeways. Opportunities include an existing park and ride facility, local connections to other routes, high quality sidewalks, and other major destinations. Table 1 and Table 2 reference pedestrian opportunities and constraints along with the legend under each map.

Figure 2: Tech Ridge Pedestrian Facilities

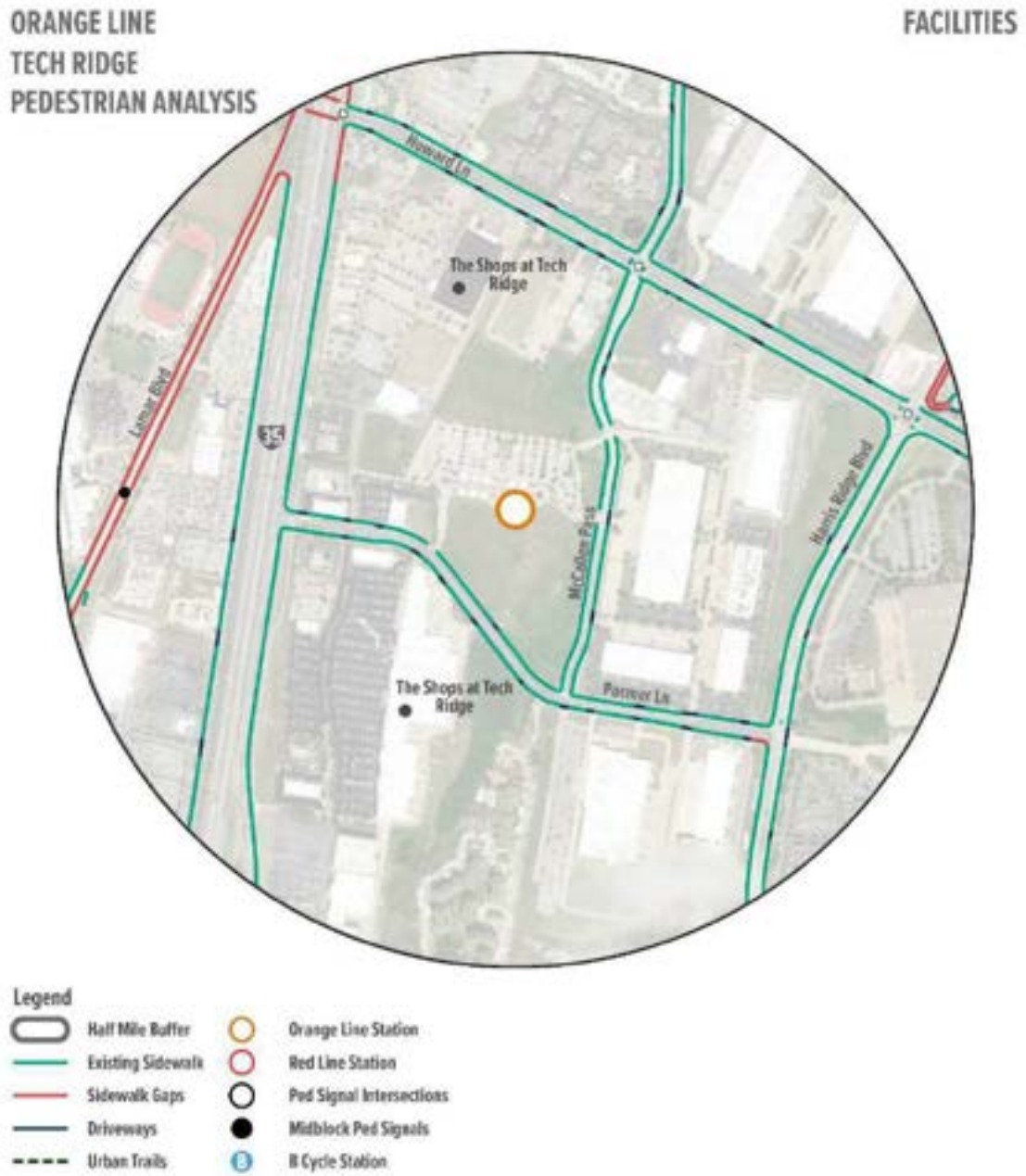
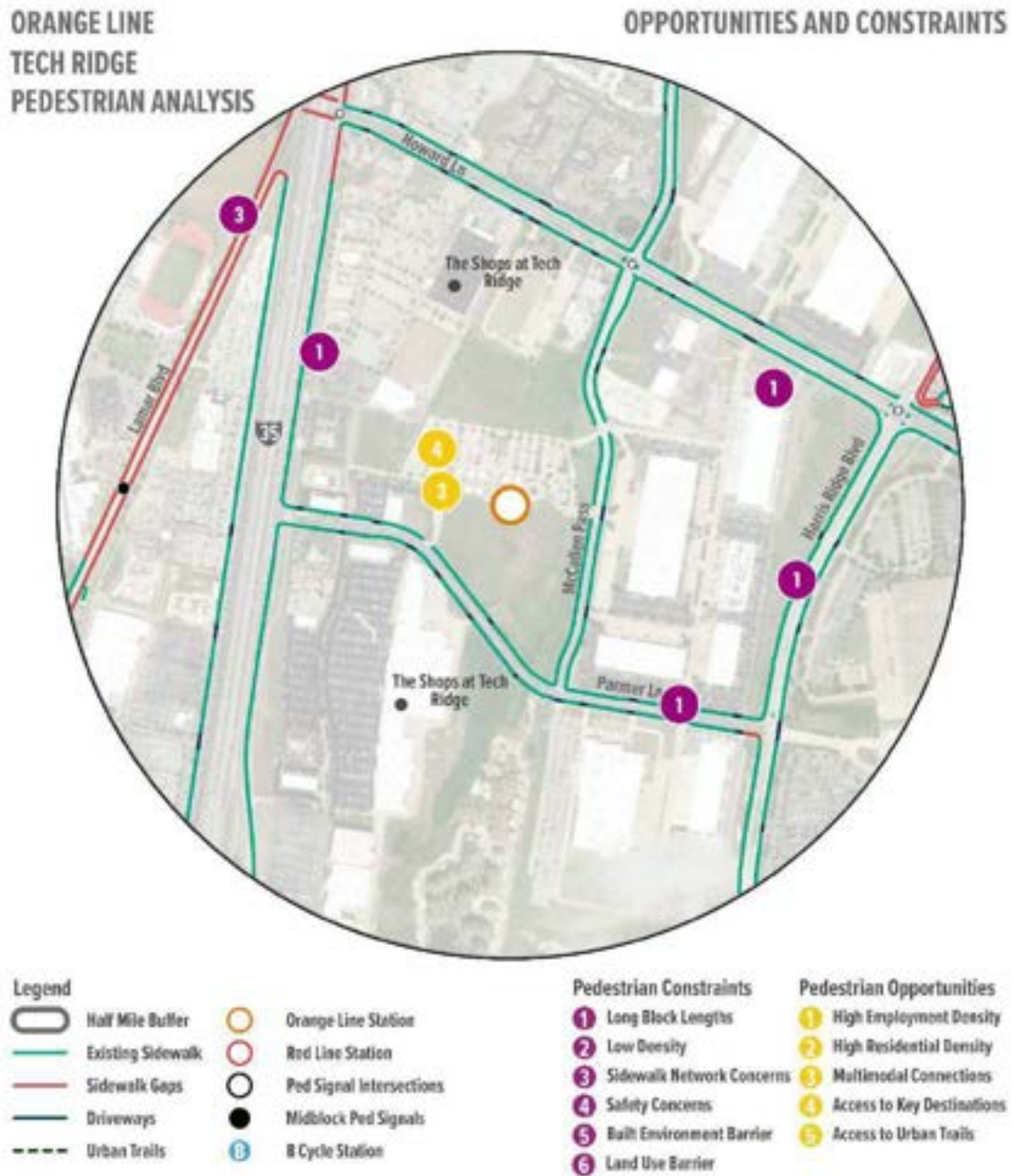


Figure 3: Tech Ridge Pedestrian Opportunities and Constraints



Existing and Planned Bicycle Facilities Assessment

There are approximately 41 miles of bicycle facilities within a 3-mile travel shed of the Tech Ridge Station, however, most of these facilities are low comfort/high stress for users, such as shared lanes along the I-35 frontage road. There are several specific gaps in the bicycle network that should be considered to improve connectivity to this Tech Ridge Station. The station is near to the Walnut Creek Trail, however, there are limited connections to the station area from the trail. Improving this connection could impact regional connectivity positively.

Table 6: Tech Ridge Bicycle Metrics

Bicycle Facilities	
Characteristic	within 3 Miles of Station
Existing Bicycle Facilities (Miles)	41.6
Bike Lanes	3.6
Shared Lanes	28.6
Protected Bikeway	0.0
Buffered Bike Lanes	5.9
Undefined	3.4
Planned Bicycle Facilities (Miles)	--
Bike Lanes	--
Shared Lanes	--
Protected Bikeway	--
Buffered Bike Lanes	--
Trails (Miles)	2.9
# of Bicycle Facility Gaps	2
Shared Mobility Services	
# of Bike Shares Kiosks	0
# of Car Share Location	--
# of Parking Spaces	--
Multimodal Connectivity	

# of Key Destinations	4
# of Local Bus Stops within 3 Miles	118
# of HCT Stations within 3 Miles	1

Bicycle Opportunities and Constraints

A number of opportunities and constraints exist for the Tech Ridge Station. Constraints include high speed roadways, no specific connections to station area, and a non-grid network for bicycling activity. Opportunities to improve bicycling in the area include improving access to a high density of jobs via high comfort bicycle facilities, connecting to residential areas to the north of Tech Ridge, and connections to shopping centers. Table 3 and Table 4 reference bicycle opportunities and constraints along with the legend under each map.

Figure 4: Tech Ridge Bicycle Facilities

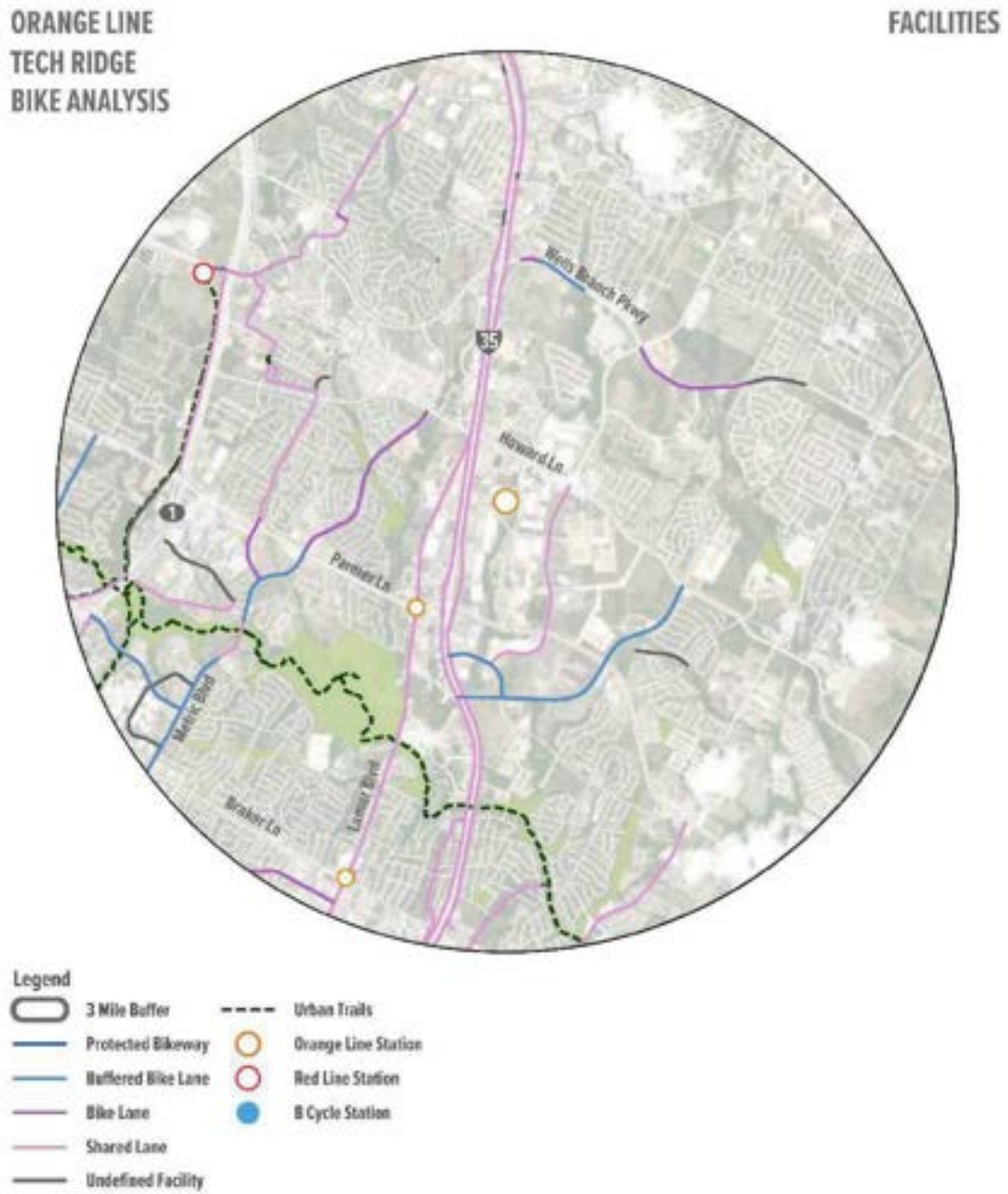
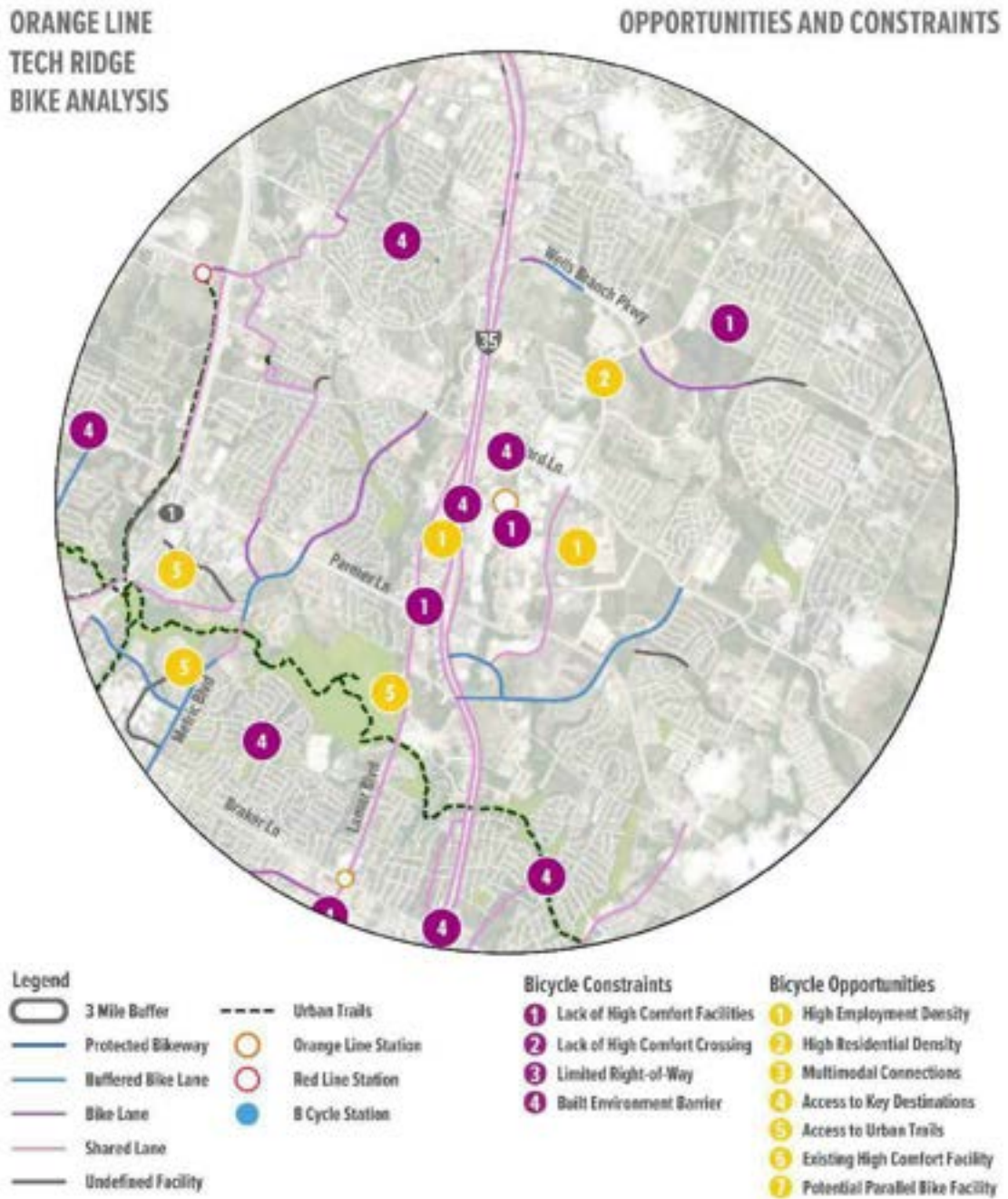


Figure 5: Tech Ridge Bicycle Opportunities and Constraints



Parmer Station

The Parmer Station is located at the intersection of N. Lamar Blvd. and Parmer Ln. The station area is surrounded by a mixture of land uses but is mostly commercial oriented. The station area does contain some existing bicycle and pedestrian infrastructure, however, there are significant gaps that impact station area connectivity and safety.

Existing and Planned Pedestrian Facilities Assessment

The Parmer Station area includes 5.61 miles of sidewalks, however, there are 7.60 miles of sidewalk gaps that significantly impact the connectivity of the station area. While Parmer Lane is generally lined with sidewalks, Lamar Blvd has a number of gaps in the network that would impact direct access to the station area.

Table 7: Parmer Pedestrian Metrics

Characteristic	within ½ Mile of Station
Existing Sidewalks (Miles)	5.6
Good Condition	--
Fair Condition	--
Poor Condition	--
Sidewalk Gaps (Miles)	7.6
Average Block Length (Feet)	858
Sidewalk to Roadway Ratio (%)	0.43
Trails (Miles)	0
# of Pedestrian Signalized Intersections	5
# of Signalized Midblock Crossings	0
% ADA Crosswalks relative to # of Intersections	--
Shared Mobility Services	
# of Bike Shares Kiosks	0

# of Car Share Location	--
# of Parking Spaces	--
Multimodal Connectivity	
# of Key Destinations	0
# of Local Bus Stops within ½ Mile	4
# of HCT Stations within ½ Mile	0

Pedestrian Opportunities and Constraints

A number of opportunities and constraints exist for the Parmer Station. Constraints include long blocks, sidewalk gaps, and freeways (I-35). Opportunities include easy/streamlined local transit and/or HCT connections (routes 801, 325, 1, 243, 392, 135, 935); major destinations such as the Fairfield Inn, Boy Scouts of America, and Residence Inn; connections to the Walnut Creek Trail; and surrounding medium density town home development. Table 1 and Table 2 reference pedestrian opportunities and constraints along with the legend under each map.

Figure 6: Parmer Pedestrian Facilities

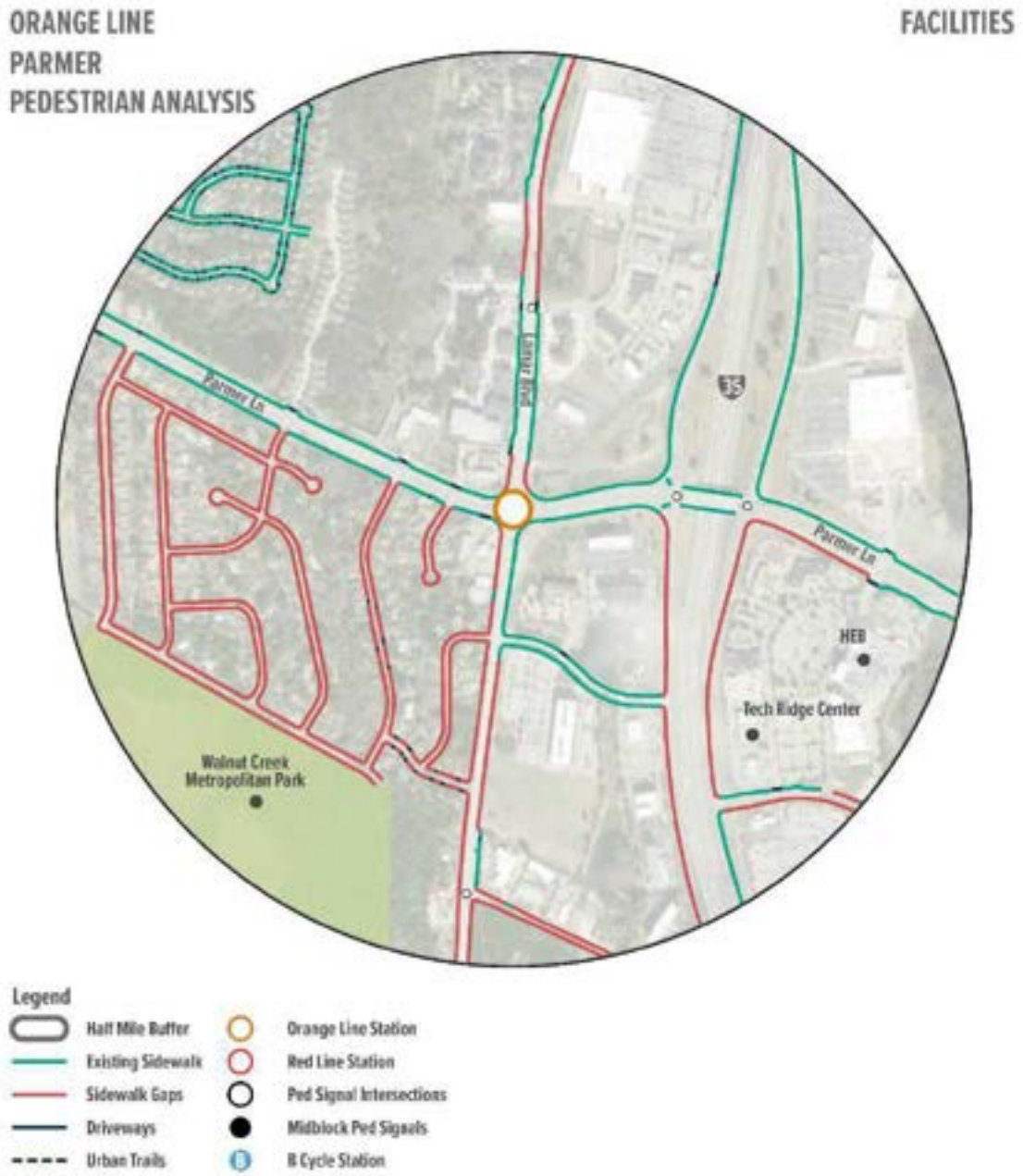
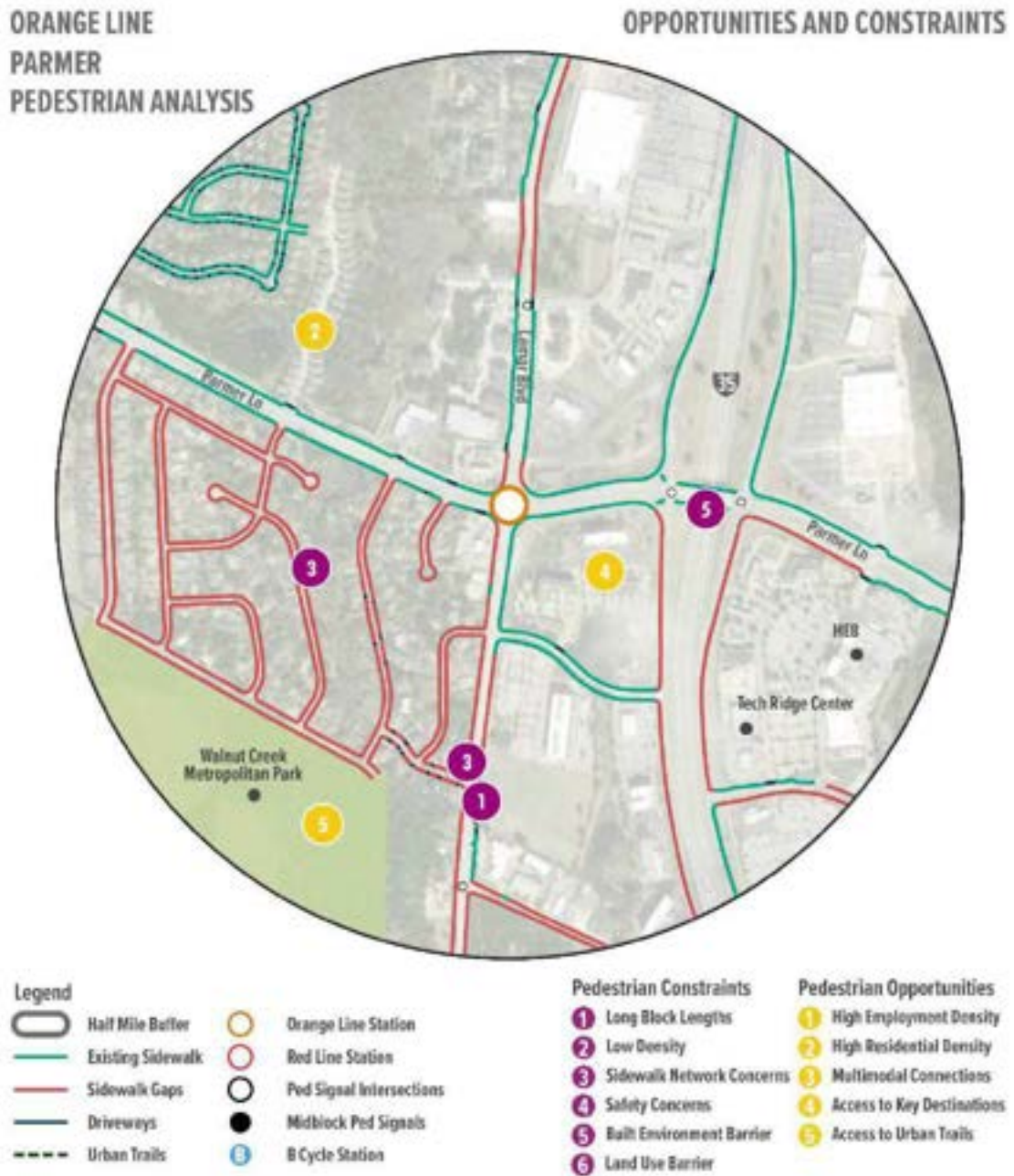


Figure 7: Parmer Pedestrian Opportunities and Constraints



Existing and Planned Bicycle Facilities Assessment

The Parmer Station area includes 54 miles of bicycle facilities, however, most of those are low comfort/high stress facilities, such as shared lanes on the I-35 frontage roads and shared lanes along Lamar Blvd. The Walnut Creek Trail provides a regional connection to the station. Several gaps exist on Metric Blvd where facility comfort levels shift from high to low. Parmer Ln itself lacks facilities to connect to facilities to the west and east of the station area.

Table 8: Parmer Bicycle Metrics

Bicycle Facilities	
Characteristic	within 3 Miles of Station
Existing Bicycle Facilities (Miles)	54.4
Bike Lanes	5.5
Shared Lanes	36.5
Protected Bikeway	0.0
Buffered Bike Lanes	6.4
Undefined	6.0
Planned Bicycle Facilities (Miles)	--
Bike Lanes	--
Shared Lanes	--
Protected Bikeway	--
Buffered Bike Lanes	--
Trails (Miles)	3.7
# of Bicycle Facility Gaps	4
Shared Mobility Services	
# of Bike Shares Kiosks	0
# of Car Share Location	--
# of Parking Spaces	--
Multimodal Connectivity	
# of Key Destinations	13

# of Local Bus Stops within 3 Miles	161
# of HCT Stations within 3 Miles	2

Bicycle Opportunities and Constraints

A number of opportunities and constraints exist for the Parmer Station. Constraints include connectivity issues, no bicycle facilities leading to the station, and accessibility barriers. The intersection at Lamar and Parmer is high speed and may not support access to the station for all ages and abilities. Opportunities include high density, high employment density, and connections to transit. Table 3 and Table 4 reference bicycle opportunities and constraints along with the legend under each map.

Figure 8: Parmer Bicycle Facilities

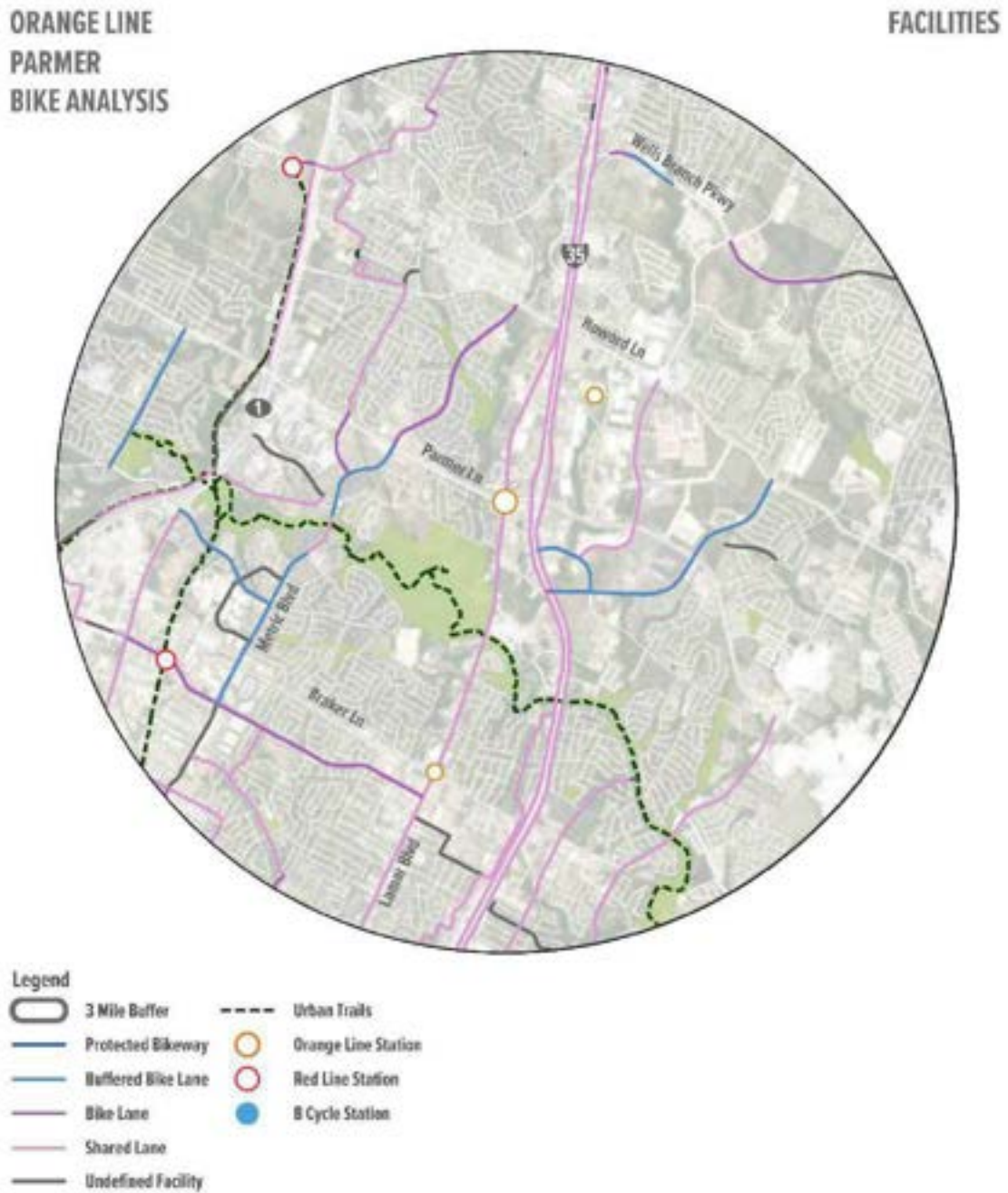
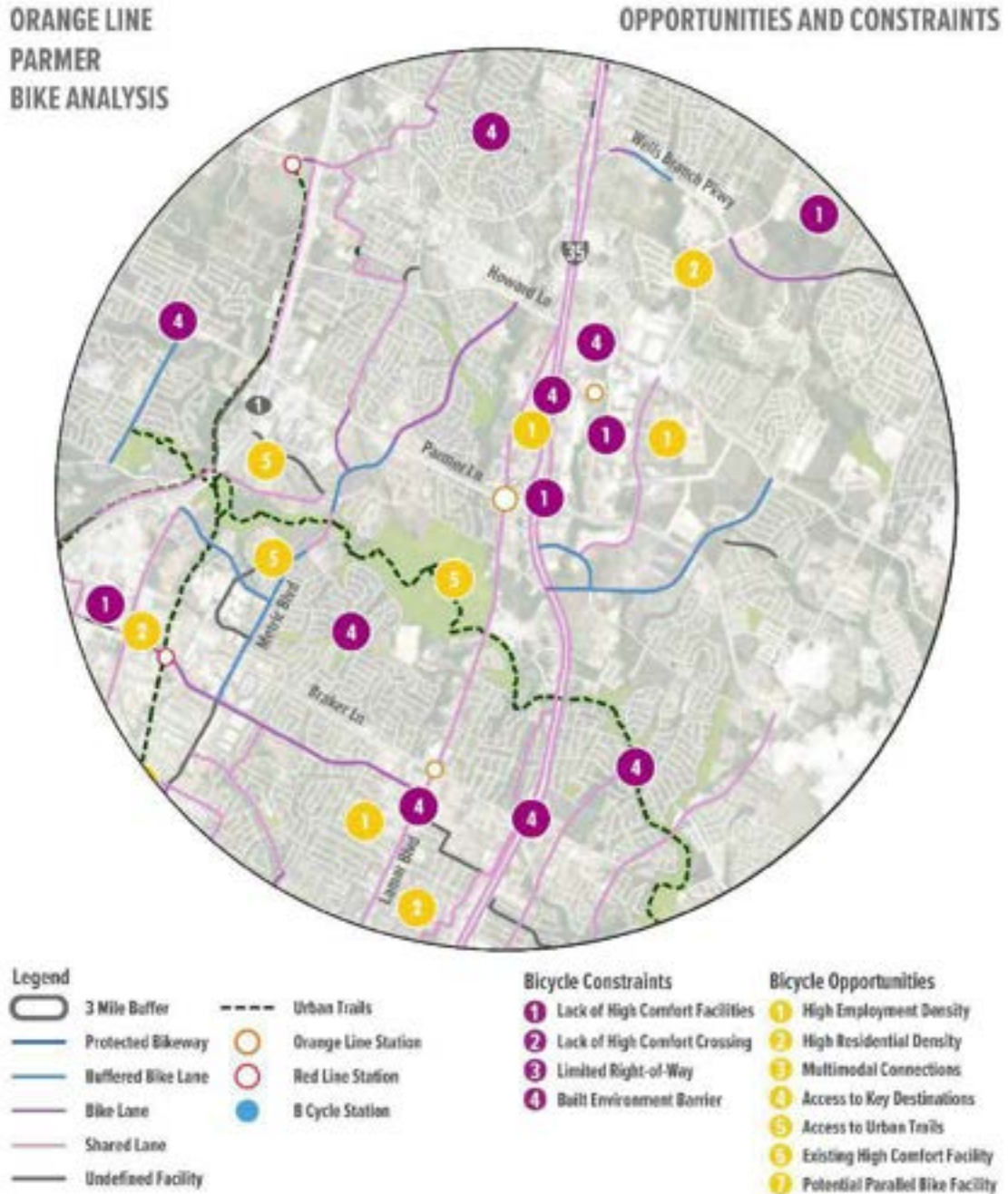


Figure 9: Parmer Bicycle Opportunities and Constraints



Braker Station

The Braker Station is located at the intersection of Braker Ln. and N. Lamar Blvd. The station area includes a mixture of land uses directly adjacent to Lamar; however, the area is largely single-family residential within the different travel sheds for active transportation. There are a significant number of driveways along Lamar that impact pedestrian safety and connectivity as well as significant gaps in the bicycle network nearby.

Existing and Planned Pedestrian Facilities Assessment

The Braker Station area includes 5.24 miles of sidewalks, however, there are 15.57 miles of sidewalk gaps, mostly in the residential areas surrounding the station. Both Braker Ln and Lamar Blvd have sidewalks in this area, however, there are some significant stretches along Lamar Blvd with sidewalk gaps.

Table 9: Braker Pedestrian Metrics

Characteristic	within 1/2 Mile of Station
Existing Sidewalks (Miles)	5.2
Good Condition	--
Fair Condition	--
Poor Condition	--
Sidewalk Gaps (Miles)	15.5
Average Block Length (Feet)	455
Sidewalk to Roadway Ratio (%)	0.40
Trails (Miles)	0
# of Pedestrian Signalized Intersections	4
# of Signalized Midblock Crossings	0
% ADA Crosswalks relative to # of Intersections	--

Shared Mobility Services	
# of Bike Shares Kiosks	0
# of Car Share Location	--
# of Parking Spaces	--
Multimodal Connectivity	
# of Key Destinations	0
# of Local Bus Stops within 1/2 Mile	16
# of HCT Stations within 1/2 Mile	0

Pedestrian Opportunities and Constraints

A number of opportunities and constraints exist for the Braker station. Constraints include sidewalk inconsistencies and access management/driveway issues. Opportunities include easy/streamlined local transit and/or HCT connections (routes 801, 1, 391); major destinations such as grocery stores, Chinatown Center, and McBee Elementary School; and development potential. Table 1 and Table 2 reference pedestrian opportunities and constraints along with the legend under each map.

Figure 10: Braker Pedestrian Facilities

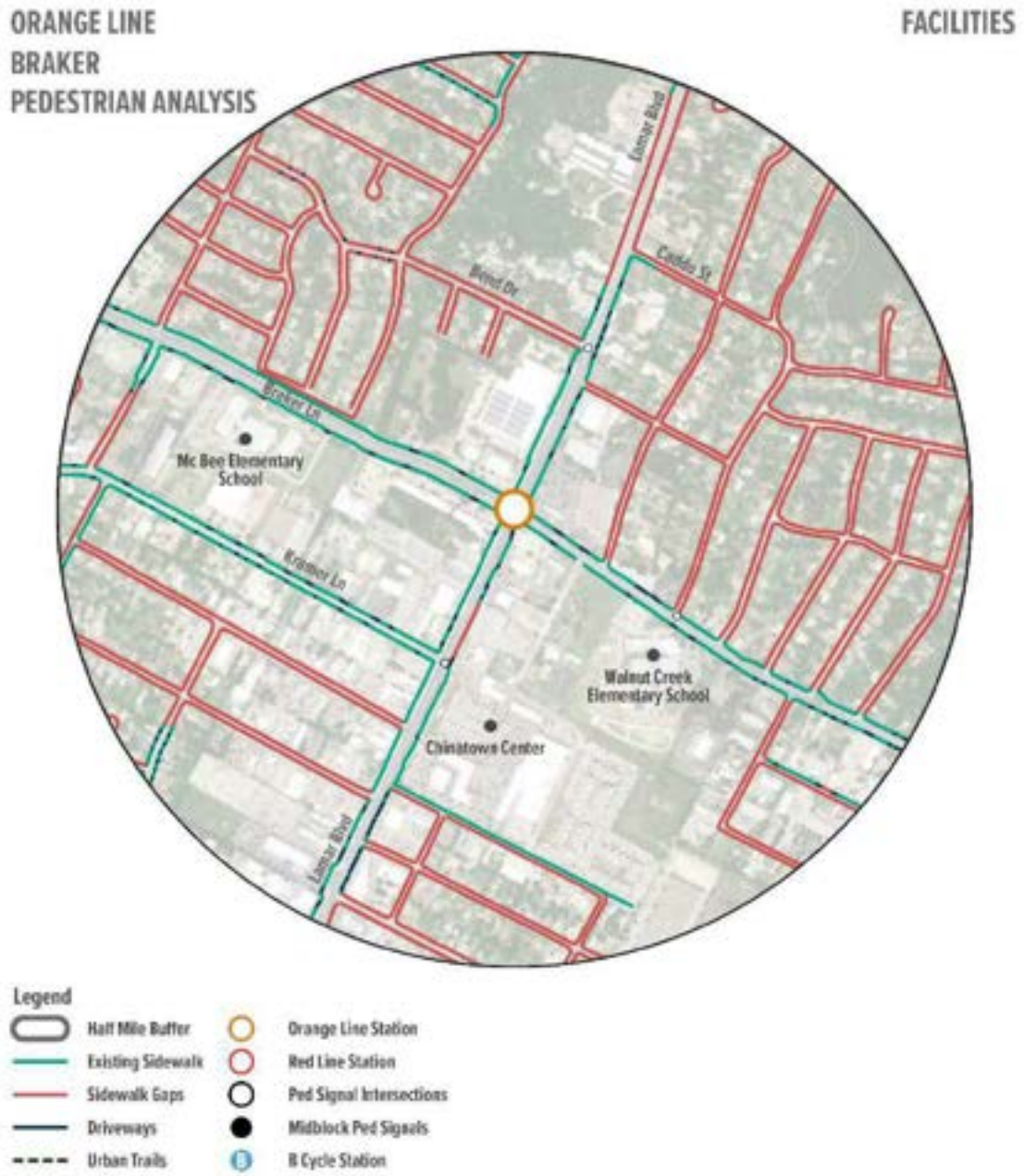
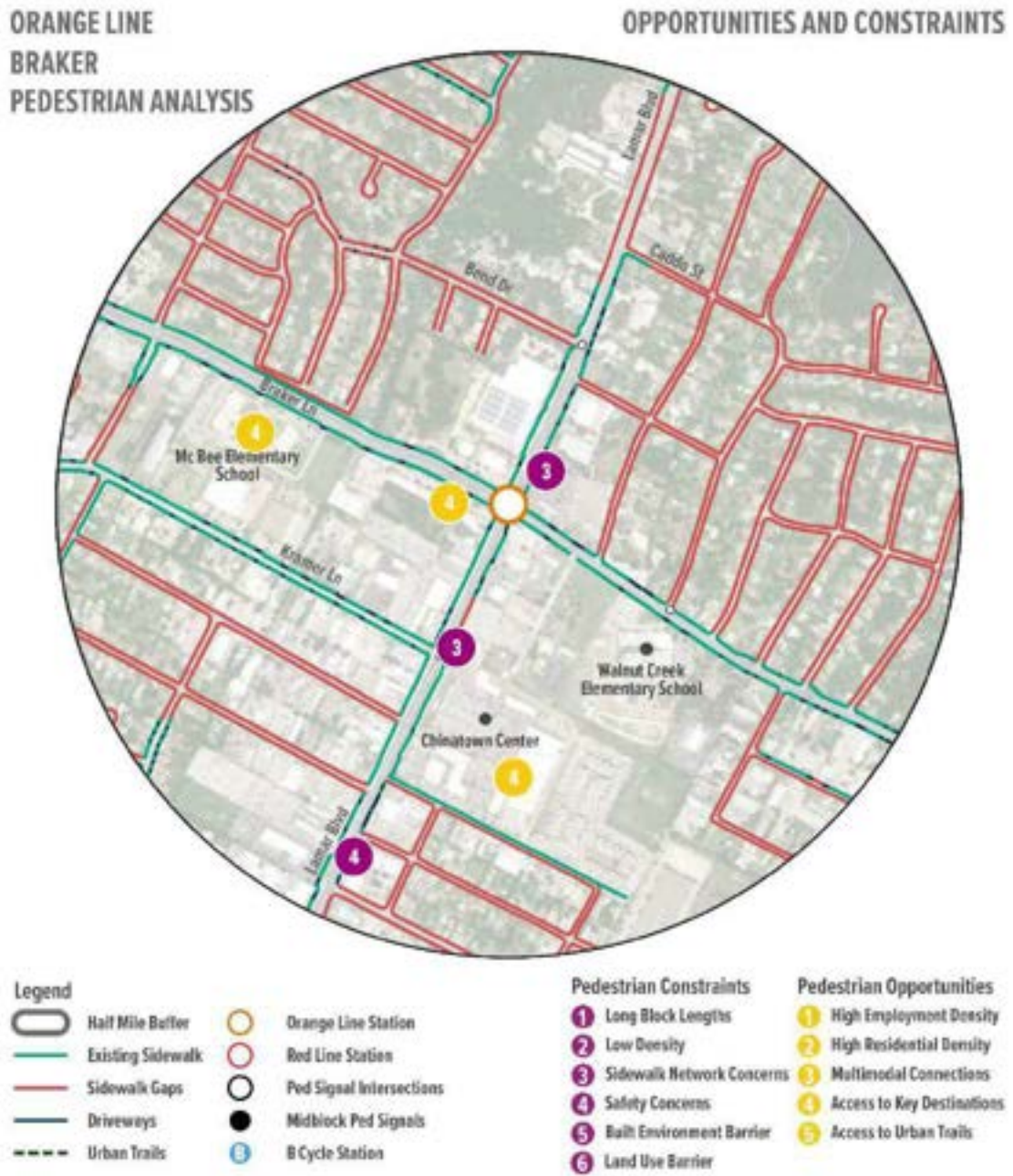


Figure 11: Braker Pedestrian Opportunities and Constraints



Existing and Planned Bicycle Facilities Assessment

The Braker station area includes 73.5 miles of bicycle facilities, however, most of those facilities are shared lanes on low comfort roadways, such as the I-35 frontage roads and Lamar Blvd. Major connectivity to the west of the station is likely to occur on the bike lane on Kramer Ln, however, the shared lane along Lamar Blvd significantly impacts direct access to the station area. Walnut Creek Trail is located to the north and can provide improved regional access. To travel south, the bike lane on Kramer Ln provides access to the Shoal Creek Trail.

Table 10: Braker Bicycle Metrics

Bicycle Facilities	
Characteristic	within 3 Miles of Station
Existing Bicycle Facilities (Miles)	73.5
Bike Lanes	11.7
Shared Lanes	43.5
Protected Bikeway	1.2
Buffered Bike Lanes	5.8
Undefined	11.3
Planned Bicycle Facilities (Miles)	--
Bike Lanes	--
Shared Lanes	--
Protected Bikeway	--
Buffered Bike Lanes	--
Trails (Miles)	4.7
# of Bicycle Facility Gaps	4
Shared Mobility Services	
# of Bike Shares Kiosks	0
# of Car Share Location	--
# of Parking Spaces	--
Multimodal Connectivity	

# of Key Destinations	22
# of Local Bus Stops within 3 Miles	260
# of HCT Stations within 3 Miles	1

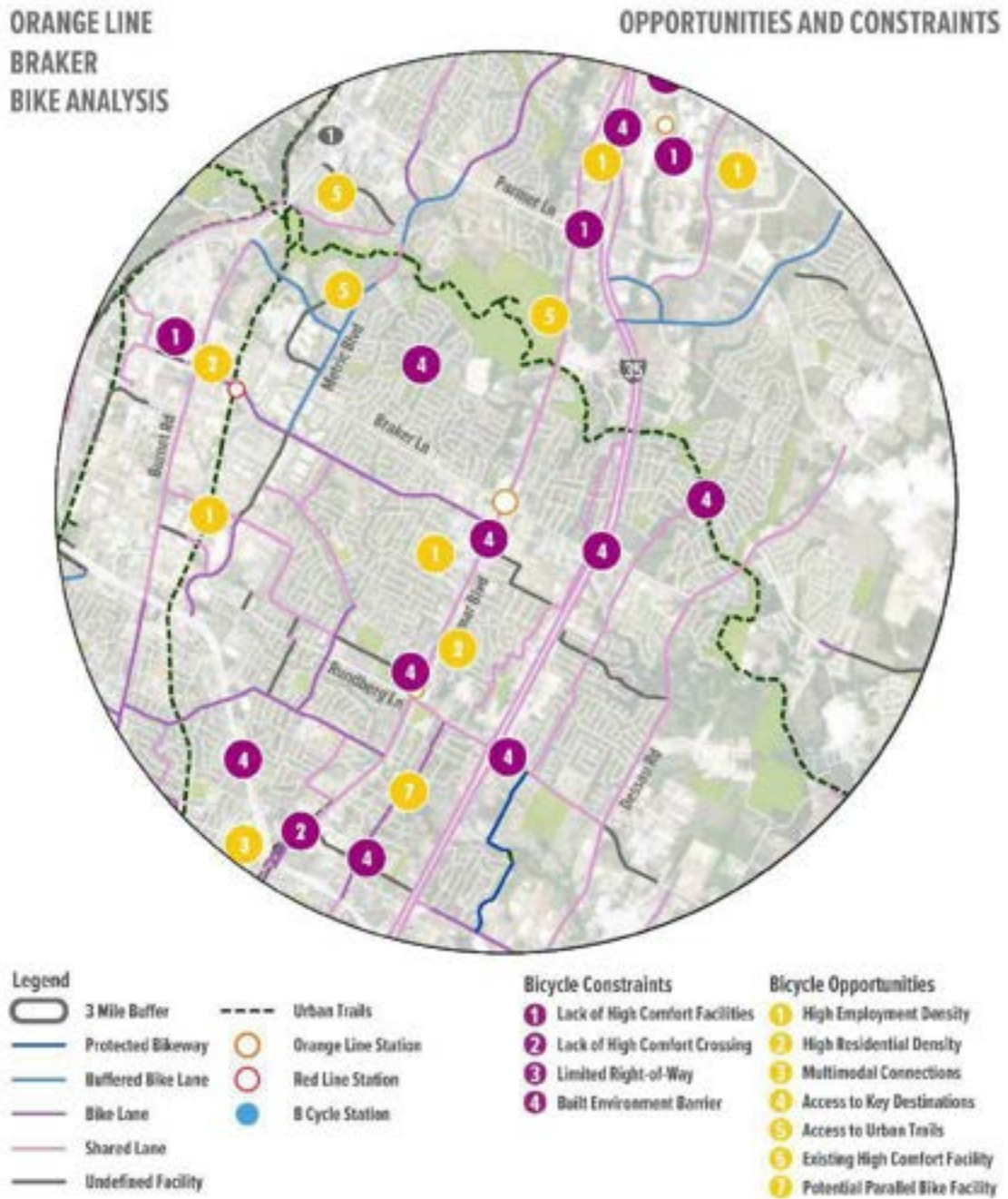
Bicycle Opportunities and Constraints

A number of opportunities and constraints exist for the Braker station. Constraints include low comfort crossing facilities, built environment accessibility barriers. Opportunities include areas of medium density, connections to transit, access to key destinations. Table 3 and Table 4 reference bicycle opportunities and constraints along with the legend under each map.

Figure 12: Braker Bicycle Facilities



Figure 13: Braker Bicycle Opportunities and Constraints



Rundberg Station

The Rundberg Station is located between Rutland Dr. and Rundberg Ln. along N. Lamar Blvd. The station area is centered around high activity generators, such as commercial shopping centers, grocery stores, and schools. There are a number of existing pedestrian and bicycle facility gaps in this area, which, when paired with high traffic volumes and speeds can result in difficult travel for those using an active mode.

Existing and Planned Pedestrian Facilities Assessment

The Rundberg Station area includes 11.8 miles of sidewalks and 7.52 miles of sidewalk gaps. Gaps are particularly significant at key points of Lamar Blvd that would tie directly into the station location. Many of the existing gaps are located in residential neighborhoods surrounding the station location. Major roadways, apart from Lamar Blvd have adequate sidewalks and provide access to a number of key destinations.

Table 11: Rundberg Pedestrian Metrics

Characteristic	within 1/2 Mile of Station
Existing Sidewalks (Miles)	11.8
Good Condition	--
Fair Condition	--
Poor Condition	--
Sidewalk Gaps (Miles)	7.5
Average Block Length (Feet)	398
Sidewalk to Roadway Ratio (%)	0.99
Trails (Miles)	0
# of Pedestrian Signalized Intersections	8
# of Signalized Midblock Crossings	1
% ADA Crosswalks relative to # of Intersections	--

Shared Mobility Services	
# of Bike Shares Kiosks	0
# of Car Share Location	--
# of Parking Spaces	--
Multimodal Connectivity	
# of Key Destinations	0
# of Local Bus Stops within 1/2 Mile	26
# of HCT Stations within 1/2 Mile	0

Pedestrian Opportunities and Constraints

A number of opportunities and constraints exist for the Rundberg Station. Constraints include access management/driveway issues and sidewalk inconsistencies. Opportunities include streamlined local transit and/or HCT (routes 801, 325, 324, and 142); major destinations such as HEB, Barrington Elementary School, and Dr. Guerrero Elementary School; and development potential/mid-density residential land use. Table 1 and Table 2 reference pedestrian opportunities and constraints along with the legend under each map.

Figure 14: Rundberg Pedestrian Facilities



Figure 15: Rundberg Pedestrian Opportunities and Constraints



Existing and Planned Bicycle Facilities Assessment

There are 85.8 miles of bicycle facilities within the Rundberg Station 3-mile travel shed, however, most facilities are low shared lanes on high volume/speed roadways which can create difficulties for station access. Several high-quality facilities exist, such as protected bikeways, trails, and bike lanes. A lack of high-quality facilities tying directly to the station area could create some barriers for accessing the station area.

Table 12: Rundberg Bicycle Metrics

Bicycle Facilities	
Characteristic	within 3 Miles of Station
Existing Bicycle Facilities (Miles)	85.8
Bike Lanes	17.7
Shared Lanes	47.1
Protected Bikeway	3.3
Buffered Bike Lanes	8.7
Undefined	8.9
Planned Bicycle Facilities (Miles)	--
Bike Lanes	--
Shared Lanes	--
Protected Bikeway	--
Buffered Bike Lanes	--
Trails (Miles)	3.7
# of Bicycle Facility Gaps	7
Shared Mobility Services	
# of Bike Shares Kiosks	0
# of Car Share Location	--
# of Parking Spaces	--
Multimodal Connectivity	
# of Key Destinations	37

# of Local Bus Stops within 3 Miles	367
# of HCT Stations within 3 Miles	3

Bicycle Opportunities and Constraints

A number of opportunities and constraints exist for the Rundberg Station. Constraints include built environment accessibility barriers, low comfort crossing facilities, connectivity issues, lack of appropriate facilities. Opportunities include access to key destinations, areas with high employment density, and connections to transit. Table 3 and Table 4 reference bicycle opportunities and constraints along with the legend under each map.

Figure 16: Rundberg Bicycle Facilities



North Lamar Transit Center Station

The North Lamar Transit Center Station is located along N. Lamar Blvd. just north of 183. The area is surrounded by medium density residential and commercial/industrial buildings. The station location itself will require significant intervention to improve pedestrian and bicycle access depending on where the guideway is running within the right of way.

Existing and Planned Pedestrian Facilities Assessment

The North Lamar Transit Center station includes 11.86 miles of sidewalks and 5.37 miles of gaps. While the sidewalk network is pretty complete, particularly along Lamar Blvd and 183 frontage roads, this station area will require significant pedestrian infrastructure to access the station platform.

Table 13: North Lamar Transit Center Pedestrian Metrics

Characteristic	within 1/2 Mile of Station
Existing Sidewalks (Miles)	11.8
Good Condition	--
Fair Condition	--
Poor Condition	--
Sidewalk Gaps (Miles)	5.3
Average Block Length (Feet)	545
Sidewalk to Roadway Ratio (%)	0.71
Trails (Miles)	0
# of Pedestrian Signalized Intersections	5
# of Signalized Midblock Crossings	0
% ADA Crosswalks relative to # of Intersections	--

Shared Mobility Services	
# of Bike Shares Kiosks	0
# of Car Share Location	--
# of Parking Spaces	--
Multimodal Connectivity	
# of Key Destinations	0
# of Local Bus Stops within 1/2 Mile	23
# of HCT Stations within 1/2 Mile	0

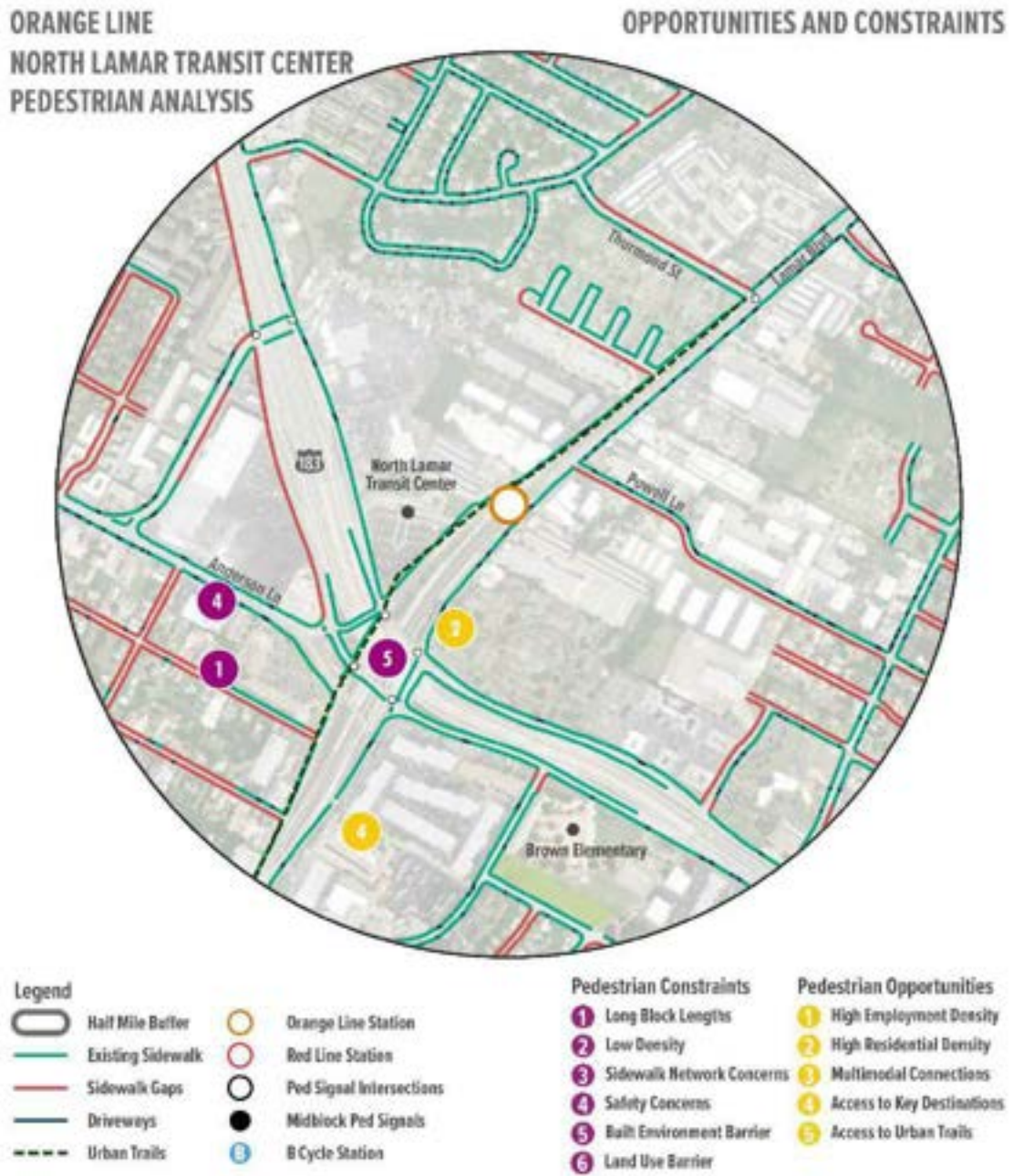
Pedestrian Opportunities and Constraints

A number of opportunities and constraints exist for the North Lamar Transit Center station. Constraints include access management and driveway issues. Opportunities include easy local transit and/or HCT connections (transit center connections); major destinations such as large employers, shopping centers, and the N. Lamar Blvd. park & ride; and mid-density/affordable housing. Table 1 and Table 2 reference pedestrian opportunities and constraints along with the legend under each map.

Figure 18: North Lamar Transit Center Pedestrian Facilities



Figure 19: North Lamar Transit Center Pedestrian Opportunities and Constraints



Existing and Planned Bicycle Facilities Assessment

While there are 97 miles of bike facilities within the North Lamar Transit Center Station area, there are significant gaps tying into the specific station location. Shared lanes and bike lanes are the most prominent facilities within the 3-mile travel shed, however, they do not tie directly into the station location from the east or west. The shared lane on Lamar is the main connection and it is a low comfort facility. This station area will require significant consideration of bicycle access to fill a number of gaps that have been identified for the bike network.

Table 14: North Lamar Transit Center Bicycle Metrics

Bicycle Facilities	
Characteristic	within 3 Miles of Station
Existing Bicycle Facilities (Miles)	97.2
Bike Lanes	24.5
Shared Lanes	53.6
Protected Bikeway	4.0
Buffered Bike Lanes	6.8
Undefined	8.2
Planned Bicycle Facilities (Miles)	--
Bike Lanes	--
Shared Lanes	--
Protected Bikeway	--
Buffered Bike Lanes	--
Trails (Miles)	2.2
# of Bicycle Facility Gaps	8
Shared Mobility Services	
# of Bike Shares Kiosks	0
# of Car Share Location	--
# of Parking Spaces	--

Multimodal Connectivity	
# of Key Destinations	41
# of Local Bus Stops within 3 Miles	487
# of HCT Stations within 3 Miles	3

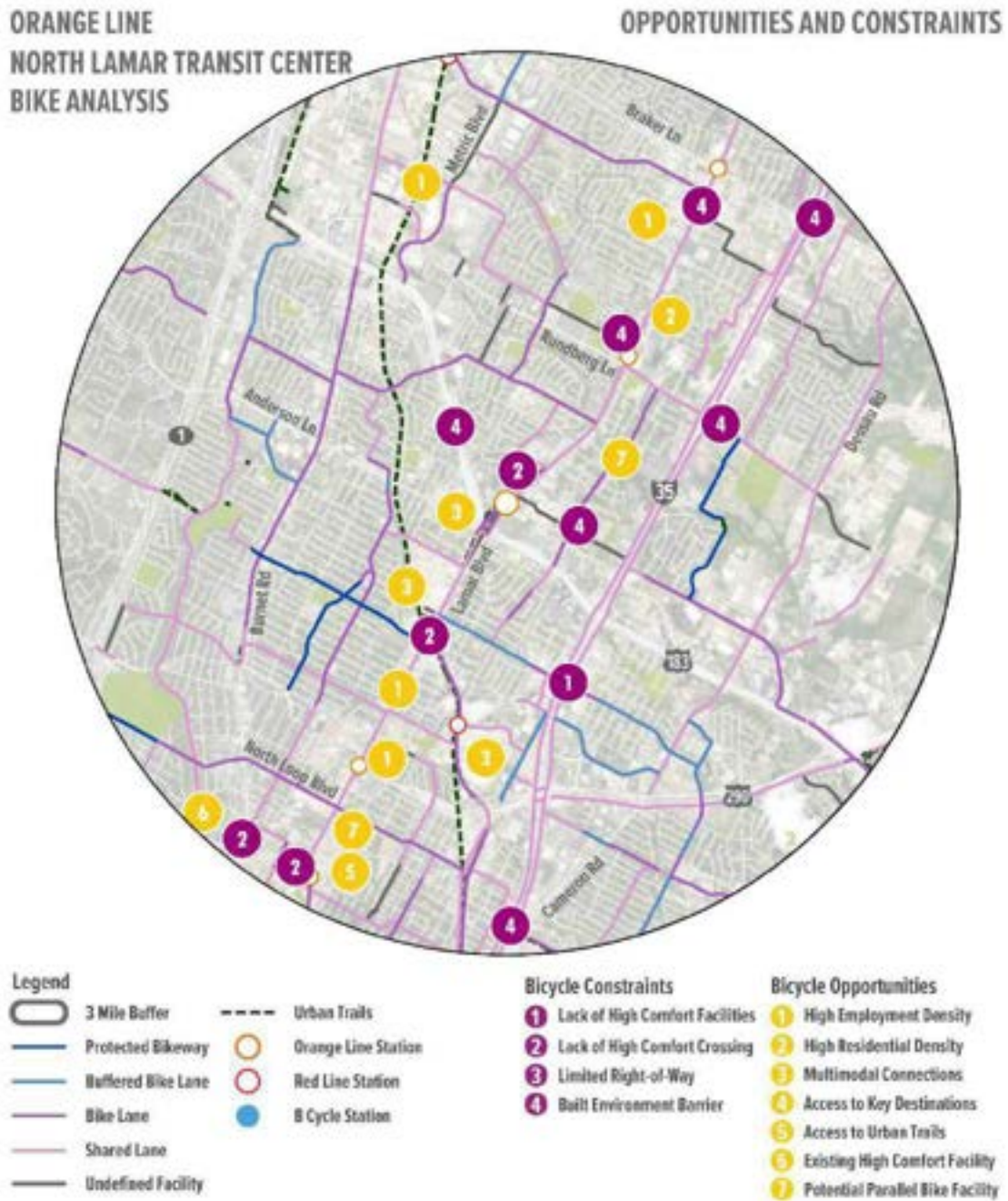
Bicycle Opportunities and Constraints

A number of opportunities and constraints exist for the North Lamar Transit Center Station. Constraints include built environment accessibility barrier, lack of facilities, and low comfort crossings. Opportunities include areas with high density, connections to transit, and access to key destinations. Table 3 and Table 4 reference bicycle opportunities and constraints along with the legend under each map.

Figure 20: North Lamar Transit Center Bicycle Facilities



Figure 21: North Lamar Transit Center Bicycle Opportunities and Constraints



Crestview Station

The Crestview Station is located at the intersection of N. Lamar Blvd. and Airport Blvd. near the Red Line Crestview Station. This station area is optimally located near mixed use and high density residential, commercial and single-family residential. The location currently serves several local routes and the Red Line. While this area is a major transit hub and some high-quality facilities exist in the vicinity, there are noticeable gaps in the pedestrian and bicycle network that limit connectivity, particularly for those with limited mobility.

Existing and Planned Pedestrian Facilities Assessment

The Crestview Station area includes over 12 miles of sidewalks and over 14 miles of sidewalk gaps. Most sidewalk gaps are in the residential communities within the 1/2 mile travel shed of the station. Lamar Blvd, Airport Rd, and Justin Ln have sidewalks to directly access the station area, however, a significant gap does exist along Lamar just south of the rail line and there are significant concerns about the pedestrian crossings at the Lamar Blvd and Airport Blvd intersection.

Table 15: Crestview Pedestrian Metrics

Characteristic	within 1/2 Mile of Station
Existing Sidewalks (Miles)	12.7
Good Condition	--
Fair Condition	--
Poor Condition	--
Sidewalk Gaps (Miles)	14.6
Average Block Length (Feet)	427
Sidewalk to Roadway Ratio (%)	0.76
Trails (Miles)	0.6

# of Pedestrian Signalized Intersections	8
# of Signalized Midblock Crossings	0
% ADA Crosswalks relative to # of Intersections	--
Shared Mobility Services	
# of Bike Shares Kiosks	0
# of Car Share Location	--
# of Parking Spaces	--
Multimodal Connectivity	
# of Key Destinations	3
# of Local Bus Stops within 1/2 Mile	29
# of HCT Stations within 1/2 Mile	1

Pedestrian Opportunities and Constraints

A number of opportunities and constraints exist for the Crestview Station. Constraints include auto oriented environment, sidewalk gaps, and large facilities without pedestrian cut throughs. Opportunities include multimodal connections (red line trail, new Airport Blvd. bicycle and pedestrian improvements, transit hub connections), high densities (TOD at Crestview Redline Station), and high-quality existing facilities (mixed use development, high accessibility, various residential densities, etc.). Table 1 and Table 2 reference pedestrian opportunities and constraints along with the legend under each map.

Figure 22: Crestview Pedestrian Facilities

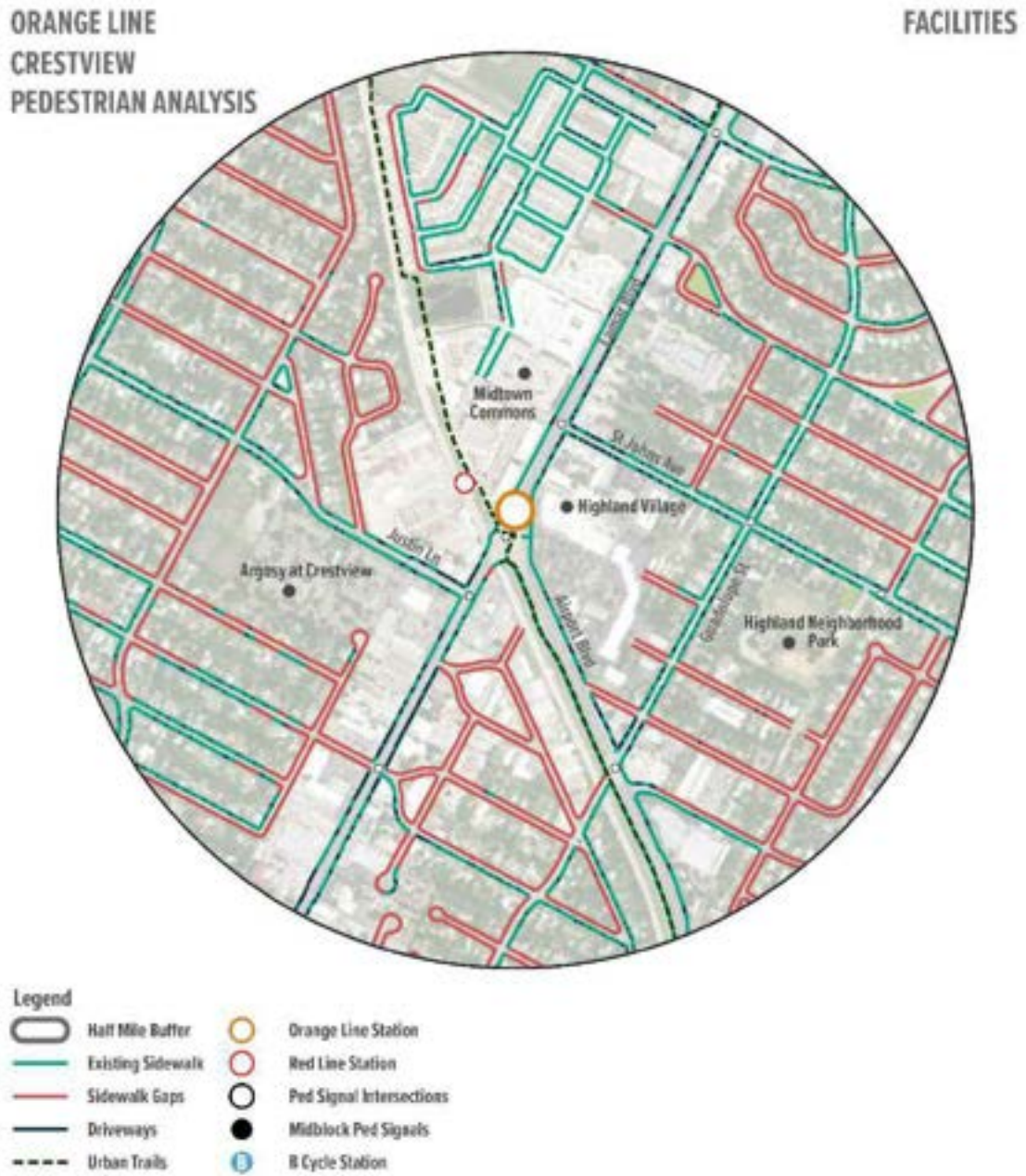
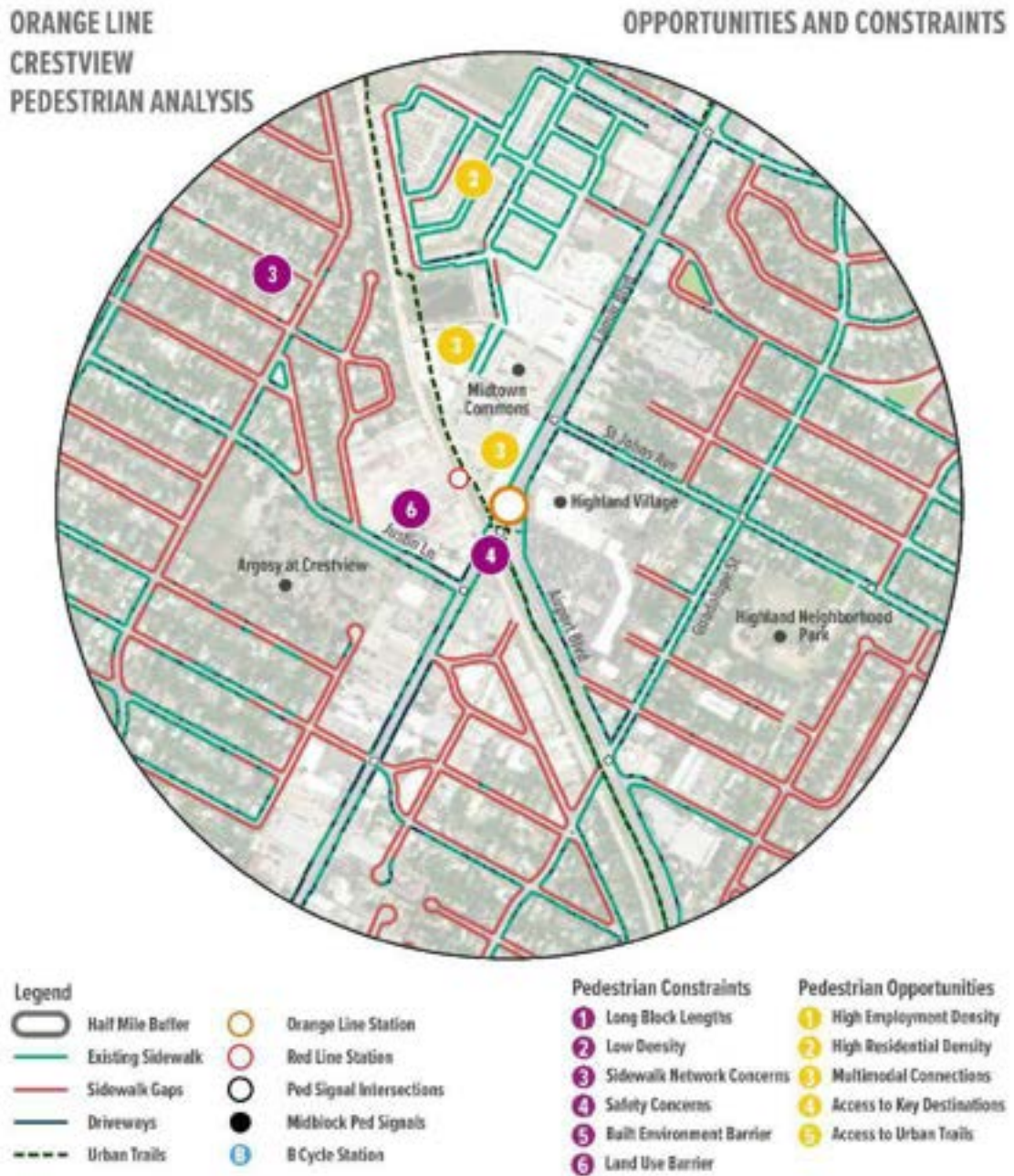


Figure 23: Crestview Pedestrian Opportunities and Constraints



Existing and Planned Bicycle Facilities Assessment

Crestview Station is well connected by existing and planned bicycle facilities, including trails, buffered bike lanes, and protected bikeways. There are a significant number of shared lane areas, which can present access challenges along Lamar Blvd, however, a number of parallel and adjacent facilities exist that tie into the specific station location. While high quality facilities do exist, there are a number of gaps where the quality significantly lowers from high comfort to medium or low comfort. Distinct changes in the comfort along particular roadways can impact the safety or attractiveness of that facility as it relates to accessing transit.

Table 16: Crestview Bicycle Metrics

Bicycle Facilities	
Characteristic	within 3 Miles of Station
Existing Bicycle Facilities (Miles)	101.4
Bike Lanes	27.9
Shared Lanes	54.5
Protected Bikeway	4.5
Buffered Bike Lanes	7.5
Undefined	7.0
Planned Bicycle Facilities (Miles)	--
Bike Lanes	--
Shared Lanes	--
Protected Bikeway	--
Buffered Bike Lanes	--
Trails (Miles)	2.4
# of Bicycle Facility Gaps	7
Shared Mobility Services	
# of Bike Shares Kiosks	0
# of Car Share Location	--
# of Parking Spaces	--

Multimodal Connectivity	
# of Key Destinations	50
# of Local Bus Stops within 3 Miles	564
# of HCT Stations within 3 Miles	2

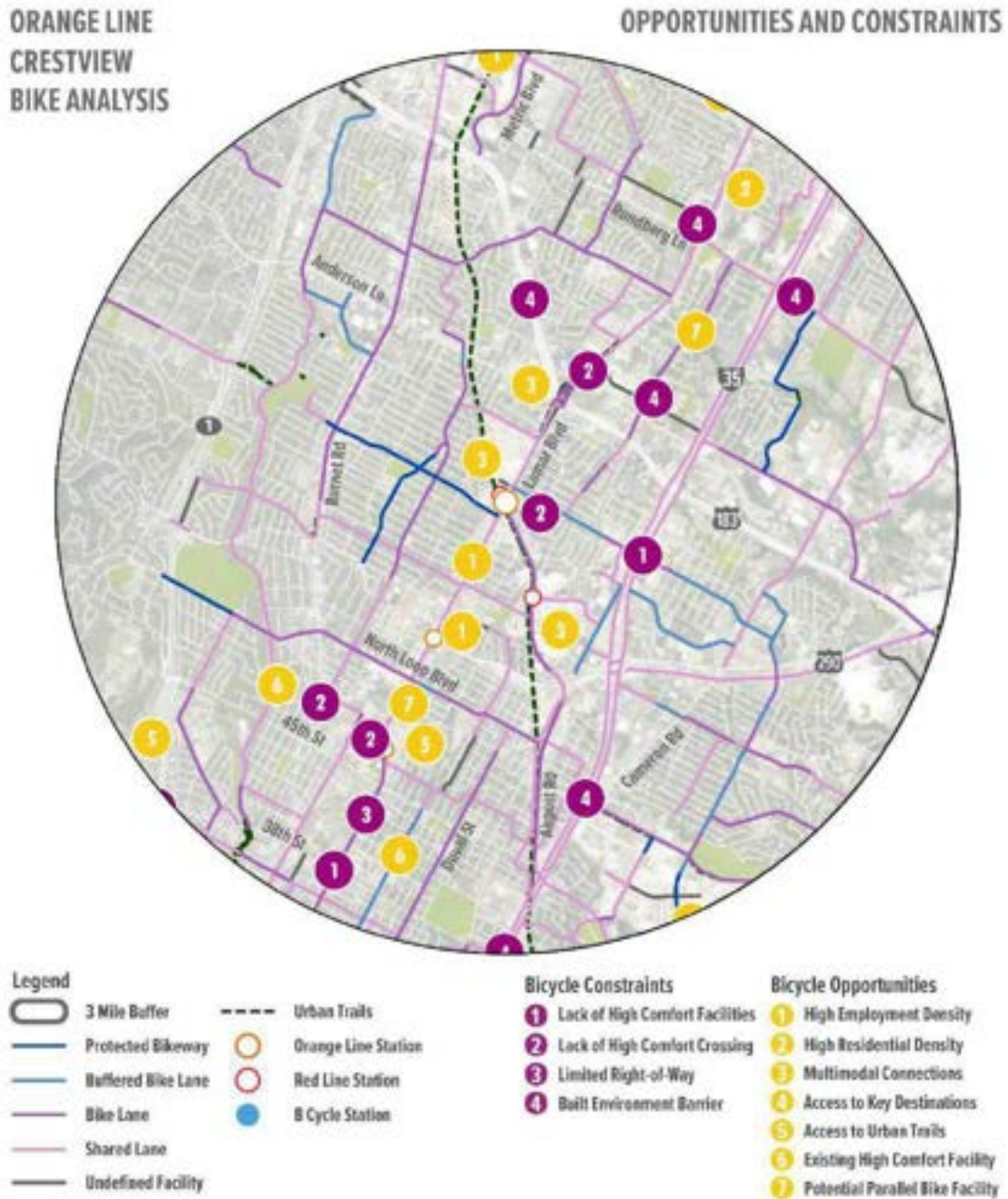
Bicycle Opportunities and Constraints

A number of opportunities and constraints exist for the Crestview Station. Constraints include built environment accessibility barriers, right-of-way constraints, low comfort crossings, and connectivity issues. Opportunities include connections to high capacity transit, trail connections, high density, high quality existing and proposed facilities, and access to key destinations. Table 3 and Table 4 reference bicycle opportunities and constraints along with the legend under each map.

Figure 24: Crestview Bicycle Facilities



Figure 25: Crestview Bicycle Opportunities and Constraints



Koenig Station

The Koenig Station is located along N. Lamar Blvd. just south of Koenig Ln. The station area is located near medium density residential, commercial uses, a school, and numerous public services. There are a number of critical gaps in the bicycle network connecting to this station, namely that Koenig Ln. does not have facilities and that the facility on Lamar Blvd. is not high comfort for users.

Existing and Planned Pedestrian Facilities Assessment

The Koenig Station includes 11 miles of existing sidewalks and slightly more sidewalk gaps, however, most gaps in the sidewalk network are on low stress local streets. While Lamar Blvd and Koenig Ln do have continuous sidewalks and are well-connected to the residential neighborhoods, there are concerns about the number of driveways along Lamar Blvd, which can significantly impact pedestrian safety and conflicts along the corridor.

Table 17: Koenig Pedestrian Metrics

Characteristic	within 1/2 Mile of Station
Existing Sidewalks (Miles)	11.1
Good Condition	--
Fair Condition	--
Poor Condition	--
Sidewalk Gaps (Miles)	11.9
Average Block Length (Feet)	484
Sidewalk to Roadway Ratio (%)	0.85
Trails (Miles)	0
# of Pedestrian Signalized Intersections	8
# of Signalized Midblock Crossings	0

% ADA Crosswalks relative to # of Intersections	--
Shared Mobility Services	
# of Bike Shares Kiosks	0
# of Car Share Location	--
# of Parking Spaces	--
Multimodal Connectivity	
# of Key Destinations	0
# of Local Bus Stops within 1/2 Mile	26
# of HCT Stations within 1/2 Mile	0

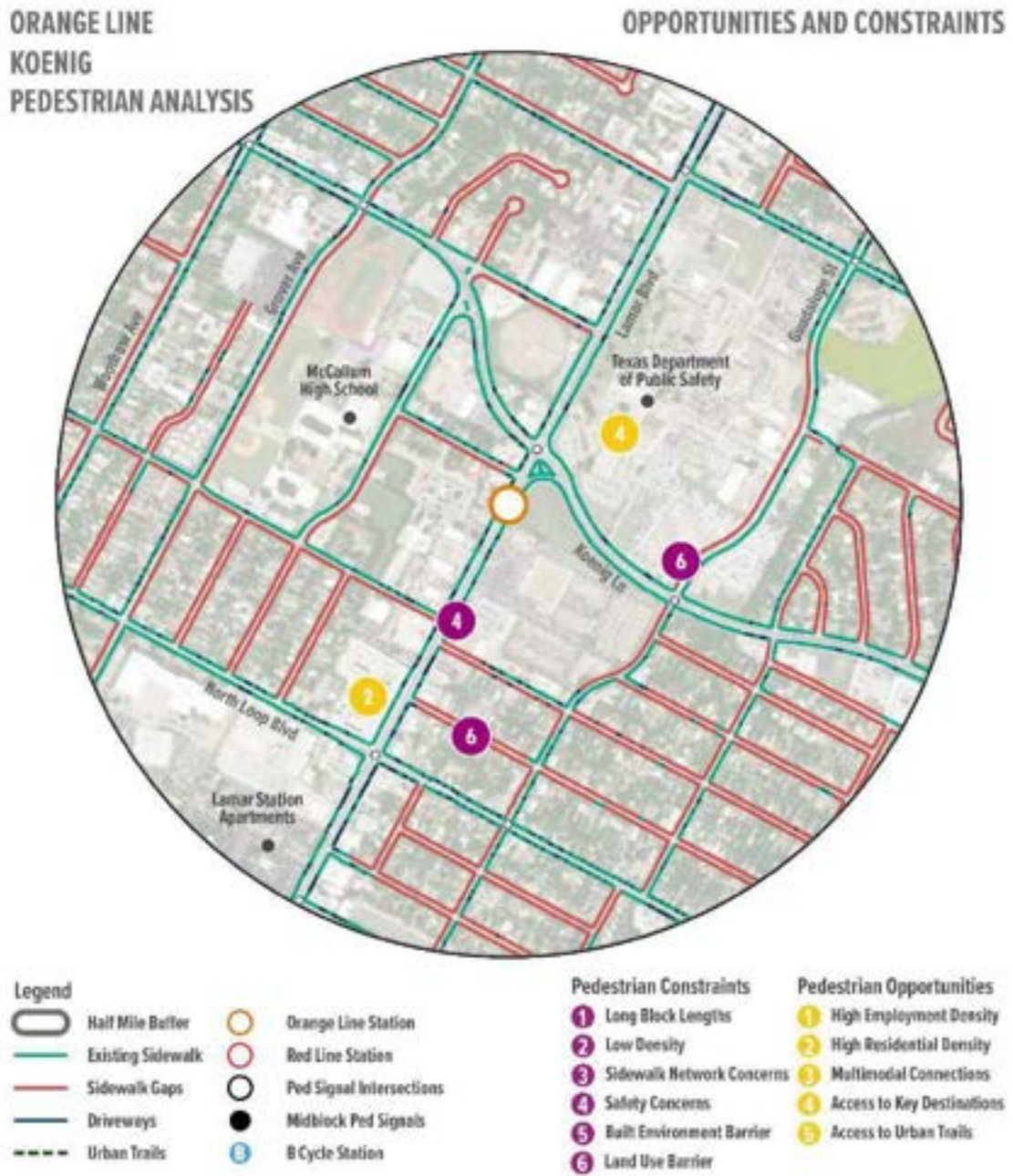
Pedestrian Opportunities and Constraints

A number of opportunities and constraints exist for the Koenig Station. Constraints include sidewalk gaps due to single family private lots/residential driveways, large facilities/parcels without pedestrian cut throughs, and access management/driveway issues. Opportunities include major destinations such as the Texas Department of Safety, high densities (Camden Lamar Heights apartment complex), and easy local transit and/or HCT connections (route 337). Table 1 and Table 2 reference pedestrian opportunities and constraints along with the legend under each map.

Figure 26: Koenig Pedestrian Facilities



Figure 27: Koenig Pedestrian Opportunities and Constraints



Existing and Planned Bicycle Facilities Assessment

Due to the Koenig Station’s location closer to the urban core, there are a significant number of varying bicycle facilities within the 3-mile travel shed, however, there are significant gaps in bicycle facilities directly adjacent to the station location, except for a low comfort facility along Lamar Blvd. High-quality facilities occur to the south and north that can provide east/west connectivity to Lamar Blvd, however, the shared lane provides a barrier to station access.

Table 18: Koenig Bicycle Metrics

Bicycle Facilities	
Characteristic	within 3 Miles of Station
Existing Bicycle Facilities (Miles)	108.4
Bike Lanes	33.2
Shared Lanes	55.0
Protected Bikeway	6.7
Buffered Bike Lanes	7.9
Undefined	5.5
Planned Bicycle Facilities (Miles)	--
Bike Lanes	--
Shared Lanes	--
Protected Bikeway	--
Buffered Bike Lanes	--
Trails (Miles)	2.8
# of Bicycle Facility Gaps	8
Shared Mobility Services	
# of Bike Shares Kiosks	11
# of Car Share Location	--
# of Parking Spaces	--
Multimodal Connectivity	
# of Key Destinations	46

# of Local Bus Stops within 3 Miles	595
# of HCT Stations within 3 Miles	2

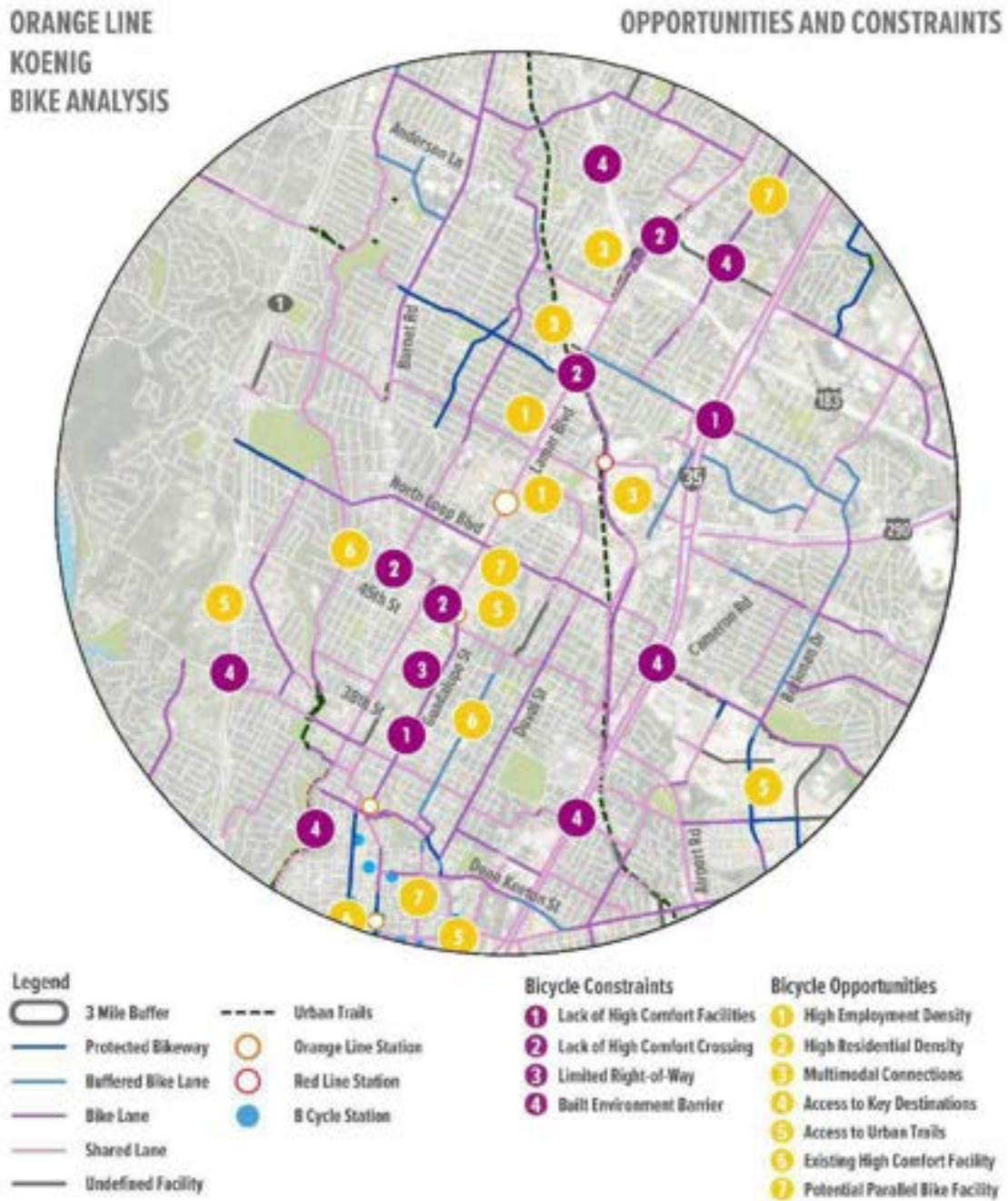
Bicycle Opportunities and Constraints

A number of opportunities and constraints exist for the Koenig Station. Constraints include built environment accessibility barriers like major freeways, a lack of connections to neighborhoods, low comfort crossings across major arterials, gaps in available bicycle facilities and ROW constraints. Opportunities to improve bicycling in the area include improving access to a high density of jobs via high comfort bicycle facilities, connecting to residential areas, and connections to shopping centers. Table 3 and Table 4 reference bicycle opportunities and constraints along with the legend under each map.

Figure 28: Koenig Bicycle Facilities



Figure 29: Koenig Bicycle Opportunities and Constraints



Triangle Station

The Triangle Station is located on Guadalupe St. to the south of the Lamar Blvd. and Guadalupe split. The station area is in an area with mixed-use residential with a significant amount of residential development occurring. In addition, the location provides access to public facilities, such as the Texas Department of Aging and Disability Services and Texas Health and Human Services. The location also has an existing CMTA Park and Ride facility located directly to the south. This location currently has adequate pedestrian and bicycle facilities connecting to the area, however, crossing facilities, particularly at the Guadalupe St./Lamar Blvd. and Lamar Blvd./45th/46th St. intersections are lacking.

Existing and Planned Pedestrian Facilities Assessment

The Triangle Station area is well connected to the pedestrian network and most existing sidewalk gaps occur in residential neighborhoods surrounding the station location. A significant number of driveways along Guadalupe St can impact safety for those walking or wheeling to the station location.

Table 19: Triangle Pedestrian Metrics

Characteristic	within 1/2 Mile of Station
Existing Sidewalks (Miles)	10.6
Good Condition	--
Fair Condition	--
Poor Condition	--
Sidewalk Gaps (Miles)	8.6
Average Block Length (Feet)	400
Sidewalk to Roadway Ratio (%)	0.90
Trails (Miles)	0
# of Pedestrian Signalized Intersections	8

# of Signalized Midblock Crossings	2
% ADA Crosswalks relative to # of Intersections	--
Shared Mobility Services	
# of Bike Shares Kiosks	0
# of Car Share Location	--
# of Parking Spaces	--
Multimodal Connectivity	
# of Key Destinations	6
# of Local Bus Stops within 1/2 Mile	30
# of HCT Stations within 1/2 Mile	0

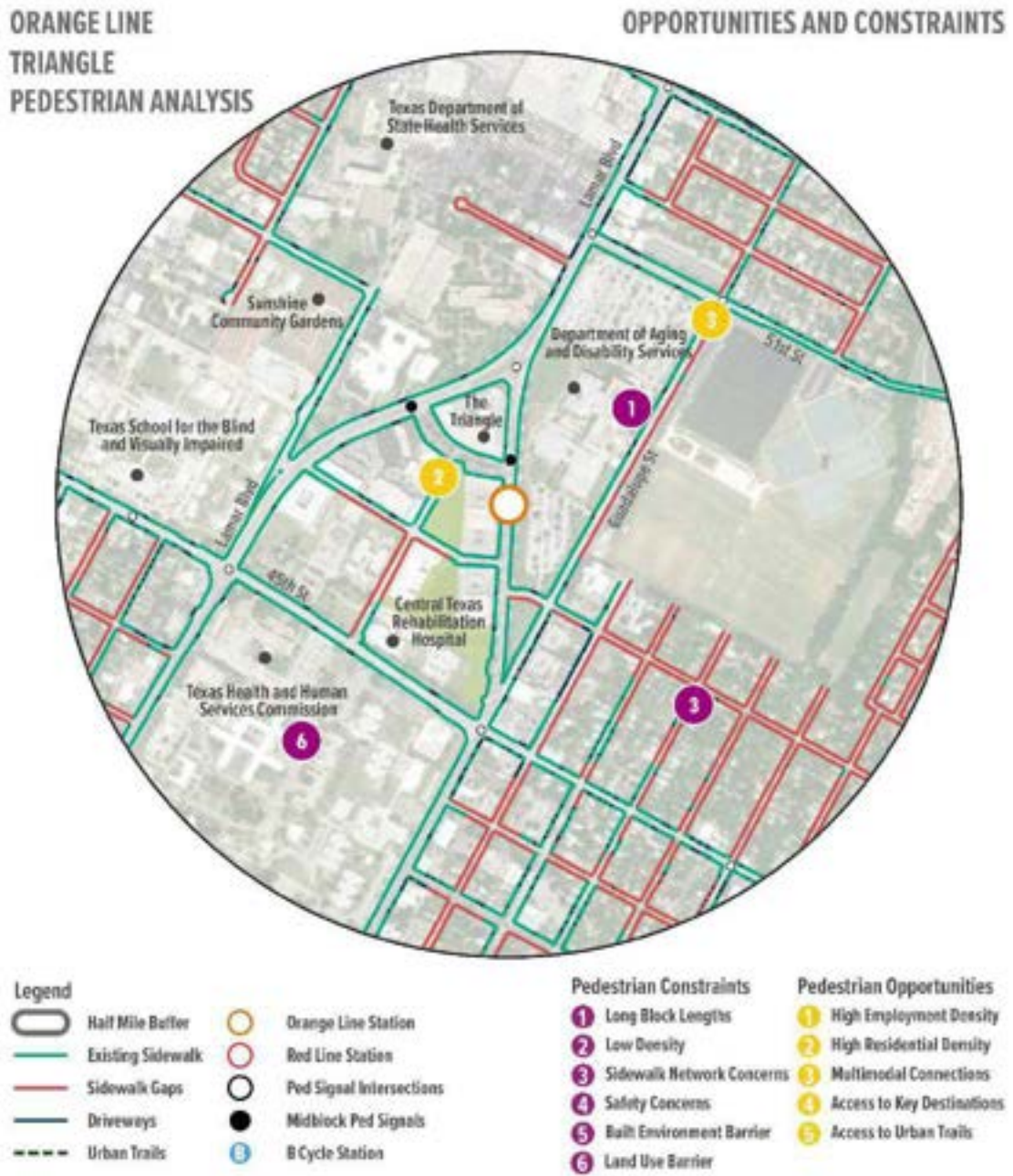
Pedestrian Opportunities and Constraints

A number of opportunities and constraints exist for the Triangle Station. Constraints include sidewalk gaps, long blocks, and large facilities without pedestrian cut throughs (Austin State Hospital). Opportunities include multimodal connections (sidewalks, bike lanes, transit connections, UT Shuttle 656 and 681), high-density mixed-use development, and easy local transit and/or HCT connections (routes 801, 1, 481, and 990). Table 1 and Table 2 reference pedestrian opportunities and constraints along with the legend under each map.

Figure 30: Triangle Pedestrian Facilities



Figure 31: Triangle Pedestrian Opportunities and Constraints



Existing and Planned Bicycle Facilities Assessment

As part of the urban core, the Triangle Station travel shed has a significant number of bicycle facilities, including a bike lane that ties into the station area from the south, however, connecting to the station from the north presents issues as the Guadalupe St and Lamar Blvd intersection presents difficulty for users. In addition, a shared lane is the only direct connection from the north along Lamar Blvd, however, a bike lane to the north on Guadalupe St. does provide parallel access to the station area.

Table 20: Triangle Bicycle Metrics

Bicycle Facilities	
Characteristic	within 3 Miles of Station
Existing Bicycle Facilities (Miles)	115.2
Bike Lanes	31.7
Shared Lanes	60.8
Protected Bikeway	5.7
Buffered Bike Lanes	10.2
Undefined	6.8
Planned Bicycle Facilities (Miles)	--
Bike Lanes	--
Shared Lanes	--
Protected Bikeway	--
Buffered Bike Lanes	--
Trails (Miles)	4.2
# of Bicycle Facility Gaps	8
Shared Mobility Services	
# of Bike Shares Kiosks	17
# of Car Share Location	--
# of Parking Spaces	--
Multimodal Connectivity	

# of Key Destinations	45
# of Local Bus Stops within 3 Miles	627
# of HCT Stations within 3 Miles	3

Bicycle Opportunities and Constraints

A number of opportunities and constraints exist for the Triangle Station. Constraints include built environment accessibility barriers like major freeways, a lack of connections to neighborhoods, low comfort crossings across major arterials, gaps in available bicycle facilities and ROW constraints. Opportunities to improve bicycling in the area include improving access to a high density of jobs via high comfort bicycle facilities, connecting to residential and shopping centers like the Triangle Center. Table 3 and Table 4 reference bicycle opportunities and constraints along with the legend under each map.

Figure 32: Triangle Bicycle Facilities

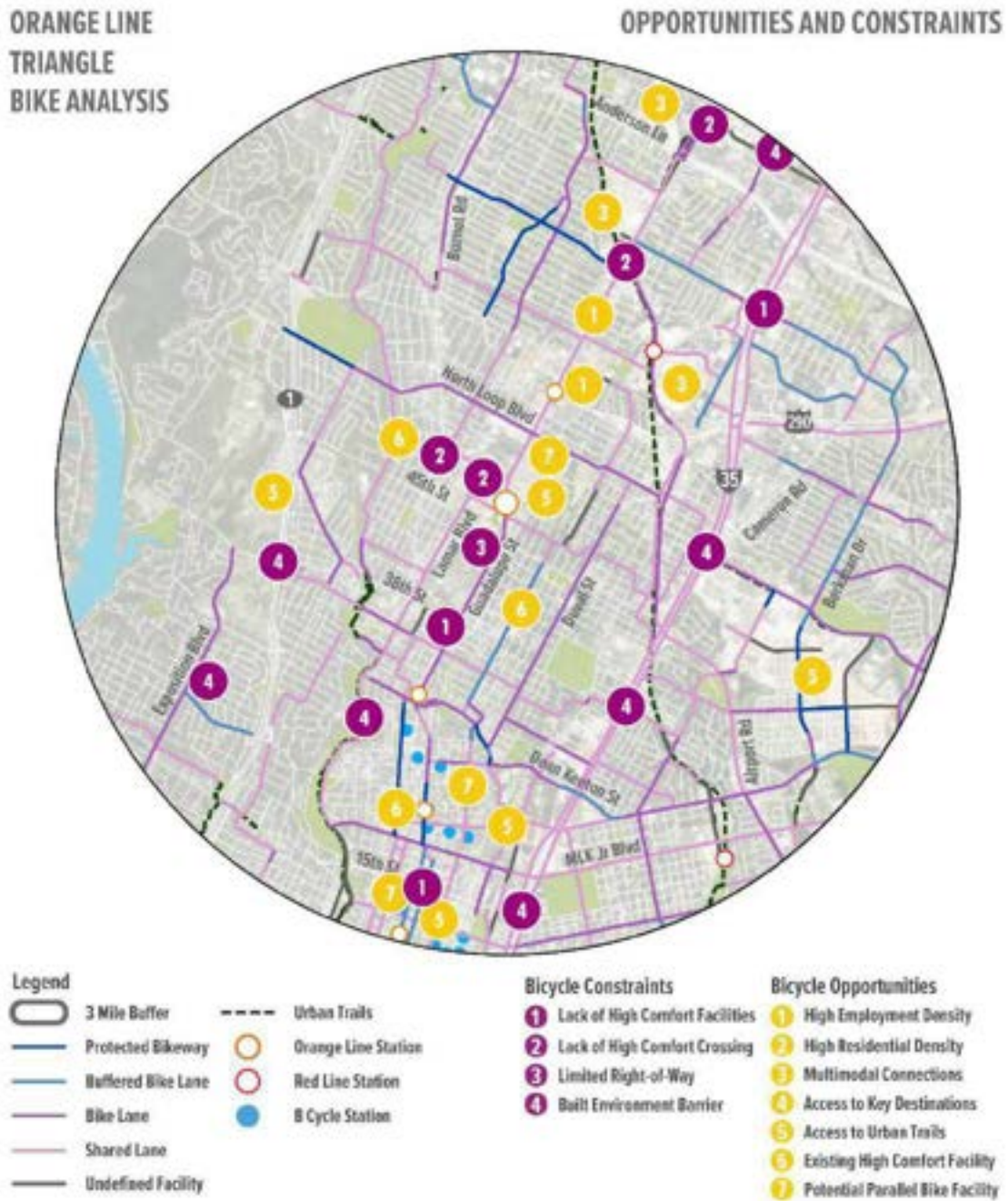
ORANGE LINE
TRIANGLE
BIKE ANALYSIS

FACILITIES



- Legend
- 3 Mile Buffer
 - Protected Bikeway
 - Buffered Bike Lane
 - Bike Lane
 - Shared Lane
 - Undefined Facility
 - Urban Trails
 - Orange Line Station
 - Red Line Station
 - B Cycle Station

Figure 33: Triangle Bicycle Opportunities and Constraints



Hyde Park (38th) Station

The Hyde Park (38th) Station is located at the Guadalupe St. and 38th St. adjacent to the Texas State Hospital. The station area contains a mixture of land uses but is primarily medium density residential. Several driveways exist along Guadalupe St. which present access management issues for active transportation users. The area contains active transportation infrastructure along Guadalupe St., and the surrounding residential areas provide pedestrian infrastructure and safe bicycle routes with minor infrastructure gaps.

Existing and Planned Pedestrian Facilities Assessment

The Hyde Park (38th) Station is well connected to the sidewalk network and includes over 21 miles of sidewalks and 9 miles of sidewalk gaps. Both Lamar Blvd and 38th St have adequate sidewalks, however, there are a number of gaps in the surrounding neighborhoods. Intersections along Lamar Blvd and 38th have pedestrian facilities for safe travel across roadways. There are several locations where driveways impact safety for pedestrians along the corridors connecting to the station location.

Table 21: Hyde Park (38th) Pedestrian Metrics

Characteristic	within 1/2 Mile of Station
Existing Sidewalks (Miles)	21.5
Good Condition	--
Fair Condition	--
Poor Condition	--
Sidewalk Gaps (Miles)	9.7
Average Block Length (Feet)	340
Sidewalk to Roadway Ratio (%)	1.19
Trails (Miles)	0

# of Pedestrian Signalized Intersections	12
# of Signalized Midblock Crossings	1
% ADA Crosswalks relative to # of Intersections	--
Shared Mobility Services	
# of Bike Shares Kiosks	0
# of Car Share Location	--
# of Parking Spaces	--
Multimodal Connectivity	
# of Key Destinations	10
# of Local Bus Stops within 1/2 Mile	41
# of HCT Stations within 1/2 Mile	0

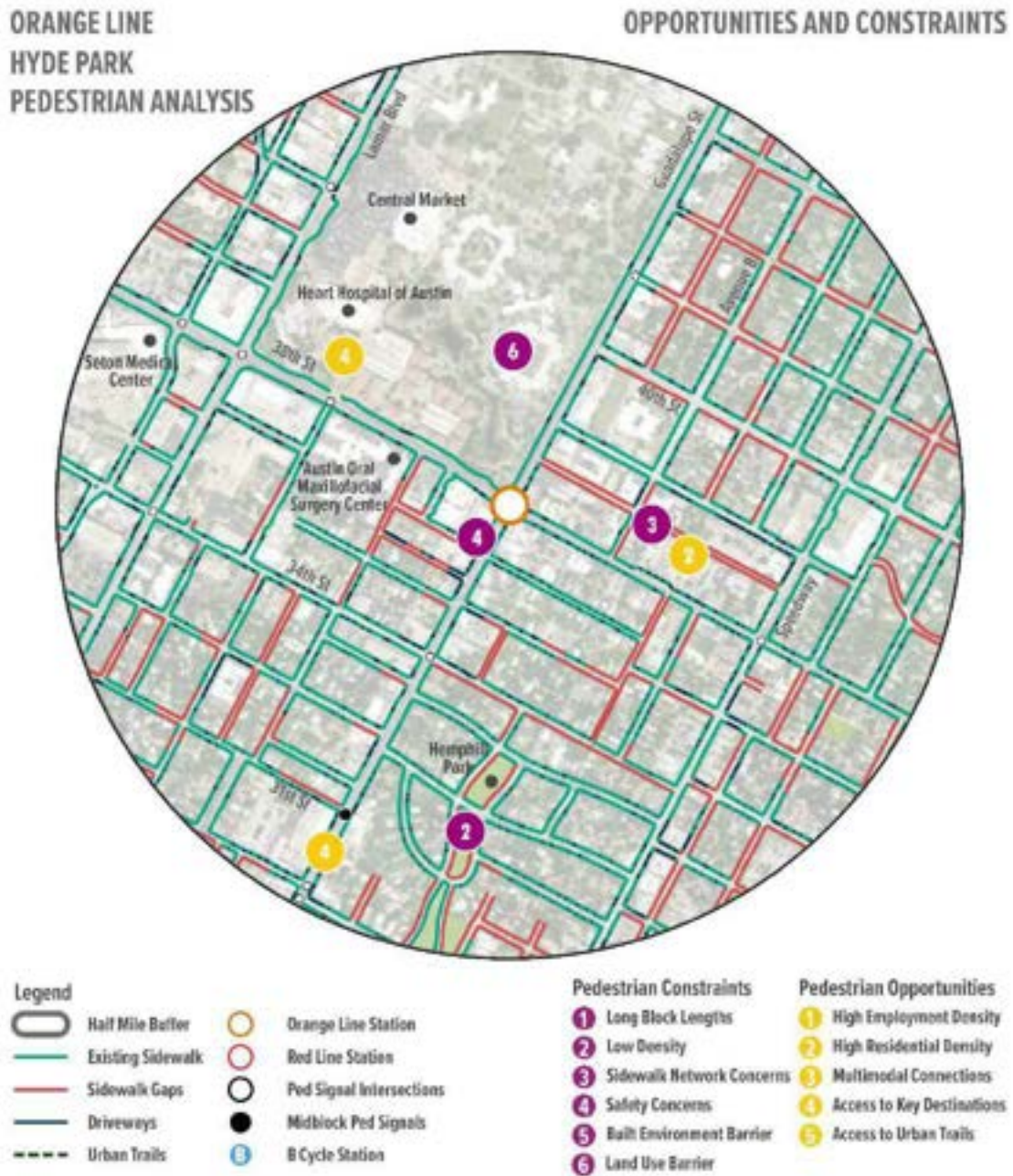
Pedestrian Opportunities and Constraints

A number of opportunities and constraints exist for the Hyde Park (38th) Station. Constraints include large facilities/parcels without pedestrian cut throughs, access management/driveway issues from W 38th St. to W 30th St., and sidewalk gaps along 38th 1/2 St. from Guadalupe St. to Speedway. Opportunities include major destinations such as hospitals/medical centers, easy local transit and/or HCT (routes 801, 1, 990, UT Shuttle 656), and medium density development. Table 1 and Table 2 reference pedestrian opportunities and constraints along with the legend under each map.

Figure 34: Hyde Park (38th) Pedestrian Facilities



Figure 35: Hyde Park (38th) Pedestrian Opportunities and Constraints



Existing and Planned Bicycle Facilities Assessment

The Hyde Park Station is well connected to the bicycle network via a bike lane on Guadalupe St. The station area includes 123.4 miles of bicycle facilities, although approximately half of those miles are shared lanes. There are a number of low stress residential streets in close proximity to the station, providing parallel and adjacent access to the station area. A buffered bike lane runs parallel to Guadalupe St to the east, which is a higher comfort than the bike lane directly to the station area.

Table 22: Hyde Park (38th) Bicycle Metrics

Bicycle Facilities	
Characteristic	within 3 Miles of Station
Existing Bicycle Facilities (Miles)	123.4
Bike Lanes	33.2
Shared Lanes	64.7
Protected Bikeway	6.6
Buffered Bike Lanes	12.1
Undefined	6.8
Planned Bicycle Facilities (Miles)	--
Bike Lanes	--
Shared Lanes	--
Protected Bikeway	--
Buffered Bike Lanes	--
Trails (Miles)	7.5
# of Bicycle Facility Gaps	11
Shared Mobility Services	
# of Bike Shares Kiosks	54
# of Car Share Location	--
# of Parking Spaces	--
Multimodal Connectivity	

# of Key Destinations	60
# of Local Bus Stops within 3 Miles	663
# of HCT Stations within 3 Miles	5

Bicycle Opportunities and Constraints

A number of opportunities and constraints exist for the Hyde Park Station. Constraints include built environment accessibility barriers like major freeways, a lack of connections to neighborhoods, low comfort crossings across major arterials, and gaps in available bicycle facilities. Opportunities to improve bicycling in the area include improving access to a high density of jobs via high comfort bicycle facilities, connecting to residential neighborhoods like Hyde Park and North Loop and shopping centers. Table 3 and Table 4 reference bicycle opportunities and constraints along with the legend under each map.

Figure 36: Hyde Park (38th) Bicycle Facilities

ORANGE LINE
HYDE PARK
BIKE ANALYSIS

FACILITIES

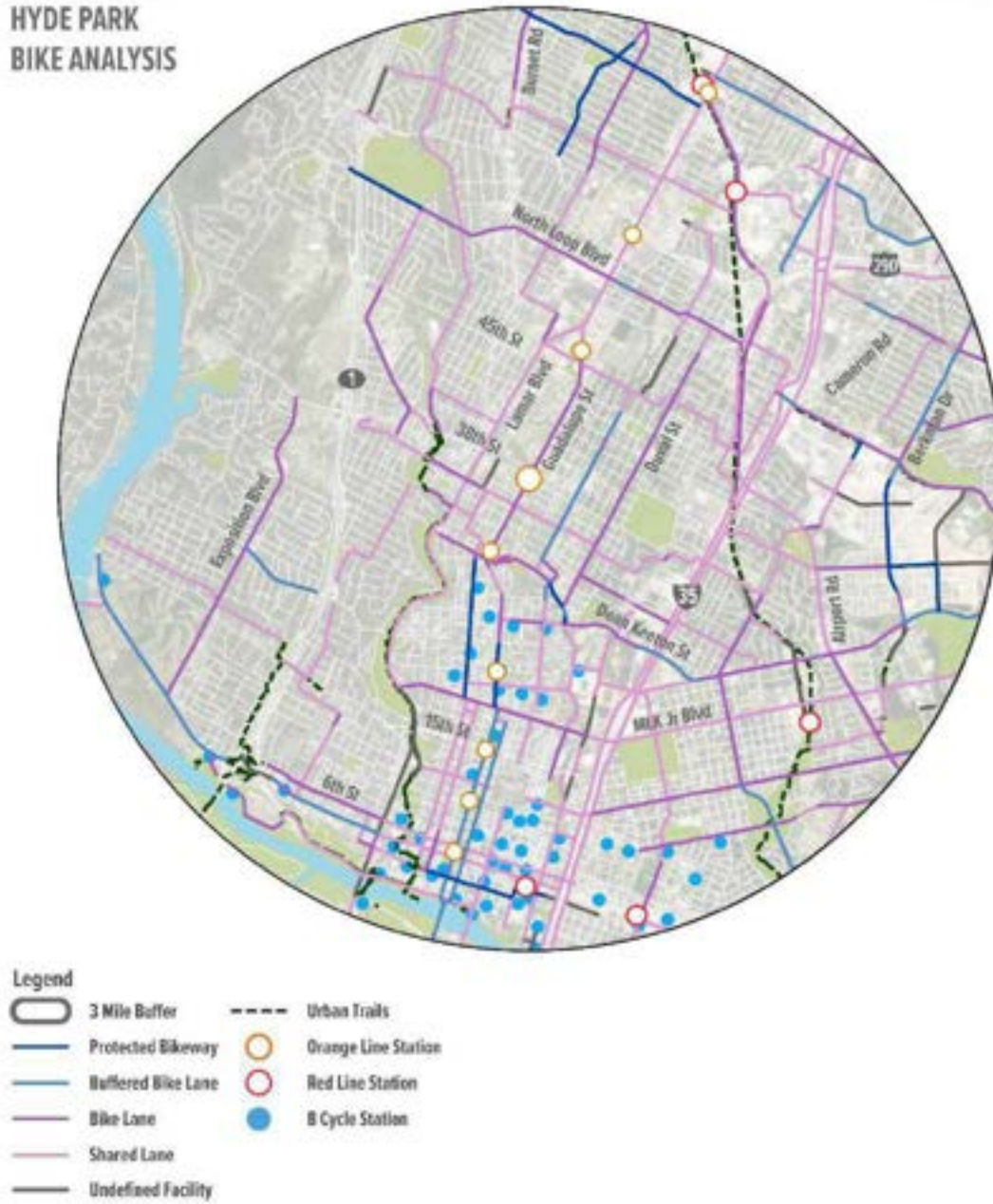
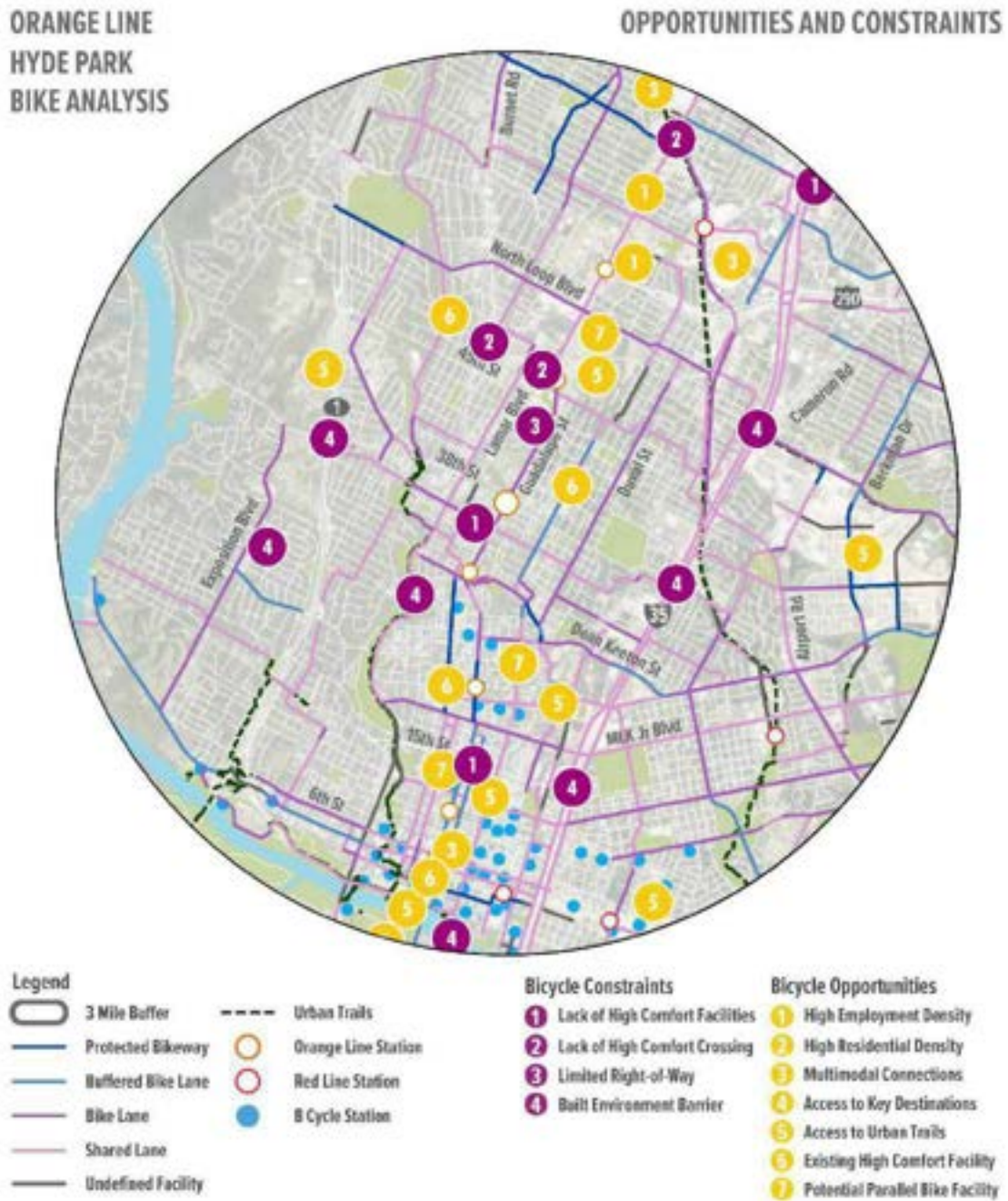


Figure 37: Hyde Park (38th) Bicycle Opportunities and Constraints



Hemphill Park (29th) Station

The Hemphill Park (29th) Station is located on Guadalupe St. between 30th St. and 29th St, just north of the University of Texas (UT) campus. The station area contains a mixture of land uses but is primarily medium density residential. Several driveways exist along Guadalupe St. which presents access management issues for active transportation users. The area contains bicycle and pedestrian infrastructure, especially on major roadways, but does contain gaps in both networks.

Existing and Planned Pedestrian Facilities Assessment

The Hemphill Park (29th) Station includes approximately 24.42 miles of existing sidewalks and gaps of 10.06 miles. Gaps are primarily found north of 29th St, both east (Hyde Park) and west of Guadalupe St. Overall this location contains moderate accessibility.

Table 23: Hemphill Park (29th) Pedestrian Metrics

Characteristic	within 1/2 Mile of Station
Existing Sidewalks (Miles)	24.4
Good Condition	--
Fair Condition	--
Poor Condition	--
Sidewalk Gaps (Miles)	10.0
Average Block Length (Feet)	353
Sidewalk to Roadway Ratio (%)	1.16
Trails (Miles)	0
# of Pedestrian Signalized Intersections	14
# of Signalized Midblock Crossings	2
% ADA Crosswalks relative to # of Intersections	--
Shared Mobility Services	

# of Bike Shares Kiosks	3
# of Car Share Location	--
# of Parking Spaces	--
Multimodal Connectivity	
# of Key Destinations	0
# of Local Bus Stops within 1/2 Mile	31
# of HCT Stations within 1/2 Mile	0

Pedestrian Opportunities and Constraints

Many opportunities and constraints exist for the Hemphill Park (29th) Station. Constraints include access management/driveway issues along Guadalupe St. from W 38th St. to W Dean Keeton St. and sidewalk gaps in residential areas with on street parking and large driveways. Opportunities include medium density development, trail connections (Shoal Creek Hike and Bike Trail), and major along the Guadalupe St. corridor. Table 1 and Table 2 reference pedestrian opportunities and constraints along with the legend under each map.

Figure 38: Hemphill Park (29th) Pedestrian Facilities



Figure 39: Hemphill Park (29th) Pedestrian Opportunities and Constraints



Existing and Planned Bicycle Facilities Assessment

There are approximately 122.2 miles of bicycle facilities within a 3-mile travel shed of the Hemphill Park (29th) Station. A mix of facility types can be found in the area due to its campus/urban setting, allowing users to avoid using low comfort/high stress infrastructure. The Hyde Park area also provides users with low speed/low traffic roadways to connect to surrounding destinations and amenities.

Table 24: Hemphill Park (29th) Bicycle Metrics

Bicycle Facilities	
Characteristic	within 3 Miles of Station
Existing Bicycle Facilities (Miles)	122.2
Bike Lanes	32.2
Shared Lanes	65.9
Protected Bikeway	6.1
Buffered Bike Lanes	10.8
Undefined	7.1
Planned Bicycle Facilities (Miles)	--
Bike Lanes	--
Shared Lanes	--
Protected Bikeway	--
Buffered Bike Lanes	--
Trails (Miles)	8.1
# of Bicycle Facility Gaps	10
Shared Mobility Services	
# of Bike Shares Kiosks	68
# of Car Share Location	--
# of Parking Spaces	--
Multimodal Connectivity	
# of Key Destinations	58
# of Local Bus Stops within 3 Miles	667

# of HCT Stations within 3 Miles	4
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Bicycle Opportunities and Constraints

A number of opportunities and constraints exist for the Hemphill Park Station. Constraints include built environment accessibility barriers like major freeways, a lack of connections to neighborhoods, low comfort crossings across major arterials, and gaps in available bicycle facilities. Opportunities to improve bicycling in the area include improving access to a high density of jobs via high comfort bicycle facilities, connecting to residential neighborhoods east and west of downtown and high-density employment areas. Table 3 and Table 4 reference bicycle opportunities and constraints along with the legend under each map.

Figure 40: Hemphill Park (29th) Bicycle Facilities

ORANGE LINE
HEMPHILL PARK
BIKE ANALYSIS

FACILITIES

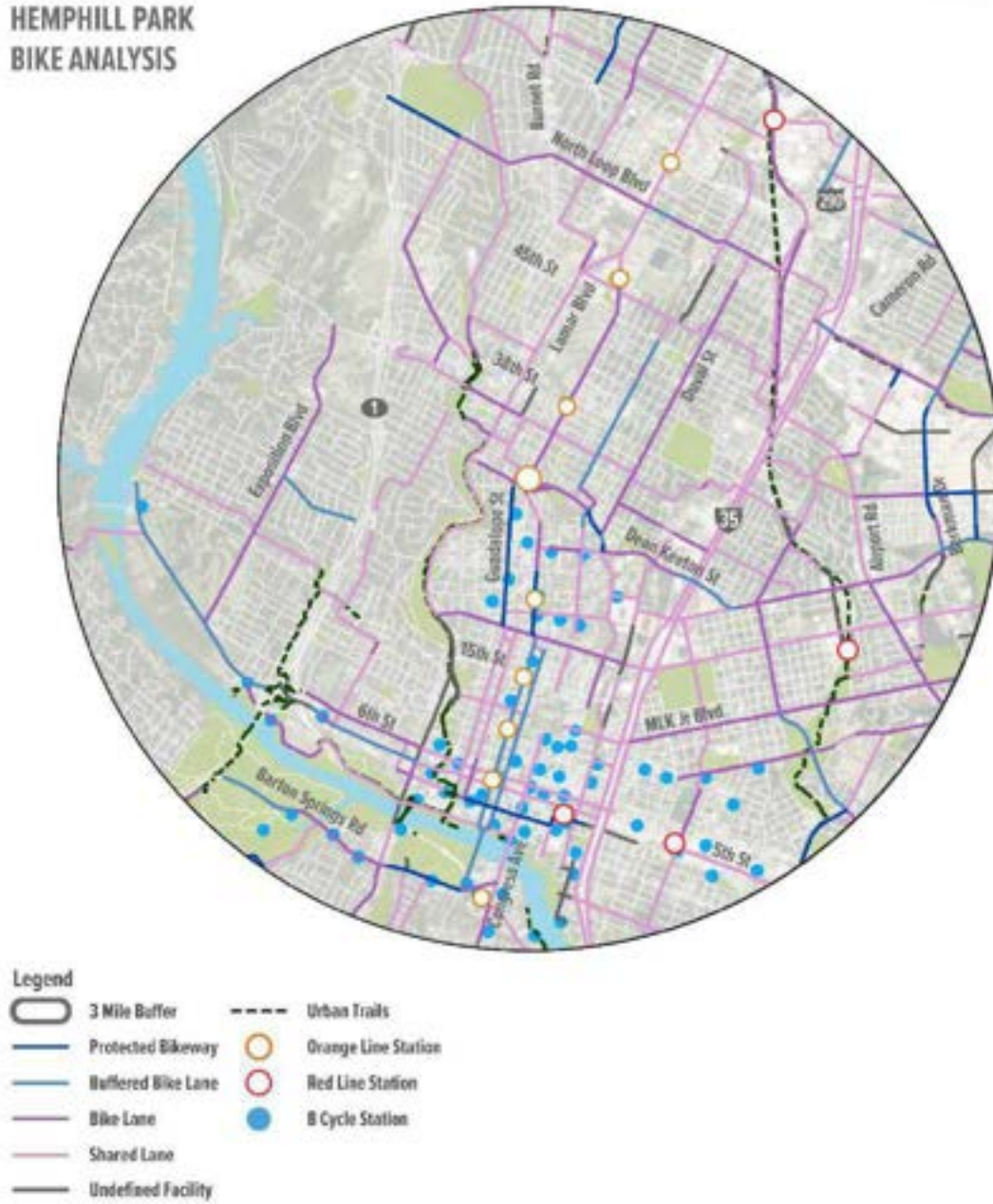
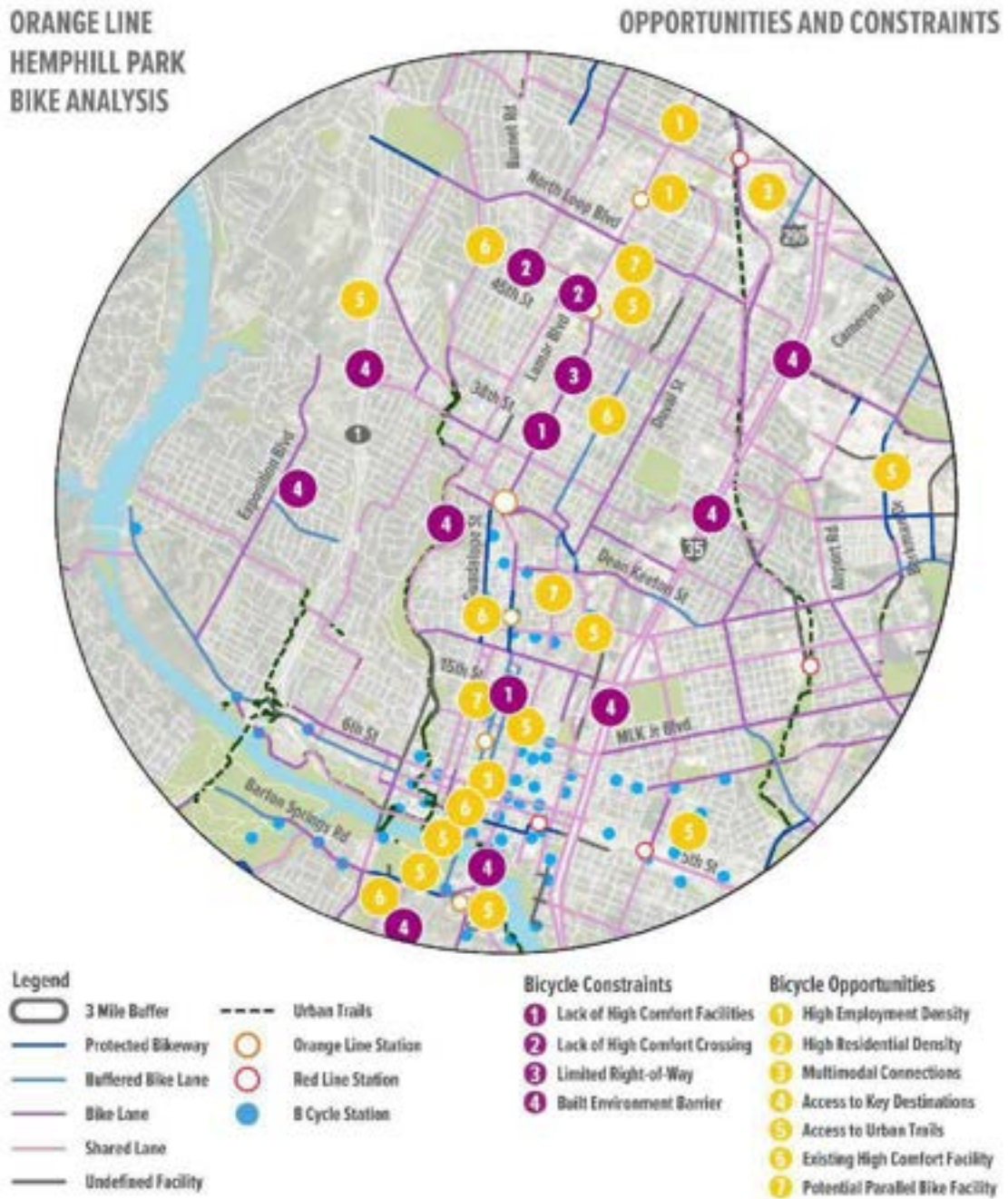


Figure 41: Hemphill Park (29th) Bicycle Opportunities and Constraints



UT Mall (24th) Station

The UT Mall (24th) Station is located at the Guadalupe St. and 22nd St. intersection adjacent to the University of Texas (UT) campus. The area contains a mixture of land uses but is primarily high density residential and the UT campus. There are a significant number of driveways along ancillary roadways and major crossroads that go through West Campus that impact pedestrian safety and connectivity. The area does contain bicycle and pedestrian connectivity, with minor gaps in both networks.

Existing and Planned Pedestrian Facilities Assessment

The UT Mall (24th) Station includes approximately 27.63 miles of existing sidewalks and gaps of 1.88 miles. Overall, this location has high pedestrian accessibility due to its campus setting and placement north of downtown. However, this setting also adds to its numerous driveways as commercial land uses are scattered throughout, causing safety concerns for pedestrians.

Table 25: UT Mall (24th) Pedestrian Metrics

Characteristic	within 1/2 Mile of Station
Existing Sidewalks (Miles)	27.6
Good Condition	--
Fair Condition	--
Poor Condition	--
Sidewalk Gaps (Miles)	1.9
Average Block Length (Feet)	367
Sidewalk to Roadway Ratio (%)	1.37
Trails (Miles)	0
# of Pedestrian Signalized Intersections	30
# of Signalized Midblock Crossings	0

% ADA Crosswalks relative to # of Intersections	--
Shared Mobility Services	
# of Bike Shares Kiosks	13
# of Car Share Location	--
# of Parking Spaces	--
Multimodal Connectivity	
# of Key Destinations	0
# of Local Bus Stops within 1/2 Mile	37
# of HCT Stations within 1/2 Mile	0

Pedestrian Opportunities and Constraints

A number of opportunities and constraints exist for the UT Mall (24th) Station. Constraints include access management/driveway issues along Guadalupe St. from W 27th St. to W Dean Keeton St. and lack of ADA crosswalks on W 24th St. (from Guadalupe St. to N. Lamar Blvd.). Opportunities include high density development in West Campus, Major destinations that surround the UT campus, and multimodal connections (B Cycle stations, walking paths through campus, transit connections, buffered bike lanes). Table 1 and Table 2 reference pedestrian opportunities and constraints along with the legend under each map.

Figure 42: UT Mall (24th) Pedestrian Facilities

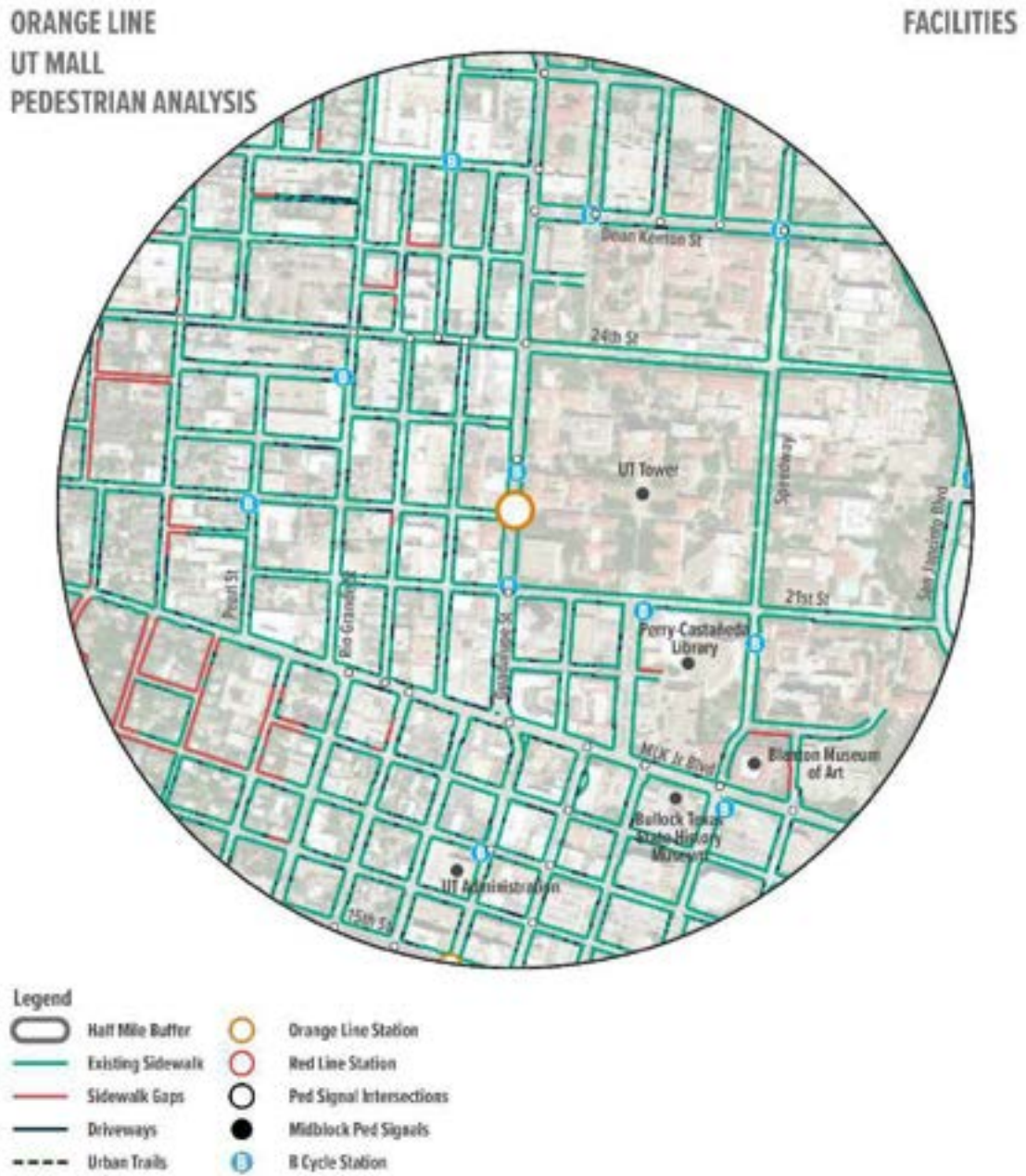
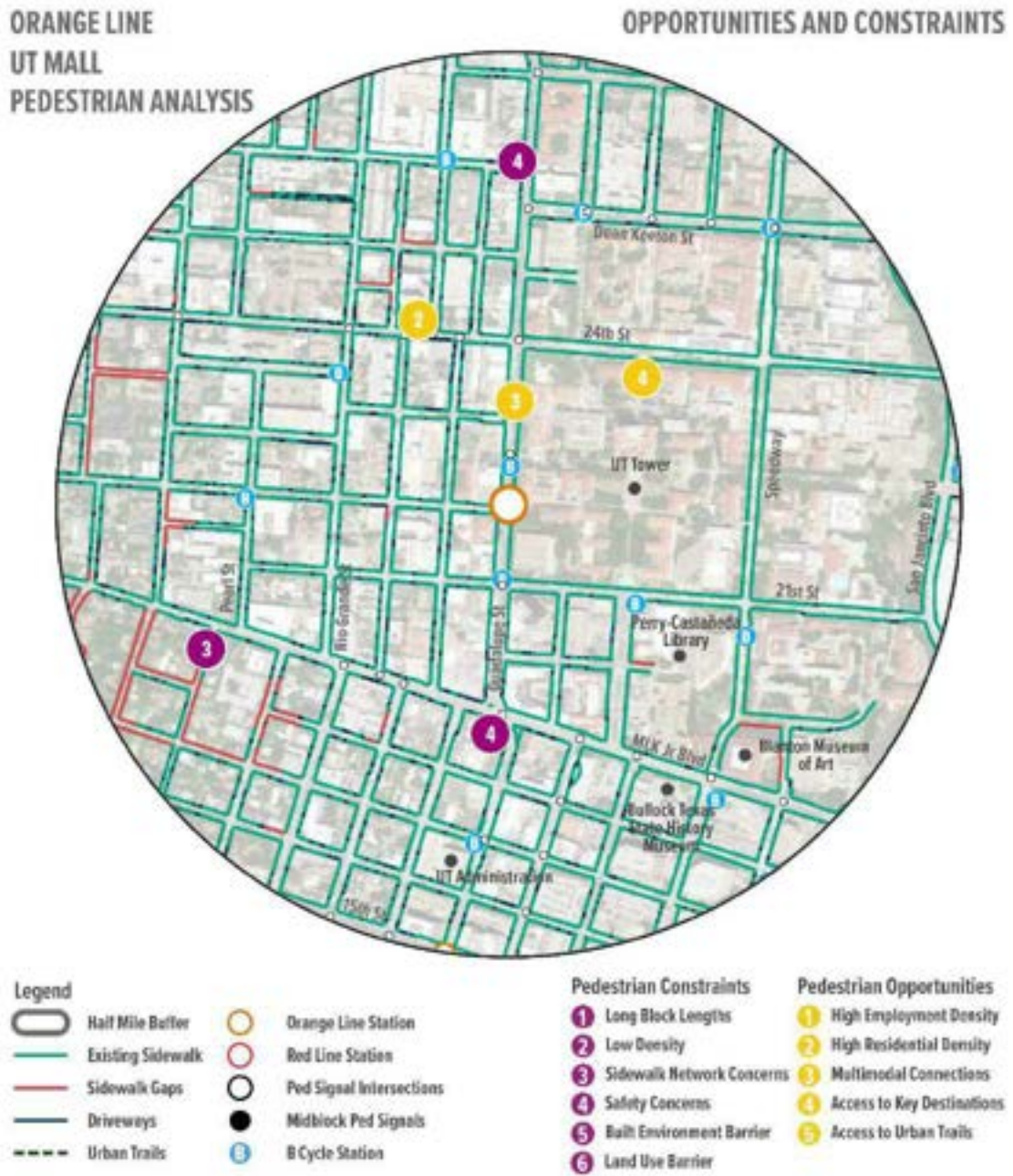


Figure 43: UT Mall (24th) Pedestrian Opportunities and Constraints



Existing and Planned Bicycle Facilities Assessment

There are approximately 126.2 miles of bicycle facilities within a 3-mile travel shed of the UT Mall (24th) Station. A mix of facility types can be found in the area due to its campus/urban setting, allowing users to avoid using low comfort/high stress infrastructure. Both Rio Grande St. and Guadalupe St. provide users with high comfort/low stress facilities, allowing them to bypass the UT campus area safely.

Table 26: UT Mall (24th) Bicycle Metrics

Bicycle Facilities	
Characteristic	within 3 Miles of Station
Existing Bicycle Facilities (Miles)	126.2
Bike Lanes	36.0
Shared Lanes	65.5
Protected Bikeway	7.4
Buffered Bike Lanes	9.7
Undefined	7.6
Planned Bicycle Facilities (Miles)	--
Bike Lanes	--
Shared Lanes	--
Protected Bikeway	--
Buffered Bike Lanes	--
Trails (Miles)	9.0
# of Bicycle Facility Gaps	10
Shared Mobility Services	
# of Bike Shares Kiosks	76
# of Car Share Location	--
# of Parking Spaces	--
Multimodal Connectivity	
# of Key Destinations	56
# of Local Bus Stops within 3 Miles	680

# of HCT Stations within 3 Miles	3
----------------------------------	---

Bicycle Opportunities and Constraints

A number of opportunities and constraints exist for the UT Mall (24th) Station. UT Mall (24th) station provides direct access to University of Texas campus, but does have constraints reaching the station including crossing of Shoal Creek and Lamar Blvd. Opportunities include the connection of the high comfort protected bikeway on Rio Grande, west of the station and connections for those attending University sporting events via high comfort facilities through campus. Table 3 and Table 4 reference bicycle opportunities and constraints along with the legend under each map.

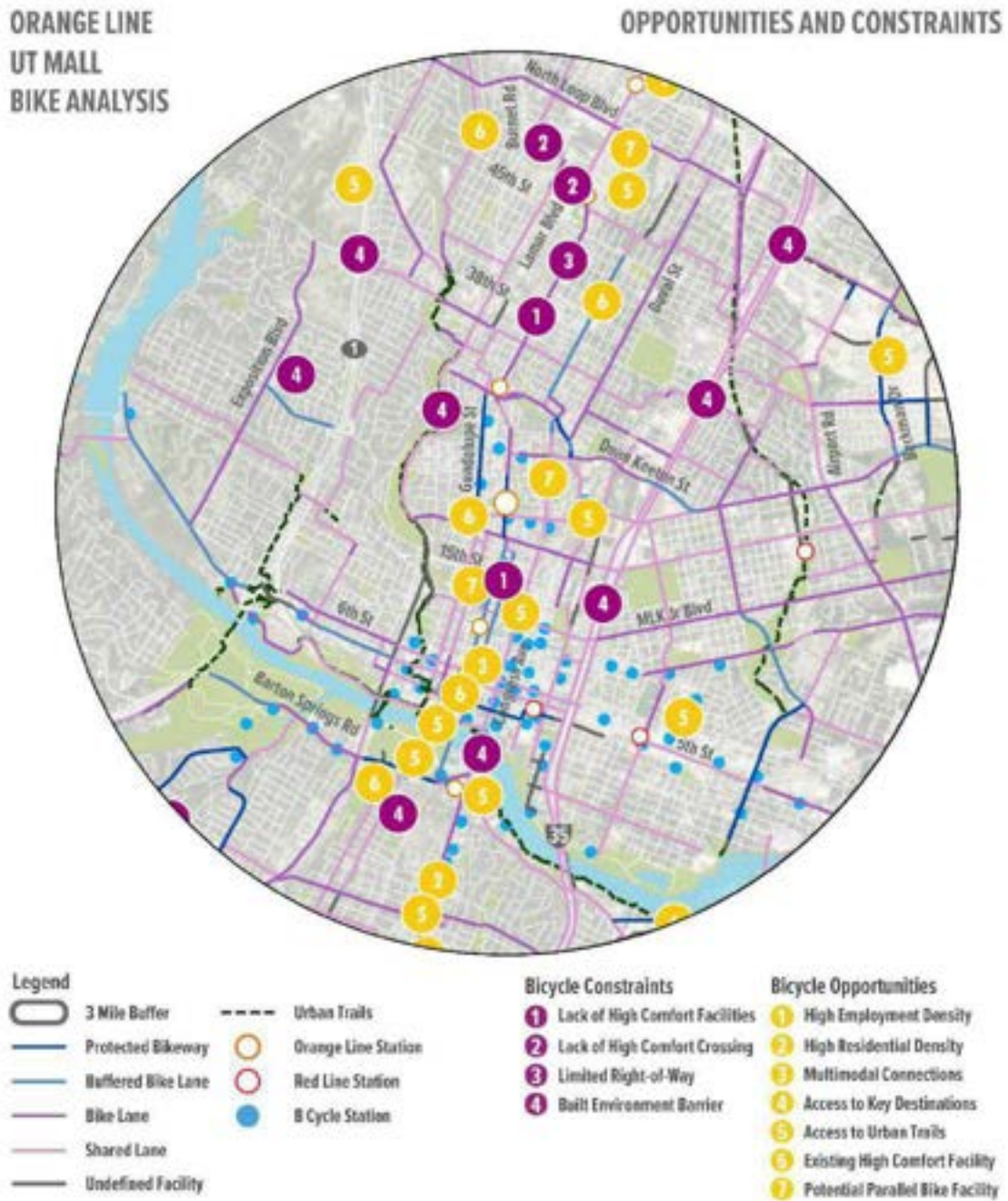
Figure 44: UT Mall (24th) Bicycle Facilities

ORANGE LINE
UT MALL
BIKE ANALYSIS

FACILITIES



Figure 45: UT Mall (24th) Bicycle Opportunities and Constraints



Capitol West Station

The Capitol West Station is located along Guadalupe St. and W. 15th St. The area consists of primarily medium to high density commercial land use as it is adjacent to the Texas State Capitol. The location contains bicycle and pedestrian infrastructure; however, gaps do exist for both forms of active transportation.

Existing and Planned Pedestrian Facilities Assessment

The Capitol West Station includes approximately 29.71 miles of existing sidewalks and gaps of about 2.45 miles. Overall, this location has above average pedestrian accessibility due to its downtown setting and grid street network.

Table 27: Capitol West Pedestrian Metrics

Characteristic	within ½ Mile of Station
Existing Sidewalks (Miles)	29.7
Good Condition	--
Fair Condition	--
Poor Condition	--
Sidewalk Gaps (Miles)	2.5
Average Block Length (Feet)	366
Sidewalk to Roadway Ratio (%)	1.36
Trails (Miles)	0
# of Pedestrian Signalized Intersections	50
# of Signalized Midblock Crossings	0
% ADA Crosswalks relative to # of Intersections	--
Shared Mobility Services	
# of Bike Shares Kiosks	15
# of Car Share Location	--

# of Parking Spaces	--
Multimodal Connectivity	
# of Key Destinations	1
# of Local Bus Stops within ½ Mile	30
# of HCT Stations within ½ Mile	0

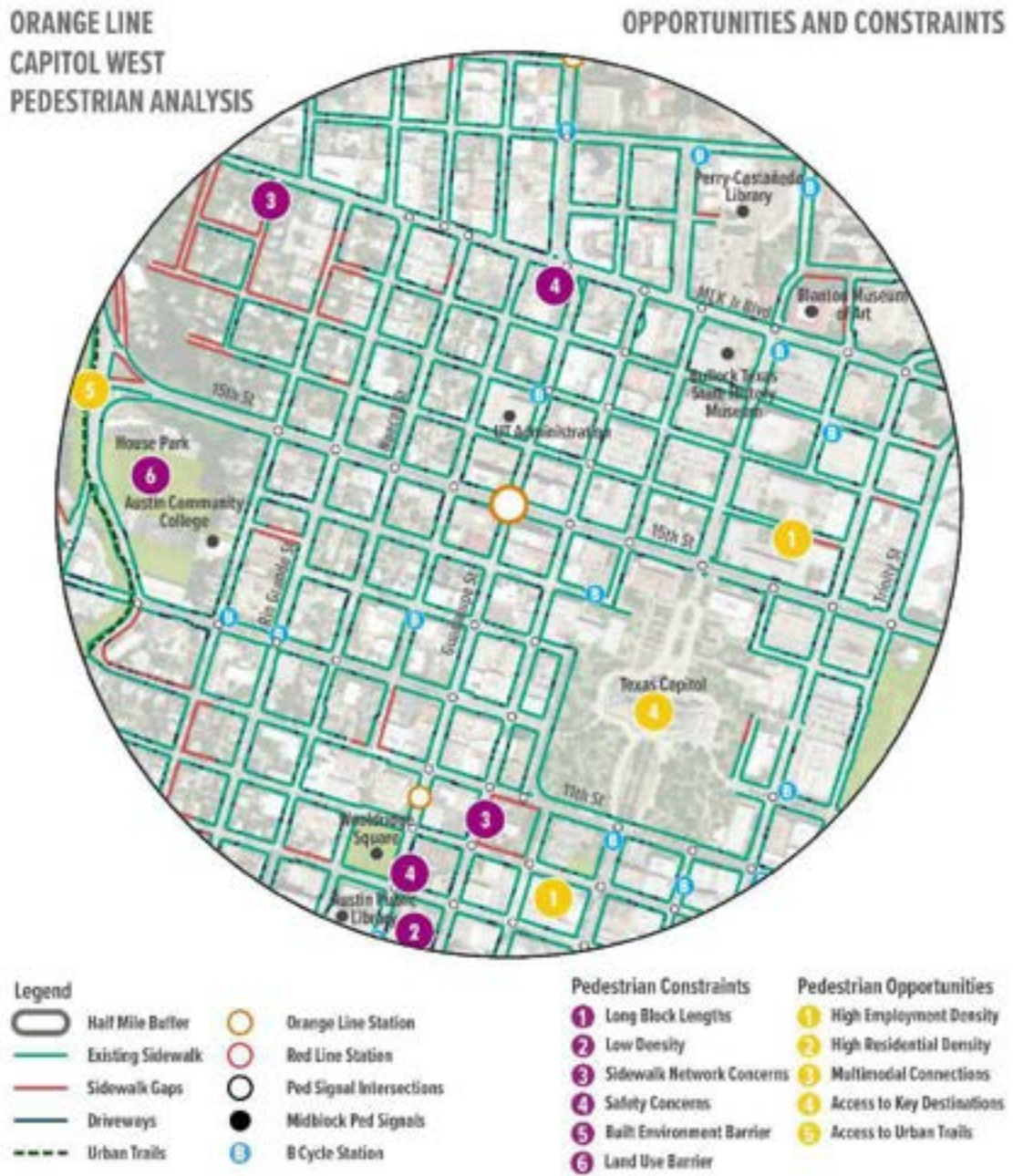
Pedestrian Opportunities and Constraints

Many opportunities and constraints exist for the Capitol West Station. Constraints include access management/driveway issues along MLK Blvd. from San Gabriel St. to Guadalupe St., large facilities without pedestrian cut throughs (ACC/football field), and sidewalk gaps along MLK Blvd. from Vance Cir. To West Ave. Opportunities include major destinations (State Capitol), high employment density, and trail connections (Shoal Creek Hike and Bike Trail). Table 1 and Table 2 reference pedestrian opportunities and constraints along with the legend under each map.

Figure 46: Capitol West Pedestrian Facilities



Figure 47: Capitol West Pedestrian Opportunities and Constraints



Existing and Planned Bicycle Facilities Assessment

There are approximately 126.8 miles of bicycle facilities within a 3-mile travel shed of the Capitol West Station with a mix of bicycle facility types (due to its downtown setting), providing users options to avoid low comfort/high stress facilities. There currently are a moderate number of gaps in the network, however, improvements to facility type could greatly improve regional connectivity.

Table 28: Capitol West Bicycle Metrics

Bicycle Facilities	
Characteristic	within 3 Miles of Station
Existing Bicycle Facilities (Miles)	126.8
Bike Lanes	37.4
Shared Lanes	63.8
Protected Bikeway	8.0
Buffered Bike Lanes	10.1
Undefined	7.4
Planned Bicycle Facilities (Miles)	--
Bike Lanes	--
Shared Lanes	--
Protected Bikeway	--
Buffered Bike Lanes	--
Trails (Miles)	9.3
# of Bicycle Facility Gaps	9
Shared Mobility Services	
# of Bike Shares Kiosks	77
# of Car Share Location	--
# of Parking Spaces	--
Multimodal Connectivity	
# of Key Destinations	56
# of Local Bus Stops within 3 Miles	686

# of HCT Stations within 3 Miles	3
----------------------------------	---

Bicycle Opportunities and Constraints

Capitol West Station is most near the state capitol building and the surrounding state offices. Constraints include 15th St. which lacks bicycle facilities and is a high-speed corridor, along with challenges faced in crossing I-35 in limited areas. Opportunities include, connection to the state capitol via high comfort facilities, and providing northern access to downtown amenities. Table 3 and Table 4 reference bicycle opportunities and constraints along with the legend under each map.

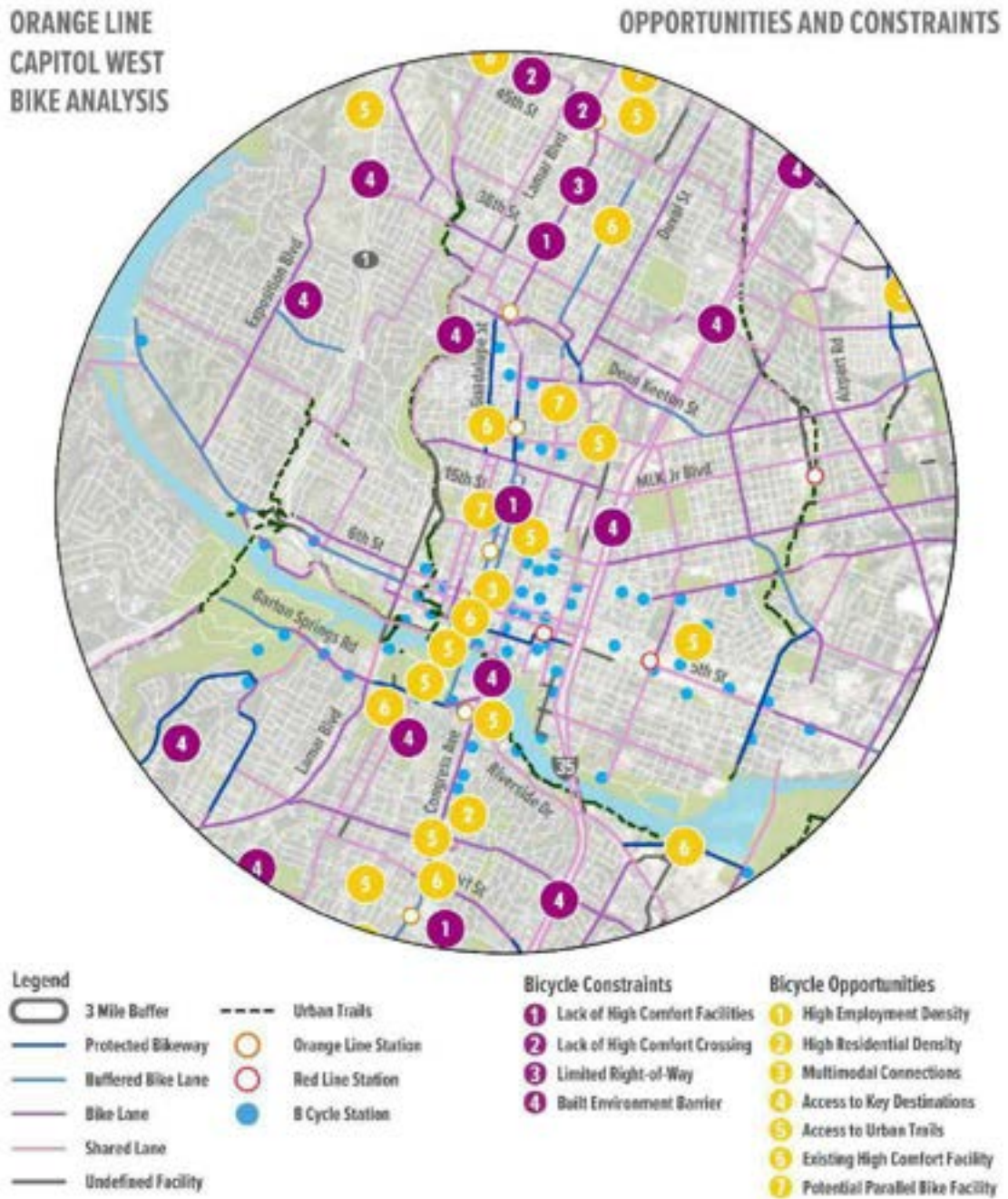
Figure 48: Capitol West Bicycle Facilities

ORANGE LINE
CAPITOL WEST
BIKE ANALYSIS

FACILITIES



Figure 49: Capitol West Bicycle Opportunities and Constraints



Wooldridge Square Station

The Wooldridge Square Station is located along Guadalupe St. between W. 11th St. and W 10th St. The area consists of primarily medium to high density commercial land use as it is adjacent to the Texas State Capitol. The location contains bicycle and pedestrian infrastructure; however, gaps do exist (more so regarding bicycle facilities).

Existing and Planned Pedestrian Facilities Assessment

The Wooldridge Square Station includes approximately 32.03 miles of existing sidewalks and gaps of about 1.29 miles. Overall, this location has above average pedestrian accessibility due to its downtown setting and grid street network.

Table 29: Wooldridge Square Pedestrian Metrics

Characteristic	within 1/2 Mile of Station
Existing Sidewalks (Miles)	32.0
Good Condition	--
Fair Condition	--
Poor Condition	--
Sidewalk Gaps (Miles)	1.3
Average Block Length (Feet)	371
Sidewalk to Roadway Ratio (%)	1.43
Trails (Miles)	0.10
# of Pedestrian Signalized Intersections	79
# of Signalized Midblock Crossings	0
% ADA Crosswalks relative to # of Intersections	--
Shared Mobility Services	
# of Bike Shares Kiosks	23

# of Car Share Location	--
# of Parking Spaces	--
Multimodal Connectivity	
# of Key Destinations	3
# of Local Bus Stops within 1/2 Mile	53
# of HCT Stations within 1/2 Mile	0

Pedestrian Opportunities and Constraints

A number of opportunities and constraints exist for the Wooldridge Square Station. Constraints include sidewalk gaps along W 11th St. from Lavaca St. to Colorado St. and access management/driveway issues along Guadalupe St. (Bank of America). Opportunities include high employment density, major destinations near downtown, and trail connections (Shoal Creek Hike and Bike Trail). Table 1 and Table 2 reference pedestrian opportunities and constraints along with the legend under each map.

Figure 50: Wooldridge Square Pedestrian Facilities

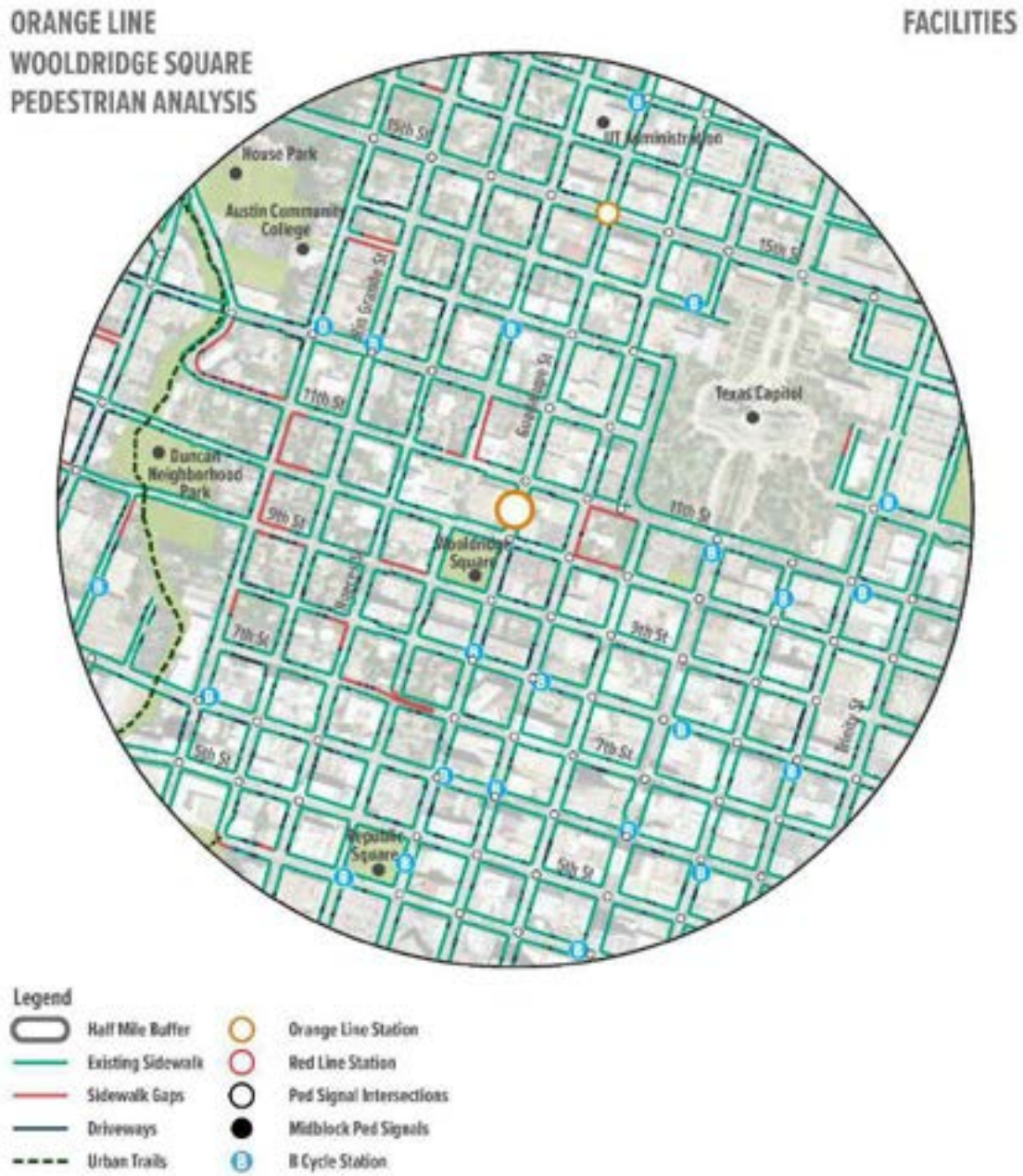
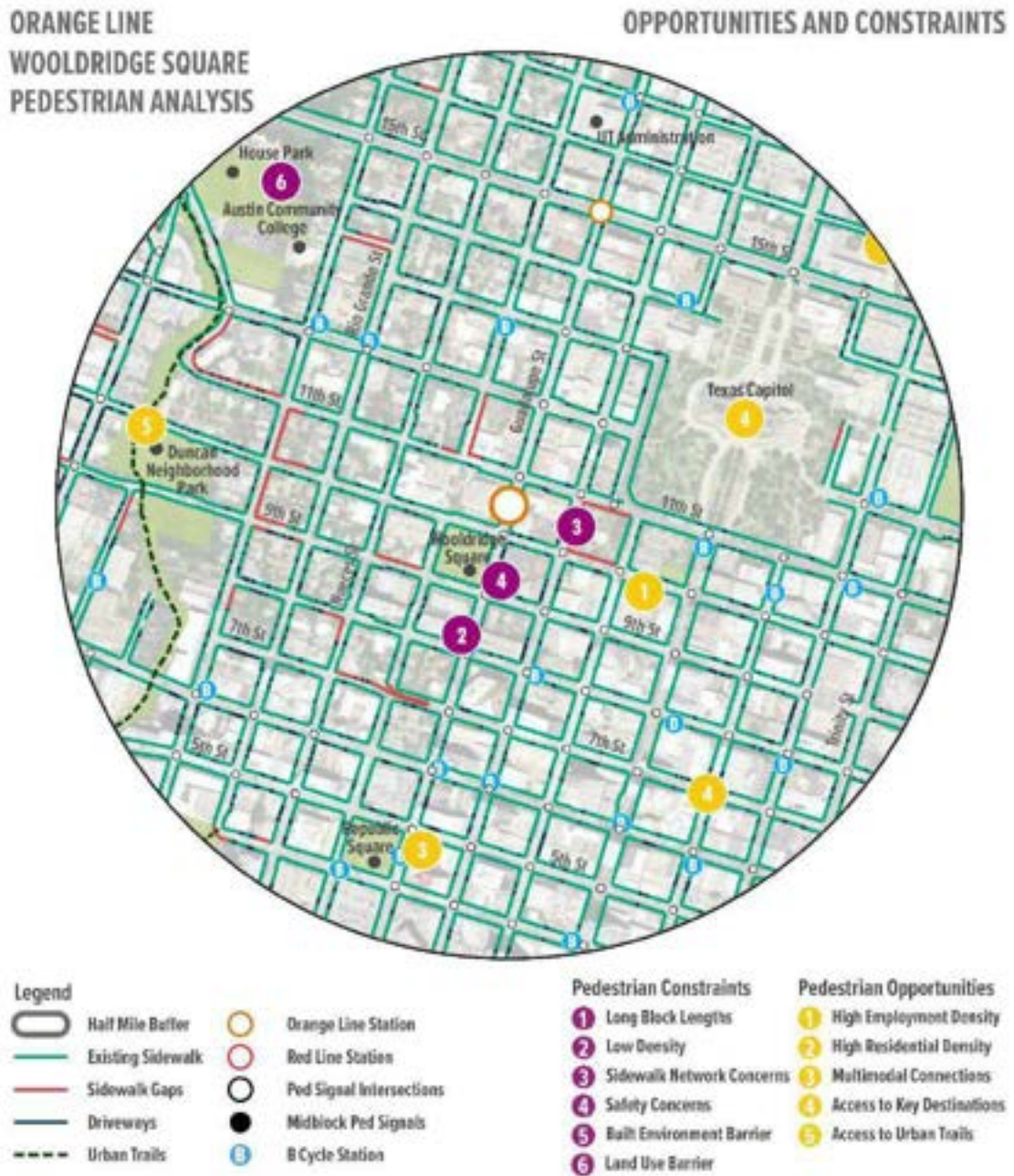


Figure 51: Wooldridge Square Pedestrian Opportunities and Constraints



Existing and Planned Bicycle Facilities Assessment

There are approximately 125 miles of bicycle facilities within a 3-mile travel shed of the Wooldridge Square Station with a mix of bicycle facility types (due to its downtown setting), providing users options to avoid low comfort/high stress facilities. There currently are a moderate number of gaps in the network, however, improvements to facility type could greatly improve regional connectivity. Natural (Ladybird Lake) and physical (State Capitol) barriers constrain user facility choice in some areas of the travel shed.

Table 30: Wooldridge Square Bicycle Metrics

Bicycle Facilities	
Characteristic	within 3 Miles of Station
Existing Bicycle Facilities (Miles)	125.0
Bike Lanes	37.9
Shared Lanes	62.4
Protected Bikeway	6.9
Buffered Bike Lanes	10.0
Undefined	7.8
Planned Bicycle Facilities (Miles)	--
Bike Lanes	--
Shared Lanes	--
Protected Bikeway	--
Buffered Bike Lanes	--
Trails (Miles)	8.8
# of Bicycle Facility Gaps	9
Shared Mobility Services	
# of Bike Shares Kiosks	77
# of Car Share Location	--
# of Parking Spaces	--
Multimodal Connectivity	

# of Key Destinations	57
# of Local Bus Stops within 3 Miles	687
# of HCT Stations within 3 Miles	3

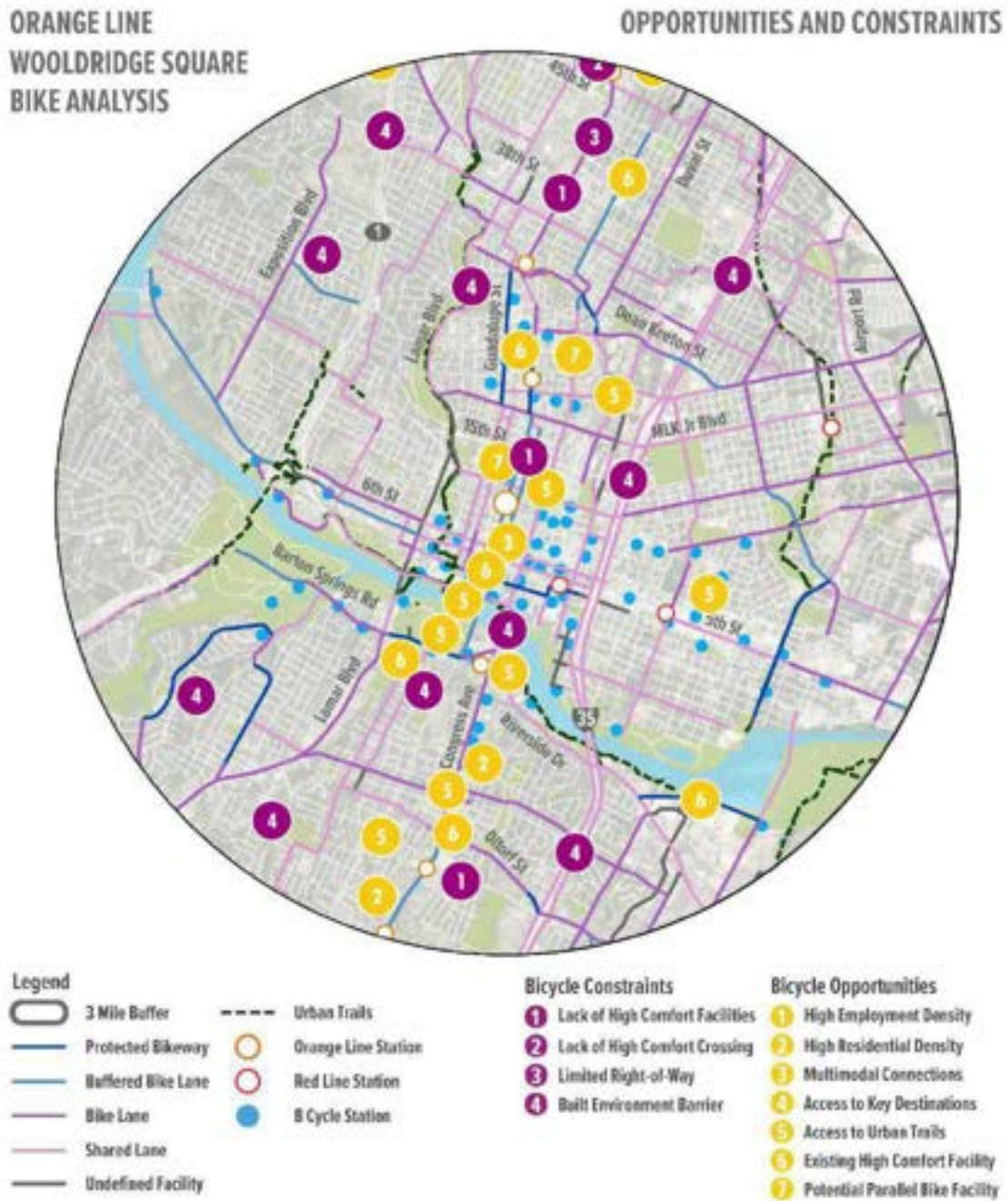
Bicycle Opportunities and Constraints

A number of opportunities and constraints exist for the Wooldridge Square Station. High employment density and a gridded street network provide opportunity for connections via bicycle, while the protected bikeway on 3rd street provides east/west connections by bicycle. Constraints include connection issues to downtown for westbound movements due to I-35, and crossing high speed roadways such as 15th St. to access final destinations. Table 3 and Table 4 reference bicycle opportunities and constraints along with the legend under each map.

Figure 52: Wooldridge Square Bicycle Facilities



Figure 53: Wooldridge Square Bicycle Opportunities and Constraints



Republic Square Station

The Republic Square Station is in downtown Austin along Guadalupe St. between W. 5th St. and W. 6th St. The area is a mixture of high density commercial and residential land uses and contains a high level of active transportation connectivity. Due to its downtown location, the area has one of the most complete bicycle and pedestrian networks. Republic Square is currently the CapMetro transit mall, so the area also contains a high level of transit connectivity to MetroRapid and MetroBus Local routes.

Existing and Planned Pedestrian Facilities Assessment

The Republic Square Station includes approximately 30.15 miles of existing sidewalks and gaps of about 1.07 miles. Overall, this location has above average pedestrian accessibility due to its downtown setting and grid street network.

Table 31: Republic Square Pedestrian Metrics

Characteristic	within ½ Mile of Station
Existing Sidewalks (Miles)	30.1
Good Condition	--
Fair Condition	--
Poor Condition	--
Sidewalk Gaps (Miles)	1.1
Average Block Length (Feet)	371
Sidewalk to Roadway Ratio (%)	1.52
Trails (Miles)	0.9
# of Pedestrian Signalized Intersections	85
# of Signalized Midblock Crossings	0
% ADA Crosswalks relative to # of Intersections	--
Shared Mobility Services	

# of Bike Shares Kiosks	25
# of Car Share Location	--
# of Parking Spaces	--
Multimodal Connectivity	
# of Key Destinations	10
# of Local Bus Stops within ½ Mile	44
# of HCT Stations within ½ Mile	1

Pedestrian Opportunities and Constraints

Many opportunities and constraints exist for the Republic Square Station. Constraints include construction sites along W. 5th St., abandoned buildings along Guadalupe St. (John Henry Faulk Library, Austin Public Library System), and limited storefronts/retail space. Opportunities include easy local transit and/or HCT connections (major downtown transit mall), high density population and employment, and major downtown destinations (convention center, 4th street shopping, Redline connections, etc.). Table 1 and Table 2 reference pedestrian opportunities and constraints along with the legend under each map.

Figure 54: Republic Square Pedestrian Facilities

ORANGE LINE
REPUBLIC SQUARE
PEDESTRIAN ANALYSIS

FACILITIES



- Legend
-  Half Mile Buffer
 -  Existing Sidewalk
 -  Sidewalk Gaps
 -  Driveways
 -  Urban Trails
 -  Orange Line Station
 -  Red Line Station
 -  Ped Signal Intersections
 -  Midblock Ped Signals
 -  B Cycle Station

Existing and Planned Bicycle Facilities Assessment

There are approximately 123.2 miles of bicycle facilities within a 3-mile travel shed of the Republic Square Station with a mix of bicycle facility types (due to its downtown setting), providing users options to avoid low comfort/high stress facilities. There currently are a moderate number of gaps in the network, however, improvements to facility type could greatly improve regional connectivity. Natural (Ladybird Lake) and physical (State Capitol) barriers constrain user facility choice in some areas of the travel shed. This station location is also in close proximity to the downtown rail station and is connected via high-quality facilities.

Table 32: Republic Square Bicycle Metrics

Bicycle Facilities	
Characteristic	within 3 Miles of Station
Existing Bicycle Facilities (Miles)	123.2
Bike Lanes	36.9
Shared Lanes	60.6
Protected Bikeway	6.9
Buffered Bike Lanes	11.7
Undefined	7.2
Planned Bicycle Facilities (Miles)	--
Bike Lanes	--
Shared Lanes	--
Protected Bikeway	--
Buffered Bike Lanes	--
Trails (Miles)	8.8
# of Bicycle Facility Gaps	9
Shared Mobility Services	
# of Bike Shares Kiosks	77
# of Car Share Location	--

# of Parking Spaces	--
Multimodal Connectivity	
# of Key Destinations	53
# of Local Bus Stops within 3 Miles	684
# of HCT Stations within 3 Miles	3

Bicycle Opportunities and Constraints

As the station serving the central downtown area, Republic Square Station is an important destination for many people seeking access to jobs and other important downtown amenities. Opportunities include connections to the protected bikeway along 3rd St. and connections to the Ann and Roy Butler Hike and Bike trail. Connections can also be made to Huston – Tillotson University in east Austin. Constraints include limited access to the station due to I-35 and crossing of wide or high-speed corridors in the downtown area. Table 3 and Table 4 reference bicycle opportunities and constraints along with the legend under each map.

Figure 56: Republic Square Bicycle Facilities

ORANGE LINE
REPUBLIC SQUARE
BIKE ANALYSIS

FACILITIES

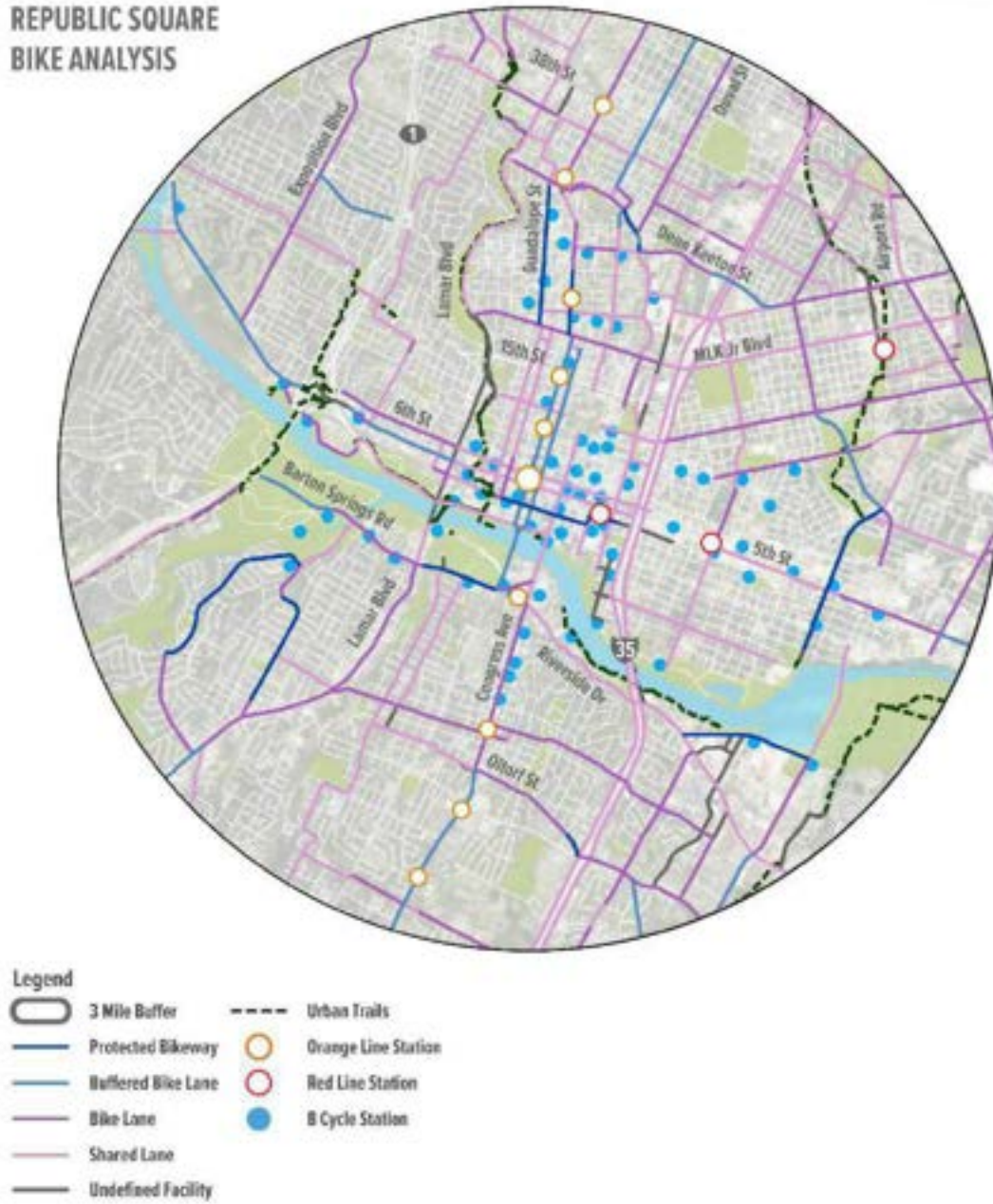
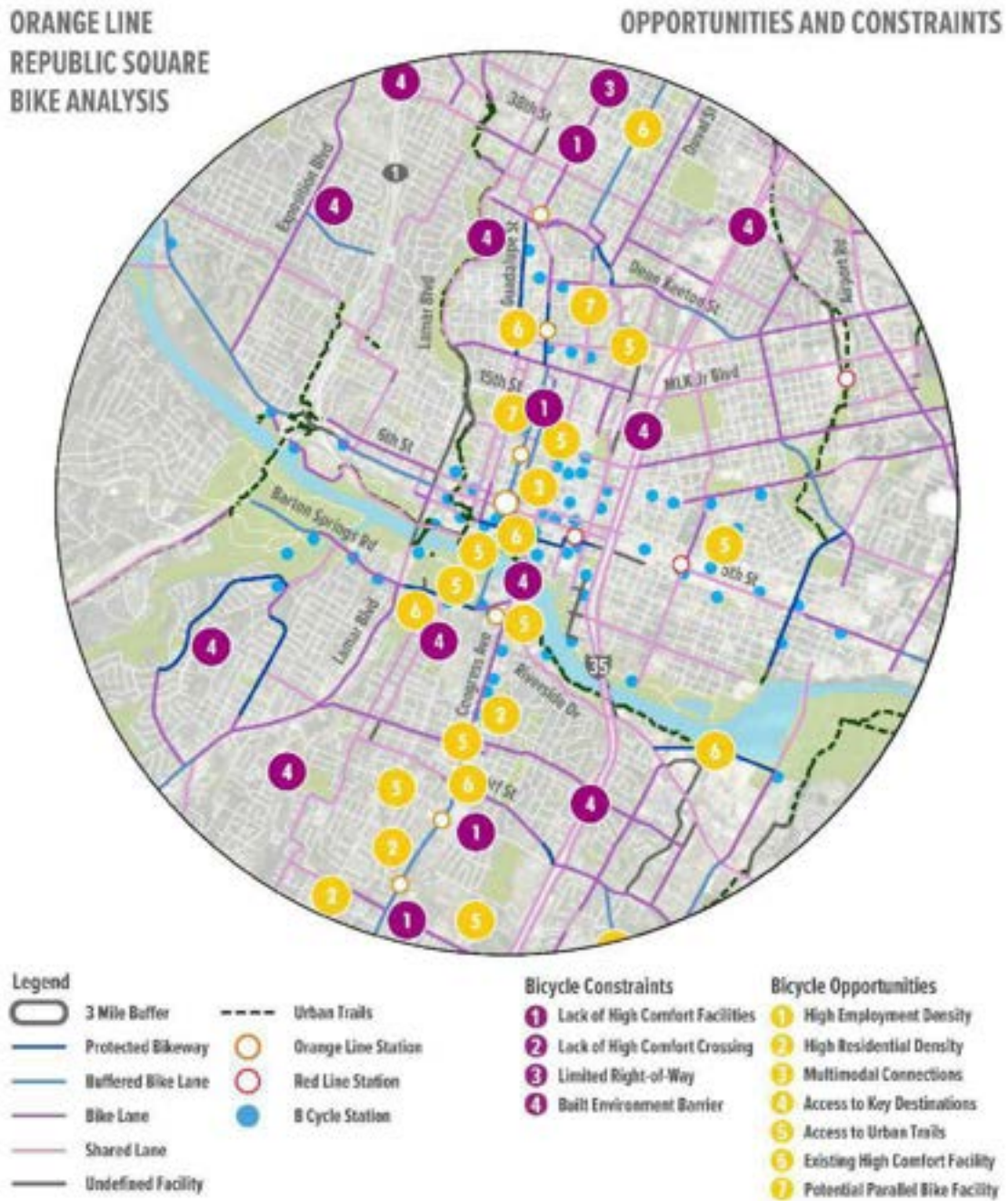


Figure 57: Republic Square Bicycle Opportunities and Constraints



Auditorium Shores Station

The Auditorium Shores Station is located on E. Riverside Dr. between S. Congress Ave. and S. 1st St. The station area contains primarily medium to high density residential development, with some commercial land use included. The area contains bicycle and pedestrian infrastructure, including connections to the Ann and Roy Butler hike and bike trail. There are gaps in the bicycle network heading south from Timbercreek Apartments on S. 1st St. The area provides connectivity to MetroBus Local routes 7, 10, and 20.

Existing and Planned Pedestrian Facilities Assessment

The Auditorium Shores Station includes approximately 10.06 miles of existing sidewalk and gaps of 4.19 miles. Overall, the location has moderate to adequate pedestrian accessibility, especially along arterials such as Riverside Dr., S. Congress Ave., and S 1st. St. The area does contain long block lengths along these roadways as the corridor(s) approach the lake/downtown.

Table 33: Auditorium Shores Pedestrian Metrics

Characteristic	within ½ Mile of Station
Existing Sidewalks (Miles)	10.0
Good Condition	--
Fair Condition	--
Poor Condition	--
Sidewalk Gaps (Miles)	4.2
Average Block Length (Feet)	409
Sidewalk to Roadway Ratio (%)	1.17
Trails (Miles)	0.5
# of Pedestrian Signalized Intersections	20
# of Signalized Midblock Crossings	2

% ADA Crosswalks relative to # of Intersections	--
Shared Mobility Services	
# of Bike Shares Kiosks	11
# of Car Share Location	--
# of Parking Spaces	--
Multimodal Connectivity	
# of Key Destinations	2
# of Local Bus Stops within ½ Mile	28
# of HCT Stations within ½ Mile	0

Pedestrian Opportunities and Constraints

Many opportunities and constraints exist for the Auditorium Shores Station. Constraints include access management/driveway issues along S. Congress Ave. from Academy Dr. to Riverside Dr. and long block lengths. Opportunities include trail connections (Austin Hike and Bike Trail), east local transit and/or HCT connections (routes 801, 7, and 20), and major destinations (Long Center/convention center). Table 1 and Table 2 reference pedestrian opportunities and constraints along with the legend under each map.

Figure 58: Auditorium Shores Pedestrian Facilities

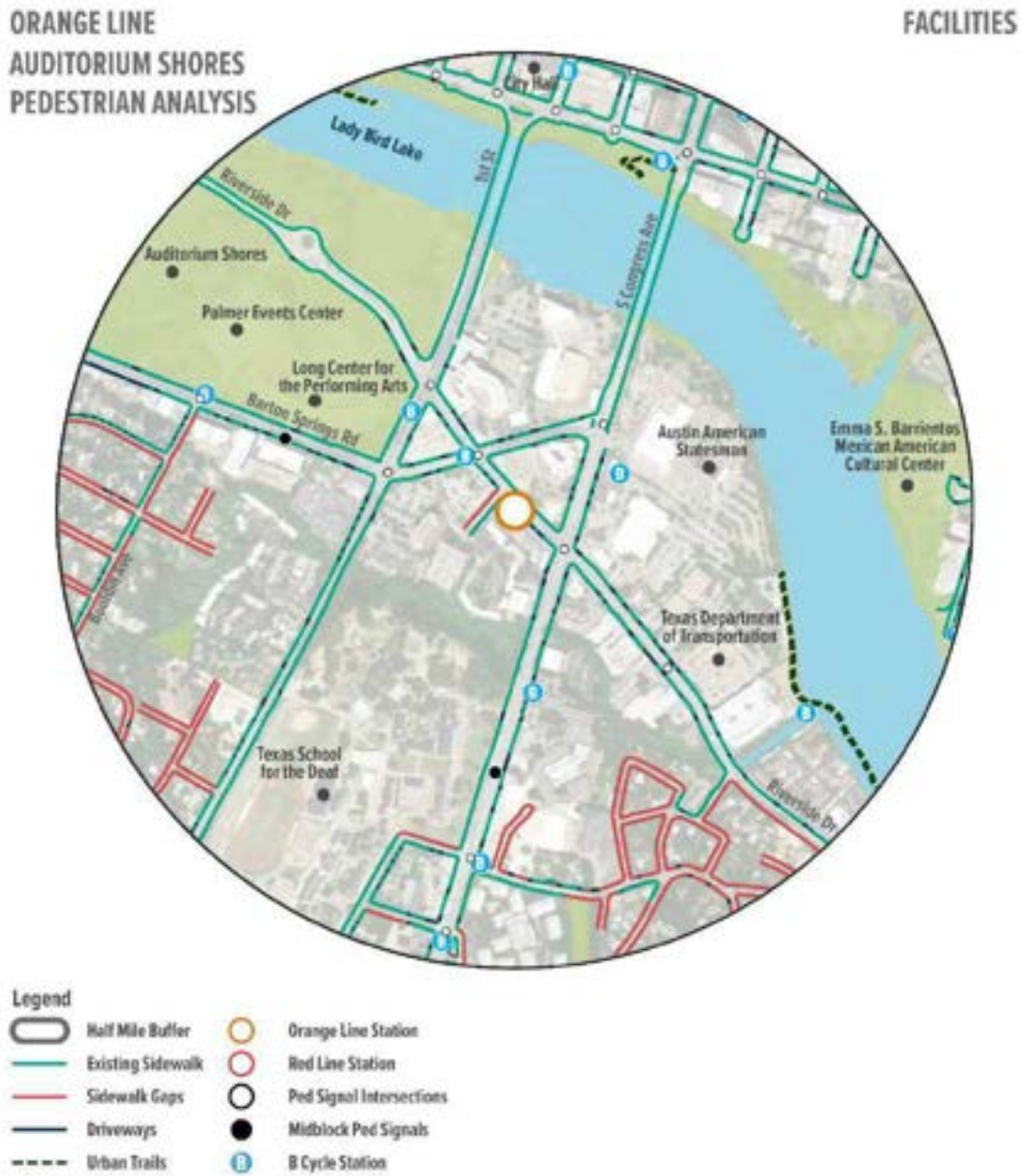
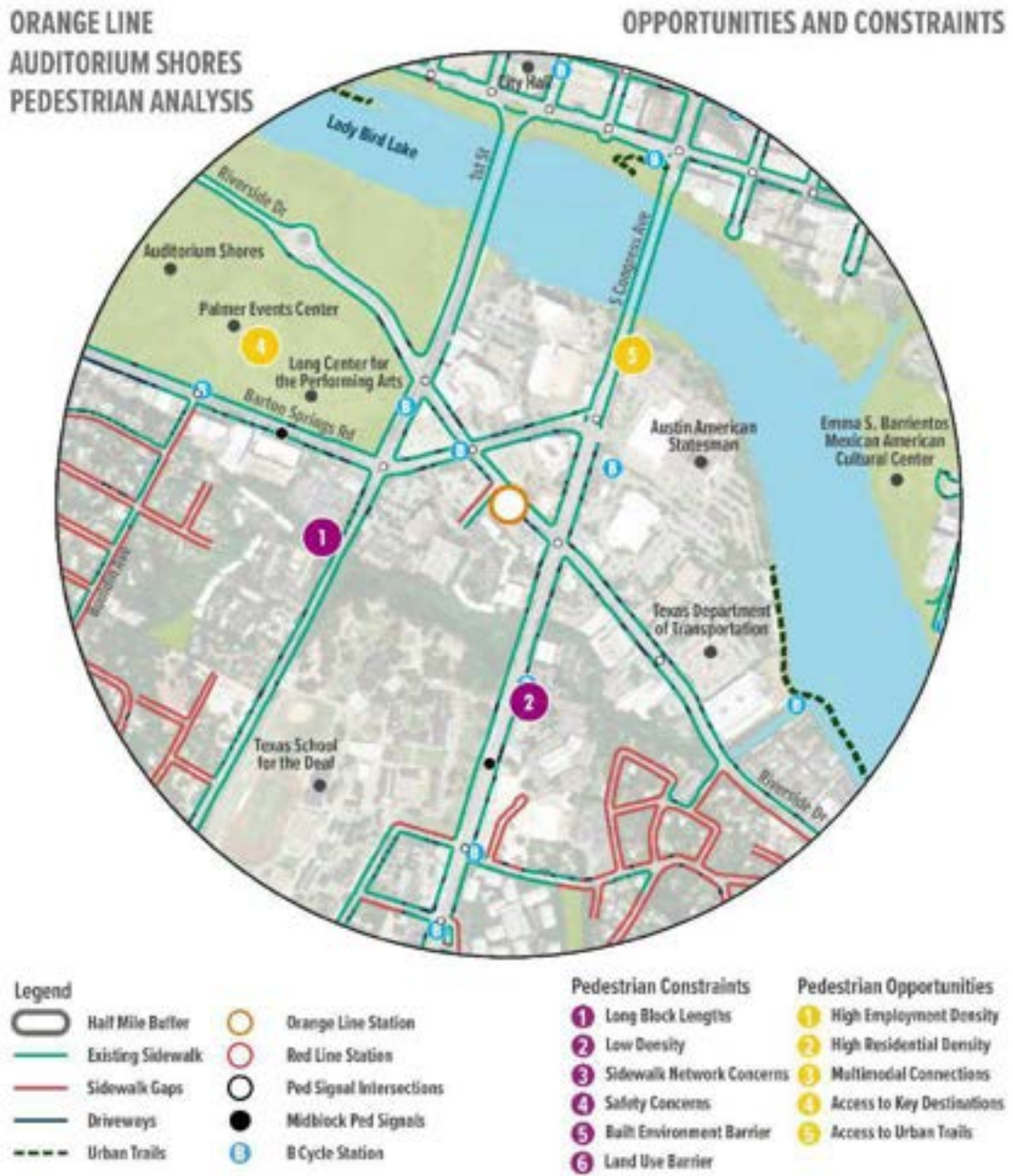


Figure 59: Auditorium Shores Pedestrian Opportunities and Constraints



Existing and Planned Bicycle Facilities Assessment

There are approximately 116.6 miles of bicycle facilities within a 3-mile travel shed of the Auditorium Shores Station with a mix of bicycle facility types (due to its proximity to downtown and urban trails), providing users options to avoid low comfort/high stress facilities. Gaps are limited within the travel shed, however, facility type improvement could positively impact regional connectivity.

Table 34: Auditorium Shores Bicycle Metrics

Bicycle Facilities	
Characteristic	within 3 Miles of Station
Existing Bicycle Facilities (Miles)	116.6
Bike Lanes	33.2
Shared Lanes	56.8
Protected Bikeway	7.2
Buffered Bike Lanes	11.6
Undefined	7.8
Planned Bicycle Facilities (Miles)	--
Bike Lanes	--
Shared Lanes	--
Protected Bikeway	--
Buffered Bike Lanes	--
Trails (Miles)	9.4
# of Bicycle Facility Gaps	9
Shared Mobility Services	
# of Bike Shares Kiosks	76
# of Car Share Location	--
# of Parking Spaces	--
Multimodal Connectivity	
# of Key Destinations	45
# of Local Bus Stops within 3 Miles	641

# of HCT Stations within 3 Miles	3
----------------------------------	---

Bicycle Opportunities and Constraints

Many opportunities and constraints exist for the Auditorium Shores Station. Constraints include lack of facilities, connectivity issues, and built environment accessibility barriers. Opportunities include high quality existing facilities, access to key destinations, shared mobility connections, trail connections, connectivity to transit, and high-density development. Table 3 and Table 4 reference bicycle opportunities and constraints along with the legend under each map.

Figure 60: Auditorium Shores Bicycle Facilities

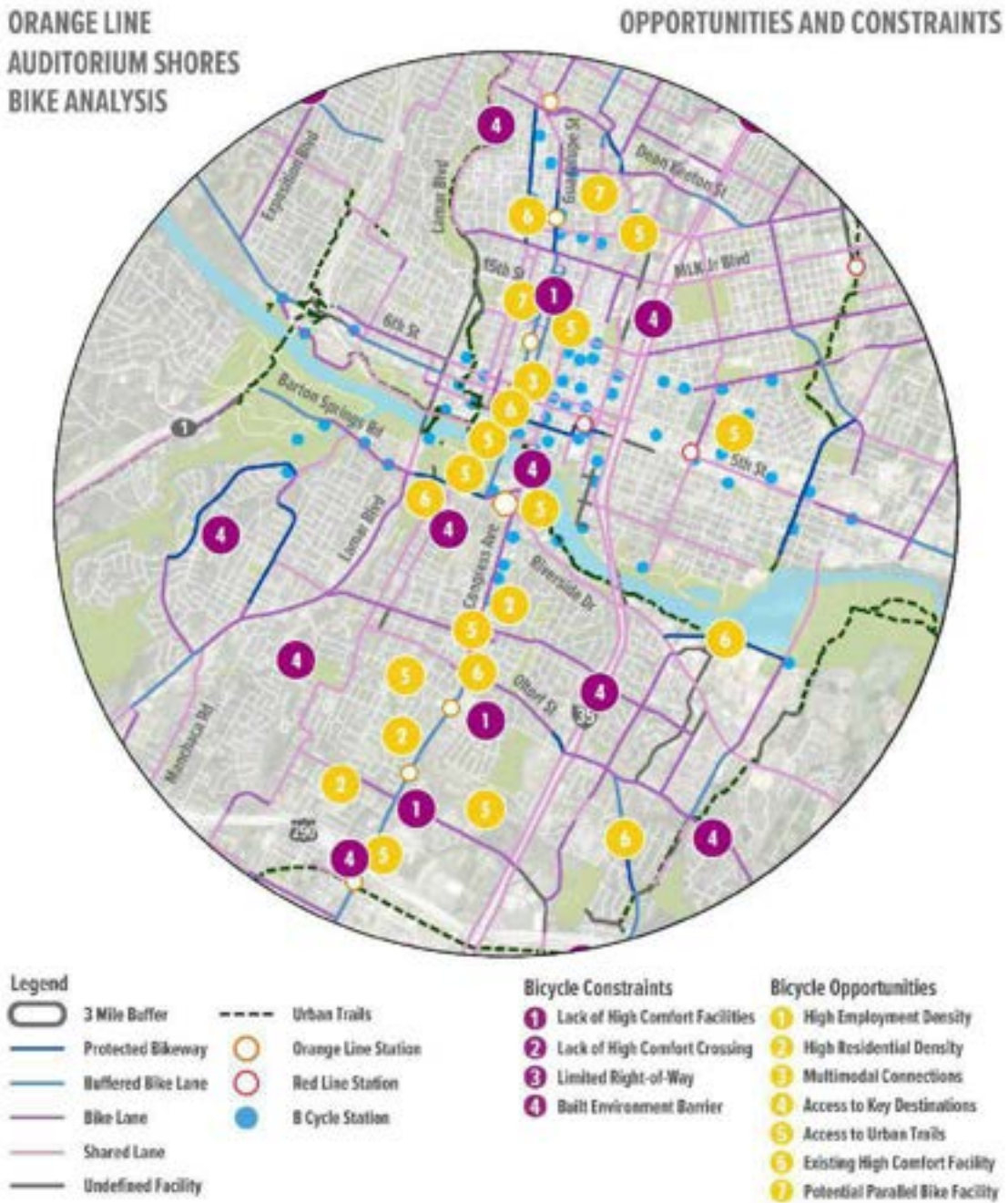
ORANGE LINE
AUDITORIUM SHORES
BIKE ANALYSIS

FACILITIES



- Legend
- 3 Mile Buffer
 - Protected Bikeway
 - Buffered Bike Lane
 - Bike Lane
 - Shared Lane
 - Undefined Facility
 - Urban Trails
 - Orange Line Station
 - Red Line Station
 - B Cycle Station

Figure 61: Auditorium Shores Bicycle Opportunities and Constraints



SOCO Station

The SOCO Station is located along S Congress Ave. between Annie St. and Mary St. The area contains a mixture of medium to high density residential and commercial land use and is a premier attraction in Austin. The area contains high active transportation connectivity, including wide pedestrian walkways, bicycle lanes, and multiple pedestrian crossings. The residential area surrounding the station location provides safe space for active modes.

Existing and Planned Pedestrian Facilities Assessment

The SOCO Station includes exactly 14.64 miles of existing sidewalk and gaps of 17.48 miles. Majority of the gaps exist in neighborhood settings surrounding the S. Congress Ave. corridor. Roadways such as S. Congress Ave. and S. Lamar Blvd. contain adequate pedestrian connectivity/accessibility, due to their urban setting and placement.

Table 35: SOCO Pedestrian Metrics

Characteristic	within 1/2 Mile of Station
Existing Sidewalks (Miles)	14.6
Good Condition	--
Fair Condition	--
Poor Condition	--
Sidewalk Gaps (Miles)	17.5
Average Block Length (Feet)	381
Sidewalk to Roadway Ratio (%)	0.76
Trails (Miles)	0
# of Pedestrian Signalized Intersections	15
# of Signalized Midblock Crossings	3
% ADA Crosswalks relative to # of Intersections	--

Shared Mobility Services	
# of Bike Shares Kiosks	3
# of Car Share Location	--
# of Parking Spaces	--
Multimodal Connectivity	
# of Key Destinations	0
# of Local Bus Stops within 1/2 Mile	17
# of HCT Stations within 1/2 Mile	0

Pedestrian Opportunities and Constraints

A number of opportunities and constraints exist for the SOCO Station. Constraints include sidewalk gaps along Eva St., access management/driveway issues along S. Congress Ave. from W. Annie St. to W. Mary St. (numerous parking lots), and long block lengths along S. Congress Ave. from College Ave. to W. Oltorf St. Opportunities include high densities (both employment and residential), major destinations, and easy local transit and/or HCT connections (routes 801 and 1). Table 1 and Table 2 reference pedestrian opportunities and constraints along with the legend under each map.

Figure 62: SOCO Pedestrian Facilities

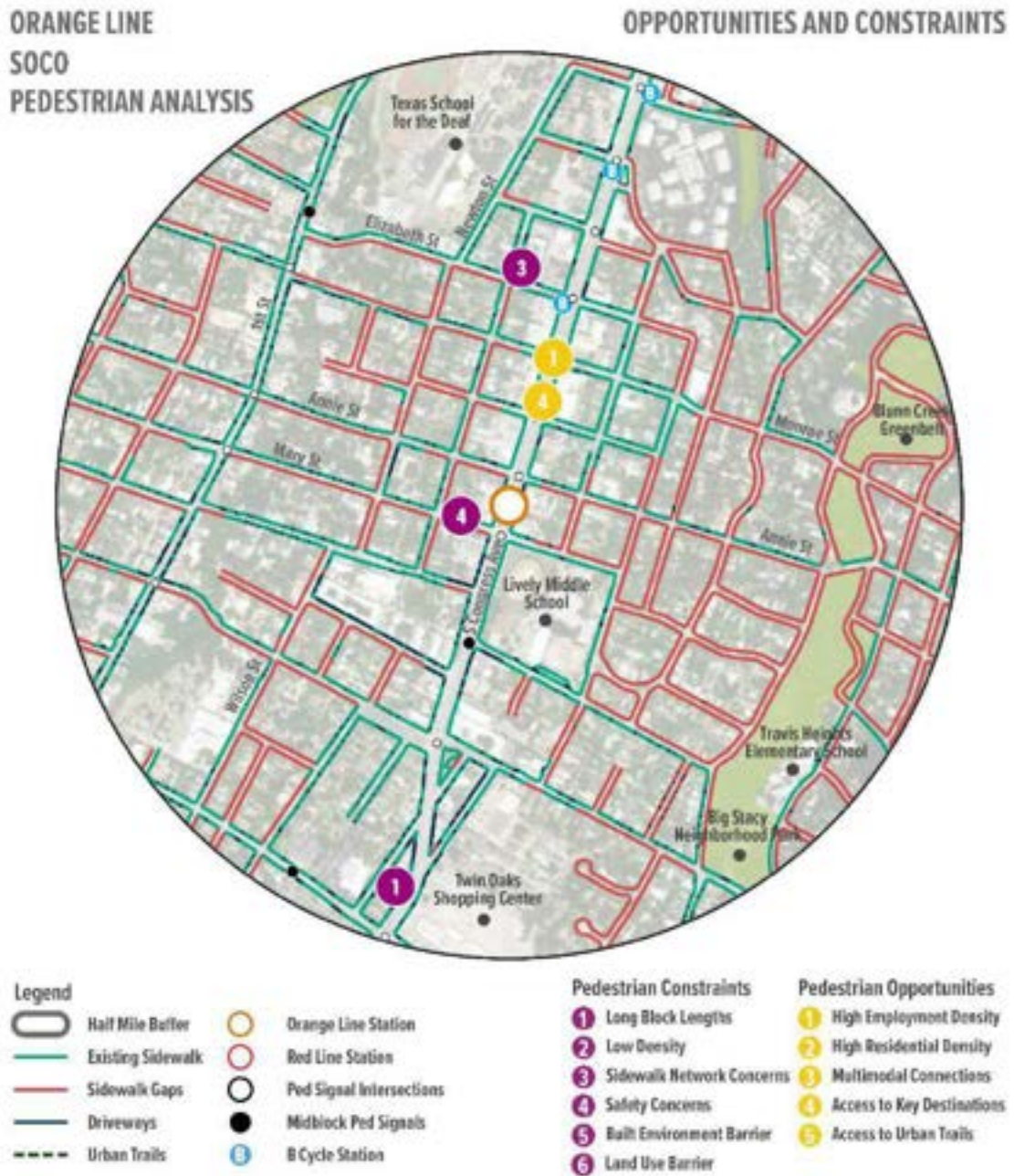
ORANGE LINE
SOCO
PEDESTRIAN ANALYSIS

FACILITIES



- Legend
- Half Mile Buffer
 - Existing Sidewalk
 - Sidewalk Gaps
 - Driveways
 - Urban Trails
 - Orange Line Station
 - Red Line Station
 - Ped Signal Intersections
 - Midblock Ped Signals
 - B Cycle Station

Figure 63: SOCO Pedestrian Opportunities and Constraints



Existing and Planned Bicycle Facilities Assessment

There are approximately 110.4 miles of bicycle facilities within a 3-mile travel shed of the South Congress Station, however, most of these facilities are low comfort/high stress for users, such as the I-35 frontage road and Lamar Blvd. The SOCO Station is in the heart of the South Congress business district which provides above average active transportation connectivity, including bike share options. The area contains significant trail mileage (9.2 miles) which connectivity could be improved upon.

Table 36: SOCO Bicycle Metrics

Bicycle Facilities	
Characteristic	within 3 Miles of Station
Existing Bicycle Facilities (Miles)	110.4
Bike Lanes	29.4
Shared Lanes	52.1
Protected Bikeway	6.6
Buffered Bike Lanes	11.5
Undefined	10.9
Planned Bicycle Facilities (Miles)	--
Bike Lanes	--
Shared Lanes	--
Protected Bikeway	--
Buffered Bike Lanes	--
Trails (Miles)	9.2
# of Bicycle Facility Gaps	8
Shared Mobility Services	
# of Bike Shares Kiosks	72
# of Car Share Location	--
# of Parking Spaces	--
Multimodal Connectivity	

# of Key Destinations	46
# of Local Bus Stops within 3 Miles	581
# of HCT Stations within 3 Miles	2

Bicycle Opportunities and Constraints

A number of opportunities and constraints exist for the SOCO Station. Constraints include lack of facilities, connectivity issues, and built environment accessibility barriers. Opportunities include high quality existing facilities, access to key destinations, shared mobility connections, trail connections, connectivity to transit, and high-density development. Table 3 and Table 4 reference bicycle opportunities and constraints along with the legend under each map.

Figure 64: SOCO Bicycle Facilities

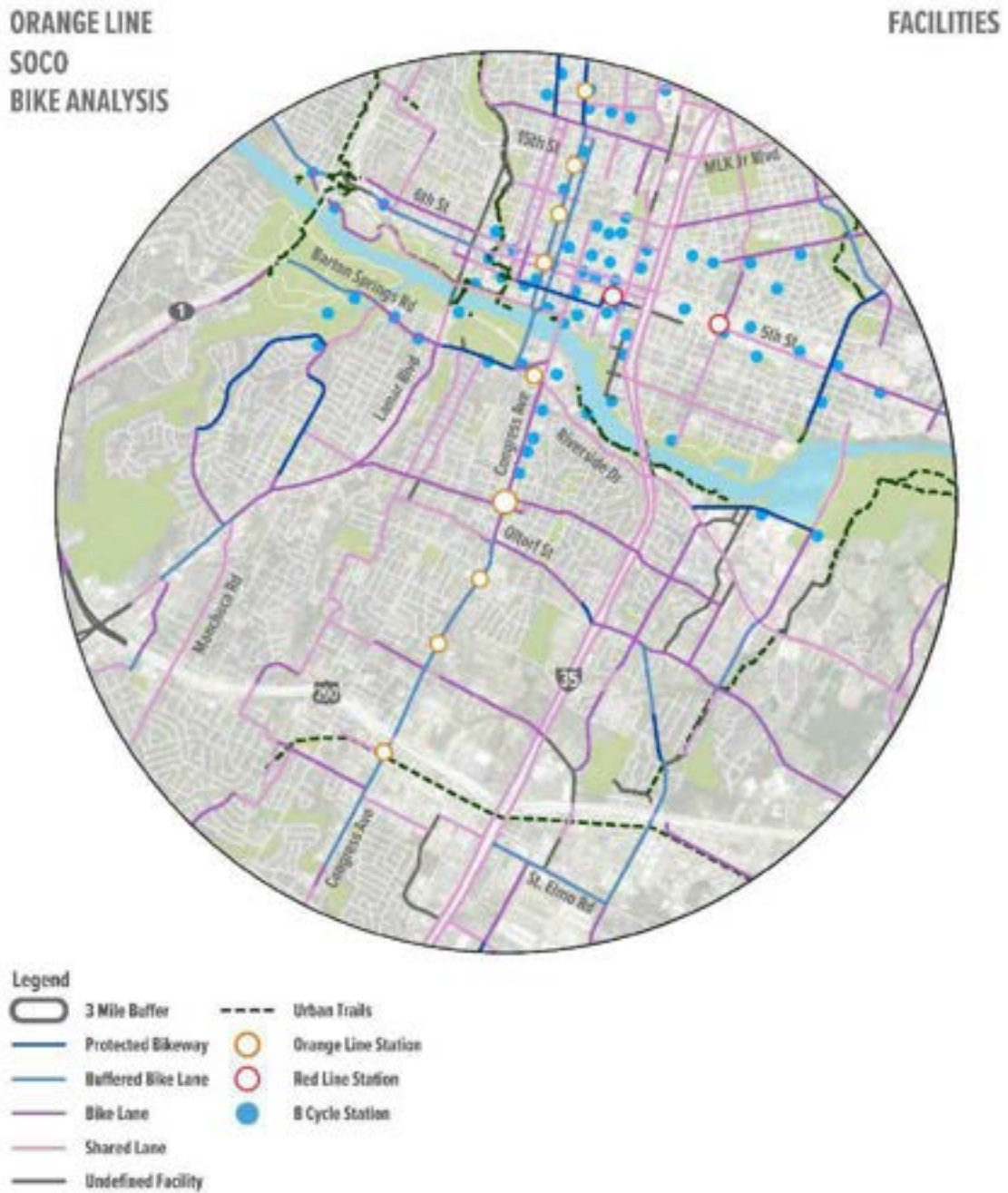
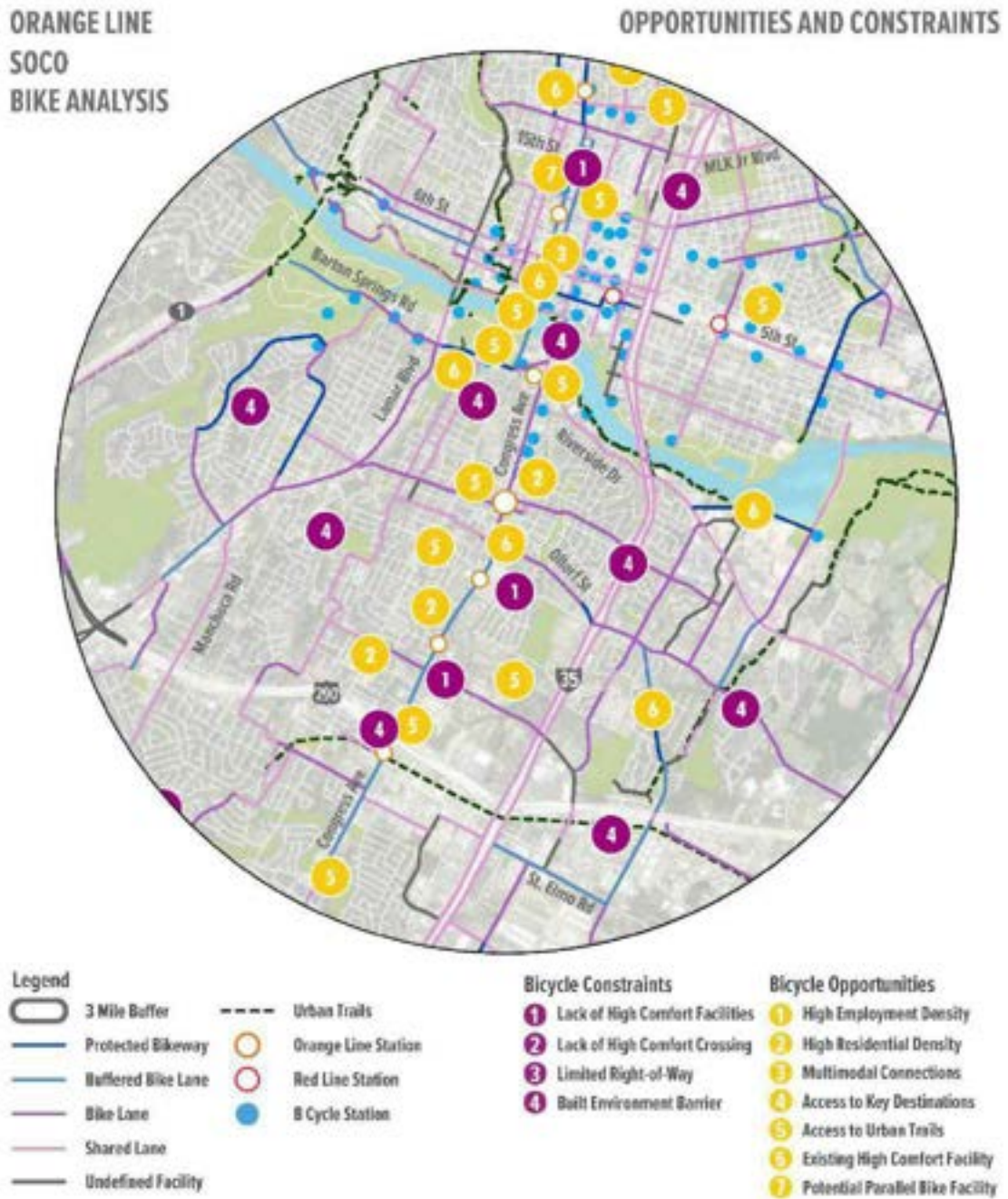


Figure 65: SOCO Bicycle Opportunities and Constraints



Oltorf Station

The Oltorf Station is located just south of the S. Congress Ave. and Oltorf St. intersection near the Oltorf HEB. The area consists of commercial and residential land uses but is primarily medium density residential development. The area contains access management issues as it has numerous driveways along S. Congress Ave. The area does contain existing bicycle and pedestrian infrastructure; however, some gaps exist in both networks. The station provides connectivity to MetroBus Local route 300.

Existing and Planned Pedestrian Facilities Assessment

The Oltorf Station includes approximately 12.03 miles of existing sidewalks and gaps of about 13.27 miles. These gaps only highlight public ROW as there are a moderate number of sidewalks and gaps on private property. Contiguous sidewalk facilities exist on major roads such as S. Congress Ave. and Oltorf St., however both contain high numbers of driveways which create access management and safety issues for users. Overall, the area has adequate pedestrian accessibility due to its increasingly urban nature.

Table 37: Oltorf Pedestrian Metrics

Characteristic	within 1/2 Mile of Station
Existing Sidewalks (Miles)	12.0
Good Condition	--
Fair Condition	--
Poor Condition	--
Sidewalk Gaps (Miles)	13.3
Average Block Length (Feet)	412
Sidewalk to Roadway Ratio (%)	0.86
Trails (Miles)	0

# of Pedestrian Signalized Intersections	12
# of Signalized Midblock Crossings	6
% ADA Crosswalks relative to # of Intersections	--
Shared Mobility Services	
# of Bike Shares Kiosks	0
# of Car Share Location	--
# of Parking Spaces	--
Multimodal Connectivity	
# of Key Destinations	0
# of Local Bus Stops within 1/2 Mile	26
# of HCT Stations within 1/2 Mile	0

Pedestrian Opportunities and Constraints

A number of opportunities and constraints exist for the Oltorf Station. Constraints include access management/driveway issues along S. Congress Ave. and long block lengths due to existing parking lots and storefronts. Opportunities include dense retail paired with medium to high density residential land uses, major destinations (grocery stores, restaurants, etc.), and easy local transit and/or HCT connections (routes 801 and 1). Table 1 and Table 2 reference pedestrian opportunities and constraints along with the legend under each map.

Figure 66: Oltorf Pedestrian Facilities

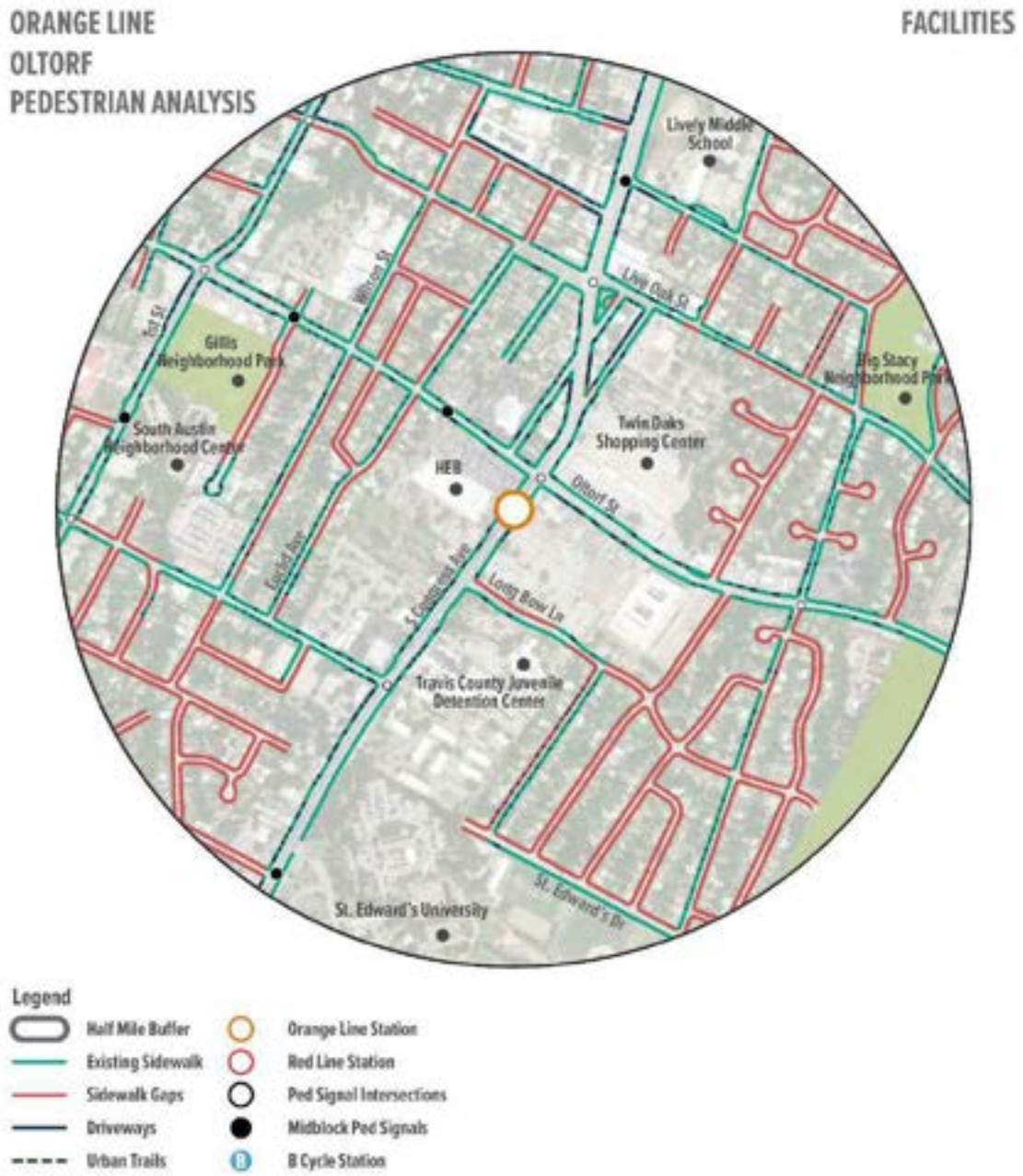
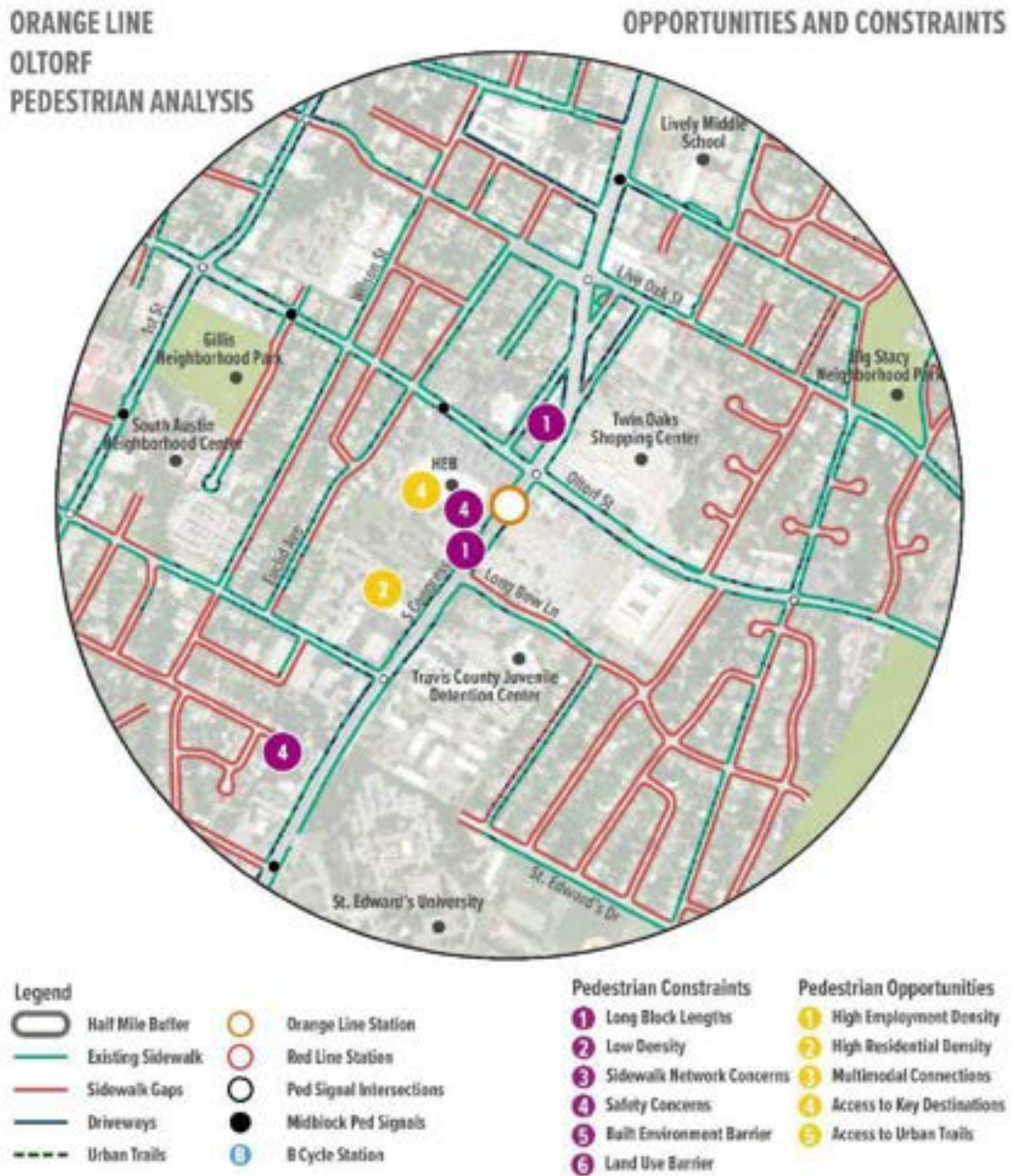


Figure 67: Oltorf Pedestrian Opportunities and Constraints



Existing and Planned Bicycle Facilities Assessment

There are approximately 104.7 miles of bicycle facilities within a 3-mile travel shed of the Oltorf Station, however, most of these facilities are low comfort/high stress for users, such as shared lanes on the I-35 frontage road and busy arterials such as Riverside Dr. Overall, the Oltorf Station contains moderate connectivity as it contains bicycle lanes along Oltorf St. (east-west) and S. Congress Ave. (north-south), however several gaps still exist. Addressing these gap areas could impact regional connectivity.

Table 38: Oltorf Bicycle Metrics

Bicycle Facilities	
Characteristic	within 3 Miles of Station
Existing Bicycle Facilities (Miles)	104.7
Bike Lanes	26.6
Shared Lanes	49.4
Protected Bikeway	6.2
Buffered Bike Lanes	11.4
Undefined	11.2
Planned Bicycle Facilities (Miles)	--
Bike Lanes	--
Shared Lanes	--
Protected Bikeway	--
Buffered Bike Lanes	--
Trails (Miles)	8.1
# of Bicycle Facility Gaps	9
Shared Mobility Services	
# of Bike Shares Kiosks	64
# of Car Share Location	--
# of Parking Spaces	--
Multimodal Connectivity	
# of Key Destinations	48

# of Local Bus Stops within 3 Miles	536
# of HCT Stations within 3 Miles	2

Bicycle Opportunities and Constraints

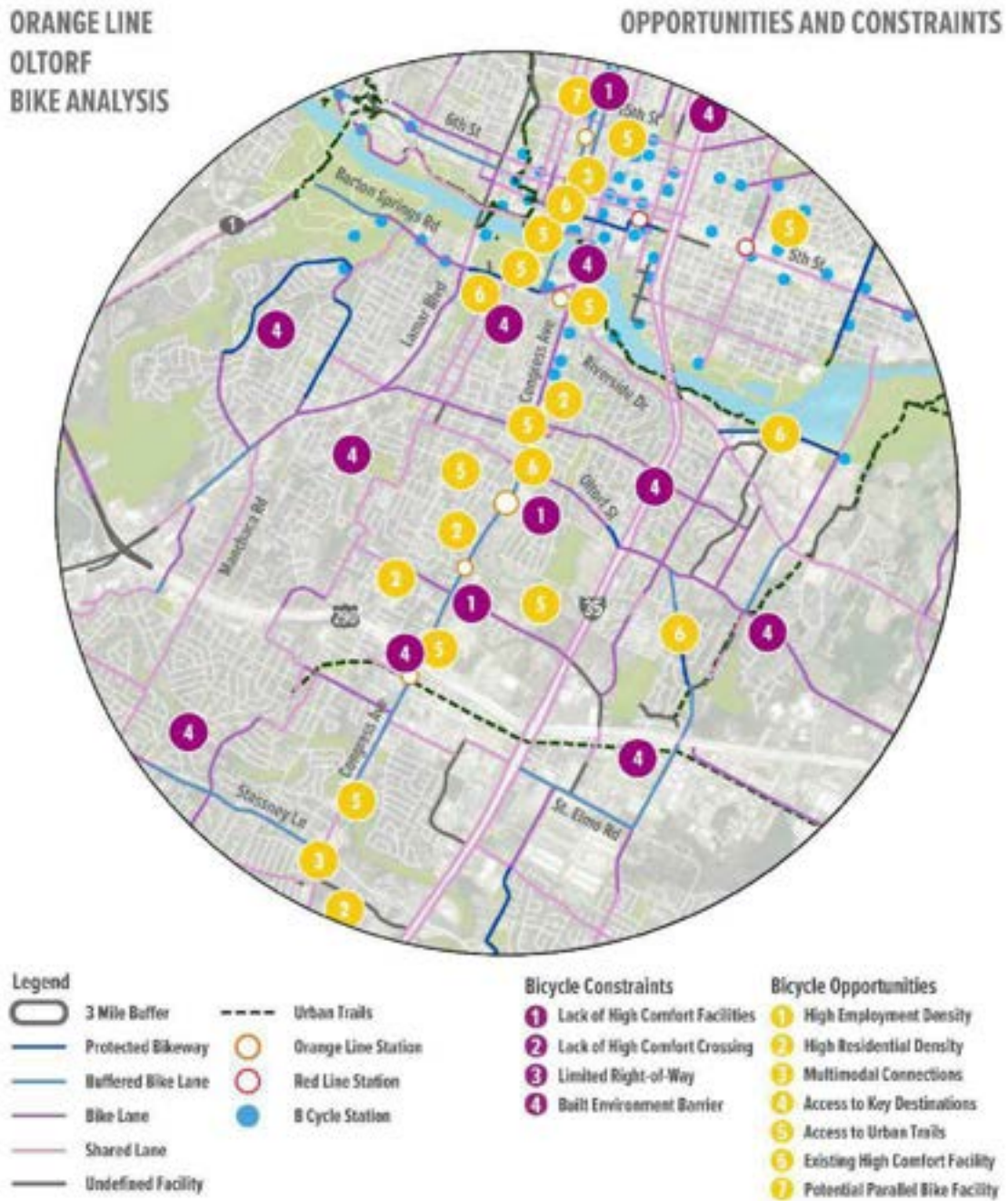
A number of opportunities and constraints exist for the Oltorf Station. Constraints include ROW constraint, built environment accessibility barriers, connectivity issues, and lack of facilities.

Opportunities include trail connections, connections to transit, access to key destinations, multimodal connections, shared mobility connections, high quality existing facilities, and high-density development. Table 3 and Table 4 reference bicycle opportunities and constraints along with the legend under each map.

Figure 68: Oltorf Bicycle Facilities



Figure 69: Oltorf Bicycle Opportunities and Constraints



St. Edwards Station

The St. Edwards Station is located on S. Congress Ave. between La Vista St. and Havana St., south of University Dr (entry to St. Edwards University). The area contains a mix of land uses but is primarily medium to high density residential and the St. Edwards Campus. The area contains contiguous bicycle and pedestrian infrastructure along S. Congress Ave., with other major crossroads (e.g. Woodward St.) also supporting active transportation. However, the area does contain significant driveway access points and gaps in both the bicycle and pedestrian networks.

Existing and Planned Pedestrian Facilities Assessment

The St. Edwards Station contains approximately 8.99 miles of existing sidewalks and gaps of 12.50 miles. These gaps are largely found in residential areas, as major streets in the area, such as S. Congress Ave. and Woodward St, provide contiguous pedestrian infrastructure. Overall, this location provides moderate pedestrian accessibility due to its proximity to St. Edwards University and its encroachment towards downtown Austin. However, there are a substantial number of driveways along S. Congress Ave. as commercial activity begins to increase, which can impact pedestrian safety.

Table 39: St. Edwards Pedestrian Metrics

Characteristic	within 1/2 Mile of Station
Existing Sidewalks (Miles)	8.9
Good Condition	--
Fair Condition	--
Poor Condition	--
Sidewalk Gaps (Miles)	12.5
Average Block Length (Feet)	471
Sidewalk to Roadway Ratio (%)	0.76

Trails (Miles)	0
# of Pedestrian Signalized Intersections	8
# of Signalized Midblock Crossings	3
% ADA Crosswalks relative to # of Intersections	--
Shared Mobility Services	
# of Bike Shares Kiosks	0
# of Car Share Location	--
# of Parking Spaces	--
Multimodal Connectivity	
# of Key Destinations	0
# of Local Bus Stops within 1/2 Mile	17
# of HCT Stations within 1/2 Mile	0

Pedestrian Opportunities and Constraints

A number of opportunities and constraints exist for the St. Edwards Station. Constraints include Sidewalk gaps along Coleman St. and Frederick St., long block lengths along S. Congress Ave. from Lightsey Rd. to E. Ben White Blvd., and the St. Edwards University parcel containing no pedestrian cut through. Opportunities include major destinations (St. Edwards), high densities along S. Congress Ave. from Cumberland Rd. to W. Alpine Rd., and easy local transit and/or HCT connections (routes 801 and 1). Table 1 and Table 2 reference pedestrian opportunities and constraints along with the legend under each map.

Figure 70: St. Edwards Pedestrian Facilities

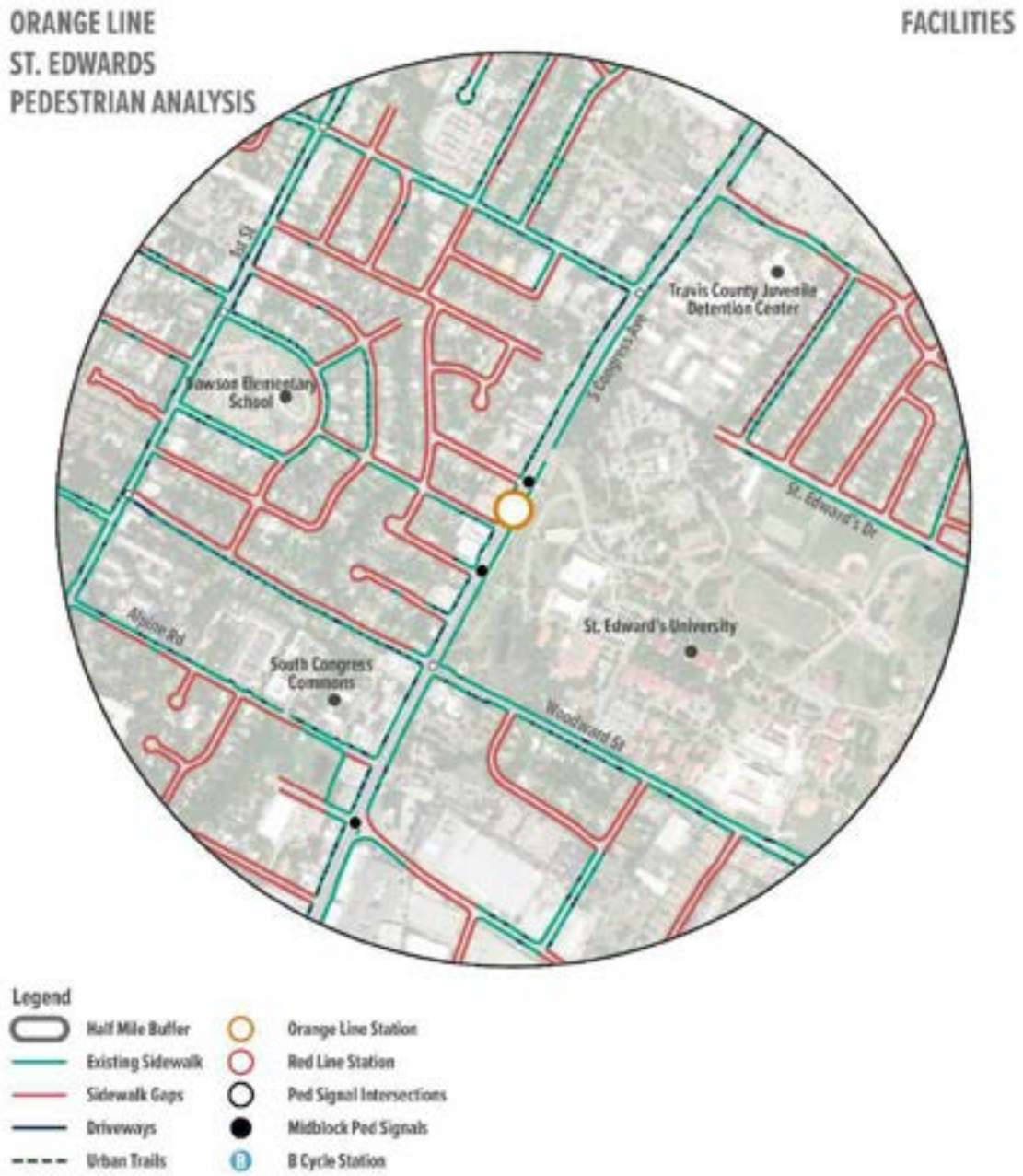
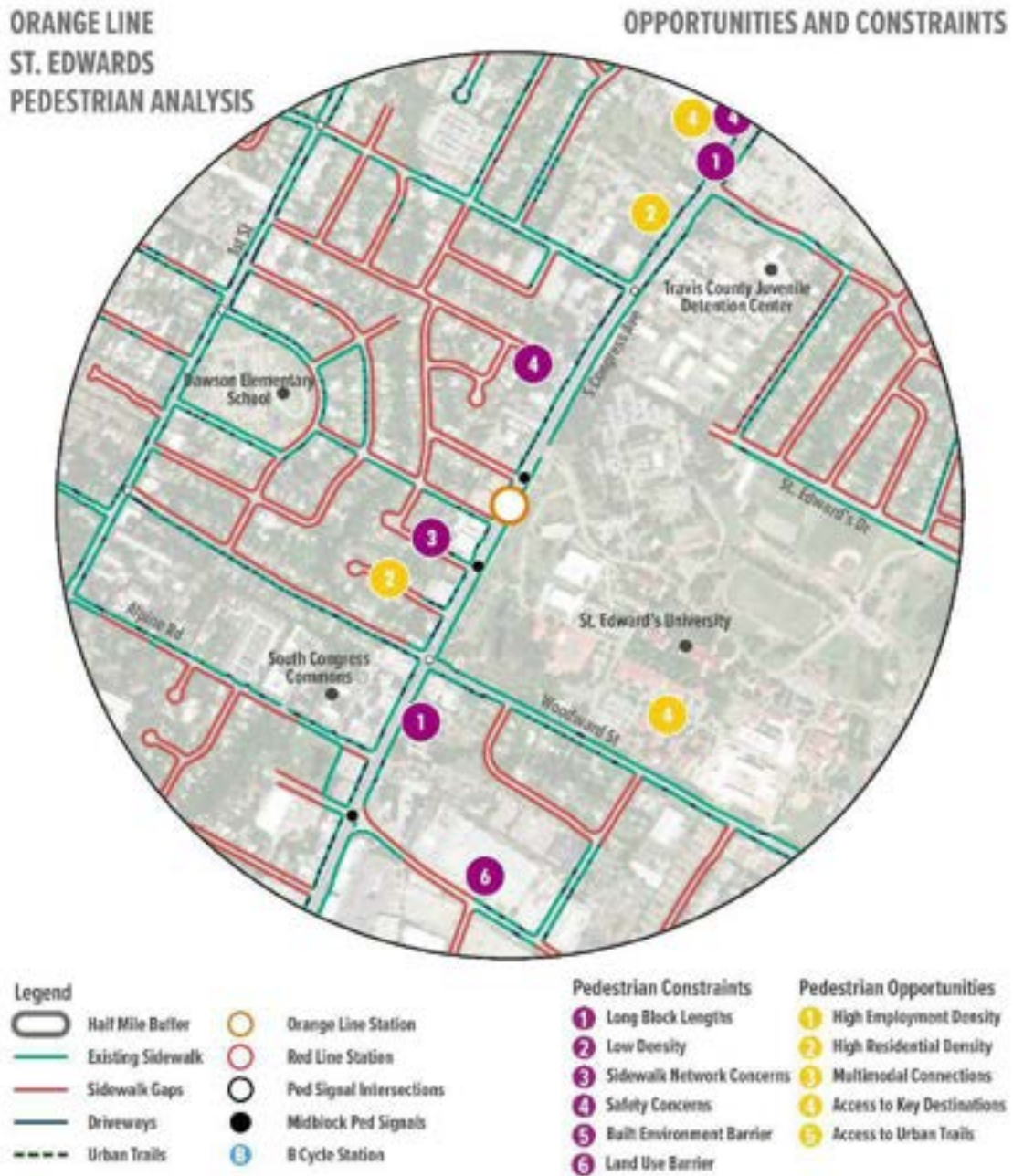


Figure 71: St. Edwards Pedestrian Opportunities and Constraints



Existing and Planned Bicycle Facilities Assessment

There are approximately 102.2 miles of bicycle facilities within a 3-mile travel shed of St. Edwards Station. Besides S. Congress Ave., most of the surrounding facilities are low comfort/high stress, such as the I-35 frontage road and east-west connectors such as Oltorf St. Regarding marked bicycle facilities, S. Congress Ave. and Havana St. serve as the two main facilities that connect directly to the St. Edwards Station.

Table 40: St. Edwards Bicycle Metrics

Bicycle Facilities	
Characteristic	within 3 Miles of Station
Existing Bicycle Facilities (Miles)	102.2
Bike Lanes	25.0
Shared Lanes	50.1
Protected Bikeway	5.7
Buffered Bike Lanes	10.8
Undefined	10.7
Planned Bicycle Facilities (Miles)	--
Bike Lanes	--
Shared Lanes	--
Protected Bikeway	--
Buffered Bike Lanes	--
Trails (Miles)	7.8
# of Bicycle Facility Gaps	7
Shared Mobility Services	
# of Bike Shares Kiosks	52
# of Car Share Location	--
# of Parking Spaces	--
Multimodal Connectivity	
# of Key Destinations	46

# of Local Bus Stops within 3 Miles	517
# of HCT Stations within 3 Miles	2

Bicycle Opportunities and Constraints

A number of opportunities and constraints exist for the St. Edwards Station. Constraints include lack of facilities, built environment accessibility barriers and connectivity issues. Opportunities include connections to transit, multimodal connections, access to key destinations, trail connections, and medium to high density development. Table 3 and Table 4 reference bicycle opportunities and constraints along with the legend under each map.

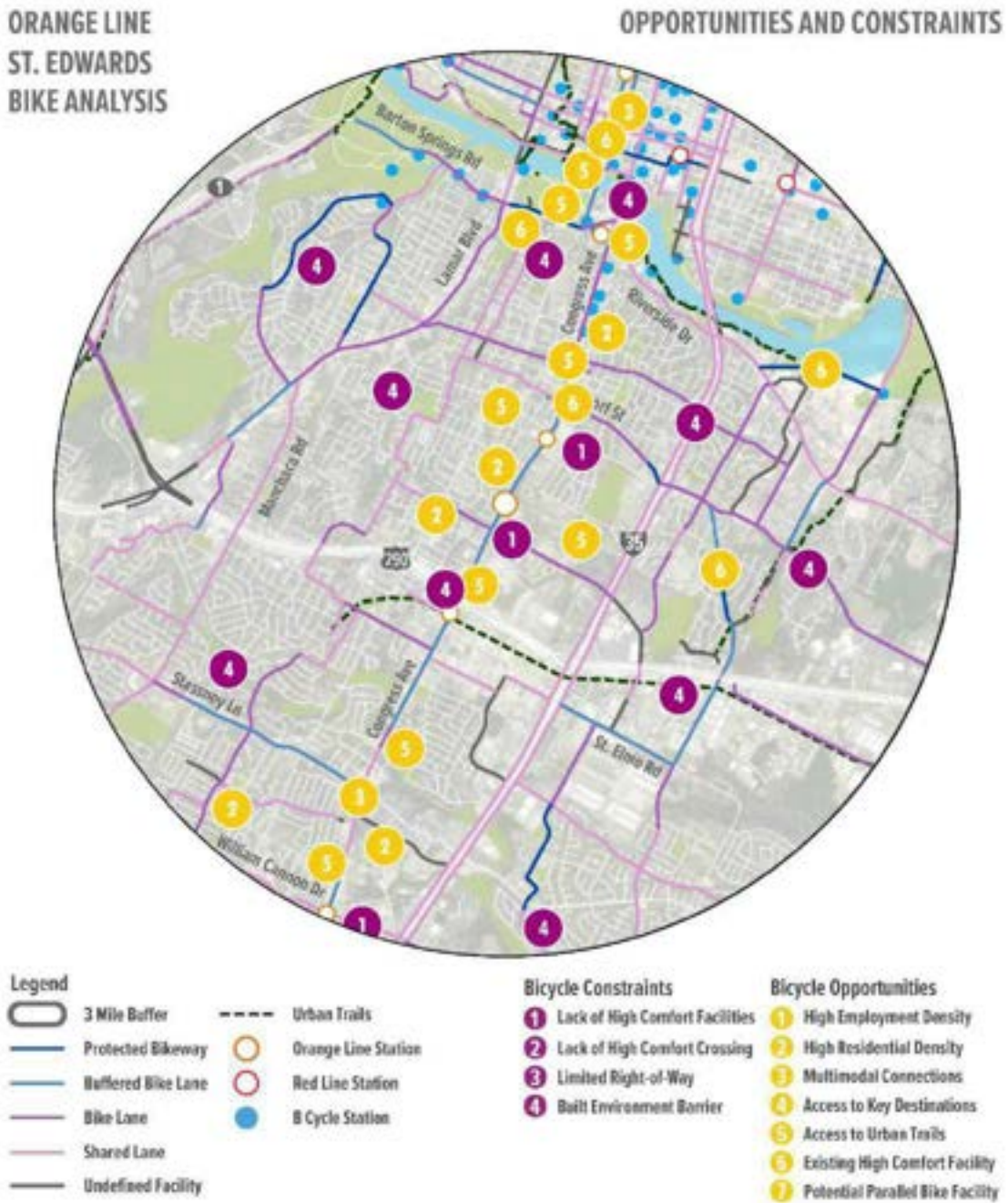
Figure 72: St. Edwards Bicycle Facilities

ORANGE LINE
ST. EDWARDS
BIKE ANALYSIS

FACILITIES



Figure 73: St. Edwards Bicycle Opportunities and Constraints



South Congress Transit Center Station

The South Congress Transit Center Station is located at the intersection of S. Congress Ave. and Ben White Blvd. The area contains a mixture of residential, commercial, and industrial land uses, however, is primarily industrial. The area contains a significant number of driveways which negatively impact active transportation safety. The area does contain existing bicycle and pedestrian infrastructure, but substantial gaps exist in both networks (primarily due to grade separation over SH 71). The station provides connectivity to MetroBus Local routes 310 and 315.

Existing and Planned Pedestrian Facilities Assessment

The South Congress Transit Center Station includes 7.81 miles of existing sidewalks and gaps measuring 8.28 miles. Overall, this location has limited pedestrian accessibility due to its proximity to highway infrastructure and its industrial setting.

Table 41: South Congress Transit Center Pedestrian Metrics

Characteristic	within 1/2 Mile of Station
Existing Sidewalks (Miles)	7.8
Good Condition	--
Fair Condition	--
Poor Condition	--
Sidewalk Gaps (Miles)	8.3
Average Block Length (Feet)	645
Sidewalk to Roadway Ratio (%)	0.54
Trails (Miles)	0
# of Pedestrian Signalized Intersections	10

# of Signalized Midblock Crossings	1
% ADA Crosswalks relative to # of Intersections	--
Shared Mobility Services	
# of Bike Shares Kiosks	0
# of Car Share Location	--
# of Parking Spaces	--
Multimodal Connectivity	
# of Key Destinations	0
# of Local Bus Stops within 1/2 Mile	20
# of HCT Stations within 1/2 Mile	0

Pedestrian Opportunities and Constraints

A number of opportunities and constraints exist for the South Congress Transit Center Station. Constraints include freeway proximity (US 290), access management/driveway issues along S. Congress Ave. from E. Ben White Blvd. to W. St Elmo Rd. due to large parking lots, and long block lengths. Opportunities include easy local transit and/or HCT connections as this is the southern transit center in Austin, and multimodal connections due to existing bike lanes along S. Congress Ave. Table 1 and Table 2 reference pedestrian opportunities and constraints along with the legend under each map.

Figure 74: South Congress Transit Center Pedestrian Facilities

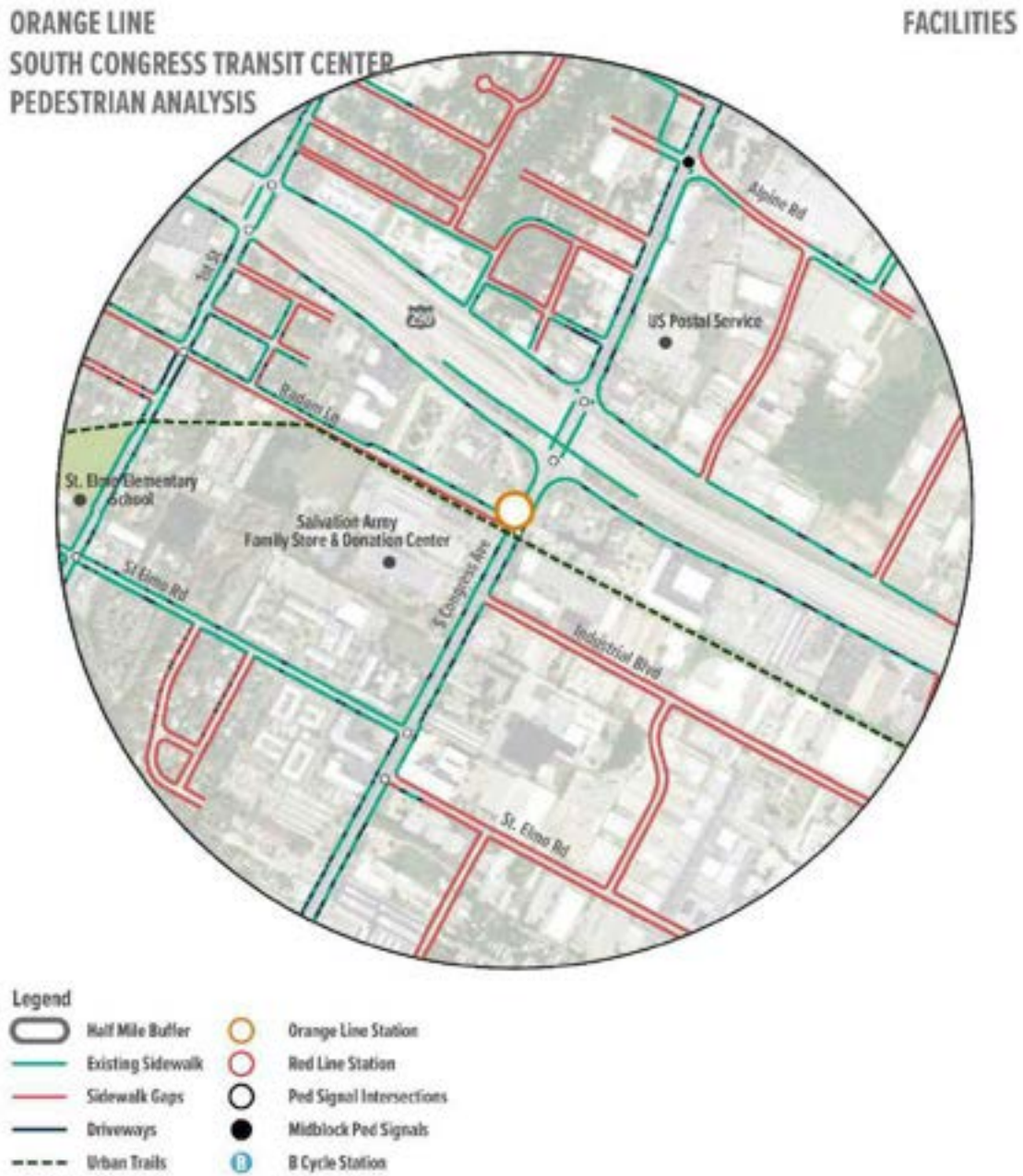
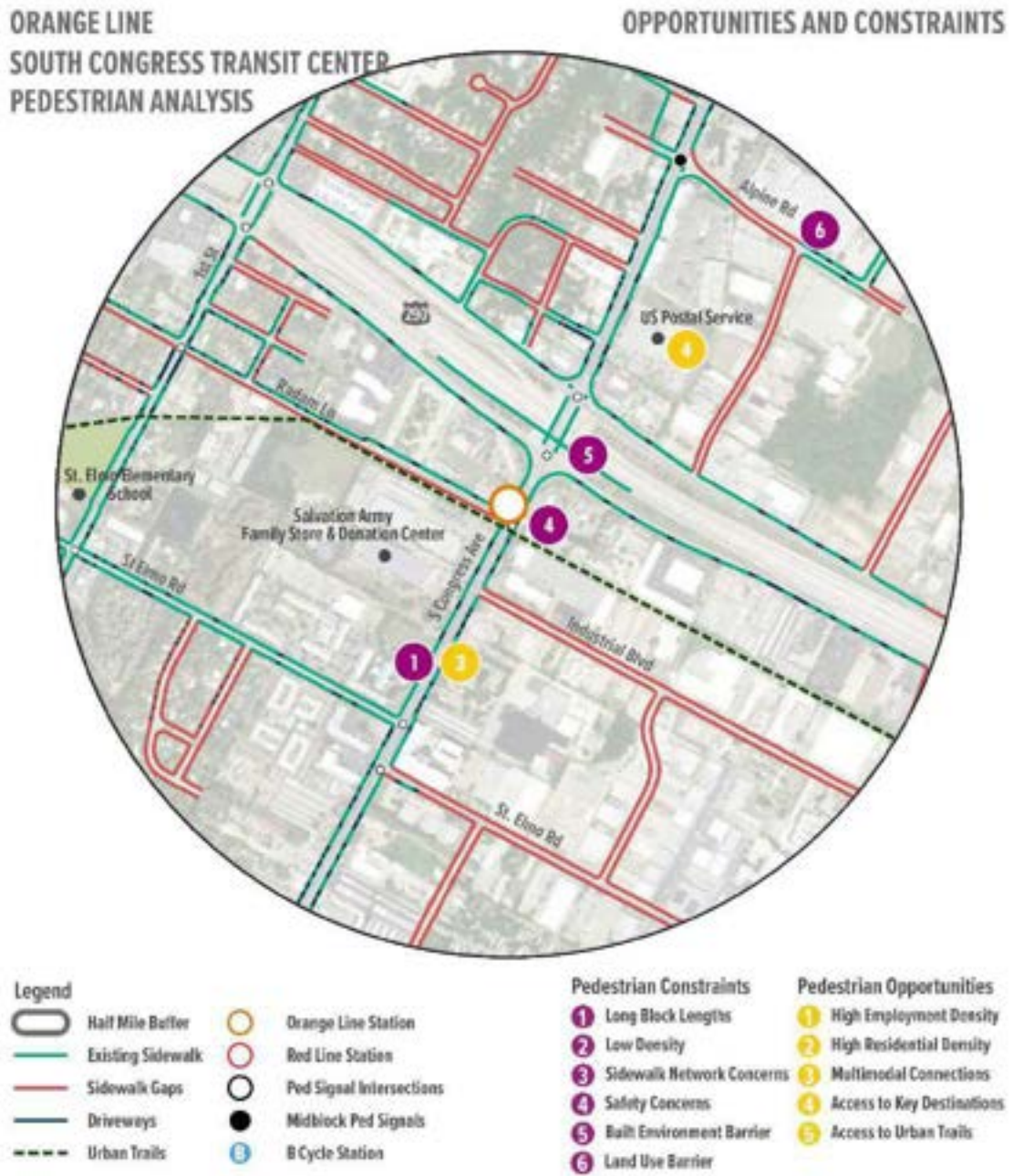


Figure 75: South Congress Transit Center Pedestrian Opportunities and Constraints



Existing and Planned Bicycle Facilities Assessment

There are approximately 92.5 miles of bicycle facilities within a 3-mile travel shed of the South Congress Transit Center Station. Majority of the facilities in the area are low comfort/high stress, however, S. Congress Ave. provides buffered bike lanes both north and south of the facility. Specific bicycle gaps exist in the network and improving these gaps could positively impact regional connectivity.

Table 42: South Congress Transit Center Bicycle Metrics

Bicycle Facilities	
Characteristic	within 3 Miles of Station
Existing Bicycle Facilities (Miles)	92.5
Bike Lanes	24.1
Shared Lanes	45.4
Protected Bikeway	4.6
Buffered Bike Lanes	8.9
Undefined	9.6
Planned Bicycle Facilities (Miles)	--
Bike Lanes	--
Shared Lanes	--
Protected Bikeway	--
Buffered Bike Lanes	--
Trails (Miles)	3.0
# of Bicycle Facility Gaps	4
Shared Mobility Services	
# of Bike Shares Kiosks	17
# of Car Share Location	--
# of Parking Spaces	--
Multimodal Connectivity	
# of Key Destinations	30

# of Local Bus Stops within 3 Miles	477
# of HCT Stations within 3 Miles	0

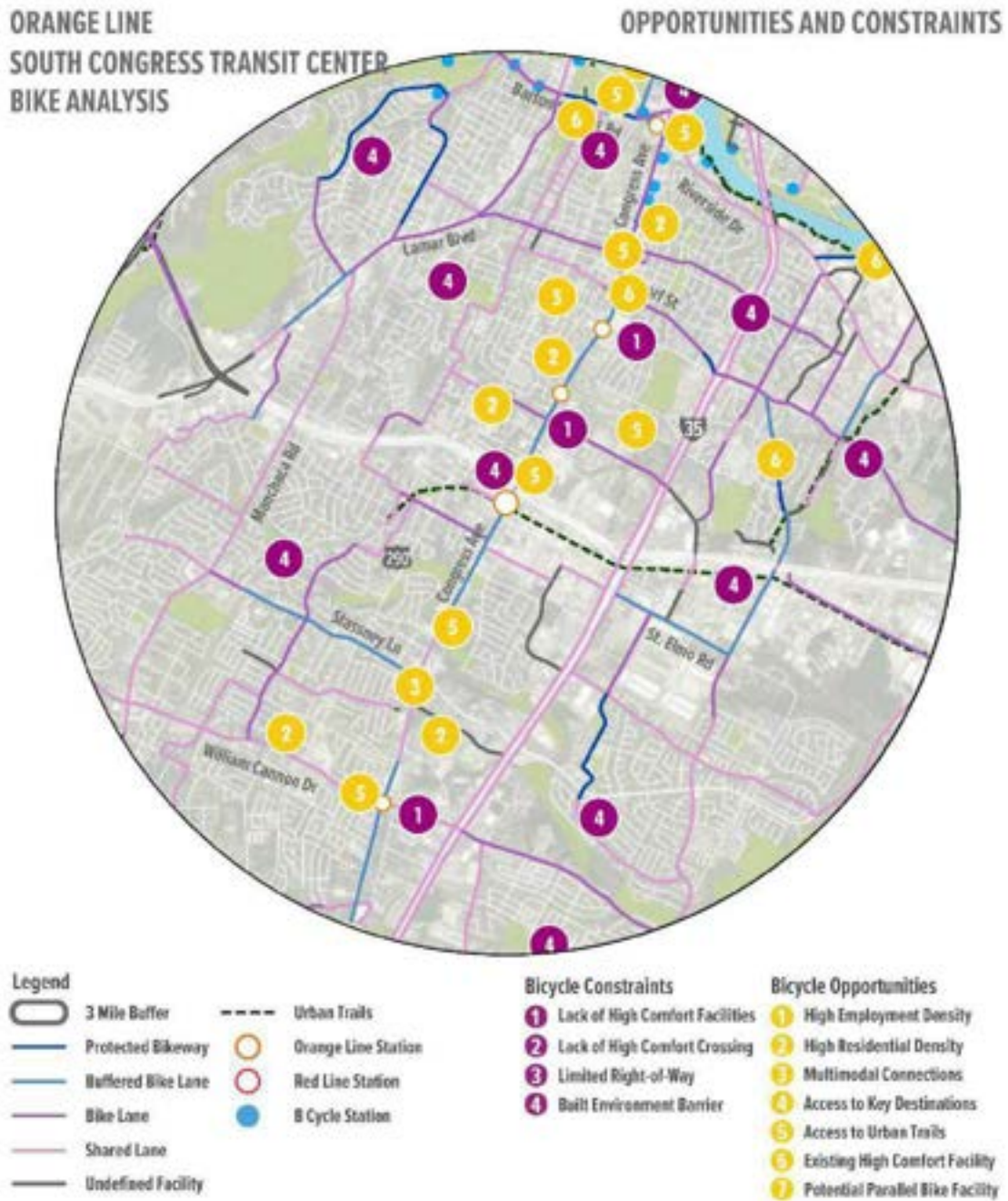
Bicycle Opportunities and Constraints

A number of opportunities and constraints exist for the South Congress Transit Center Station. Constraints include connectivity issues, built environment accessibility barriers and lack of facilities in specific locations. Opportunities include access to key destinations, trail connections, connections to transit, high quality existing facilities in specific areas, and medium to high density development. Table 3 and Table 4 reference bicycle opportunities and constraints along with the legend under each map.

Figure 76: South Congress Transit Center Bicycle Facilities



Figure 77: South Congress Transit Center Bicycle Opportunities and Constraints



Stassney Station

The Stassney Station is located at the intersection of S. Congress Ave. and Stassney Ln. The station area includes commercial and residential land uses, however, it primarily medium to high density residential. The area contains a significant number of driveways which negatively impact active transportation safety. The area does contain existing bicycle and pedestrian infrastructure, but substantial gaps exist in both networks.

Existing and Planned Pedestrian Facilities Assessment

The Stassney Station includes approximately 12.38 miles of existing sidewalks and gaps of about 8.37 miles. These gaps only highlight public ROW as there are a moderate number of both sidewalks and sidewalk gaps on private property. Overall, the station location has limited pedestrian accessibility, especially connecting to larger arterials, due to its residential setting and placement.

Table 43: Stassney Pedestrian Metrics

Characteristic	within 1/2 Mile of Station
Existing Sidewalks (Miles)	12.3
Good Condition	--
Fair Condition	--
Poor Condition	--
Sidewalk Gaps (Miles)	8.4
Average Block Length (Feet)	486
Sidewalk to Roadway Ratio (%)	1.01
Trails (Miles)	0
# of Pedestrian Signalized Intersections	3
# of Signalized Midblock Crossings	0

% ADA Crosswalks relative to # of Intersections	--
Shared Mobility Services	
# of Bike Shares Kiosks	0
# of Car Share Location	--
# of Parking Spaces	--
Multimodal Connectivity	
# of Key Destinations	0
# of Local Bus Stops within 1/2 Mile	17
# of HCT Stations within 1/2 Mile	0

Pedestrian Opportunities and Constraints

A number of opportunities and constraints exist for the Stassney Station. Constraints include lack of ADA curb ramps on S. Congress Ave. and Wasson Rd., access management/driveway issues along S. Congress Ave. from W. Mockingbird Ln. to Ainsworth St., and sidewalk gaps along S. Congress Ave. from W. Stassney Ln. to Little Texas Ln. Opportunities include trail connections (Williamson Creek Greenbelt), easy local transit and/or HCT connections (routes 801 and 1), and medium density residential development. Table 1 and Table 2 reference pedestrian opportunities and constraints along with the legend under each map.

Figure 78: Stassney Pedestrian Facilities

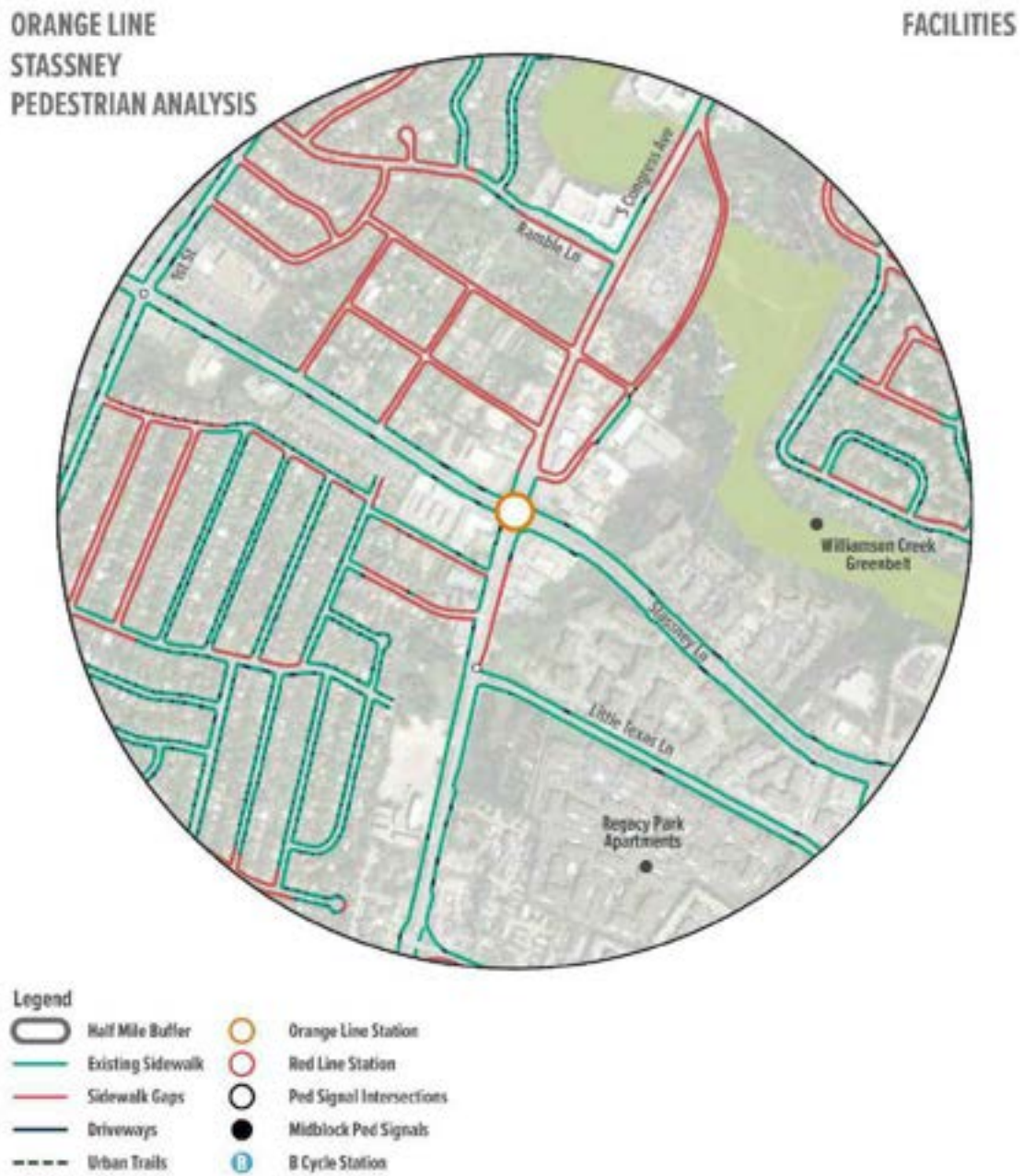
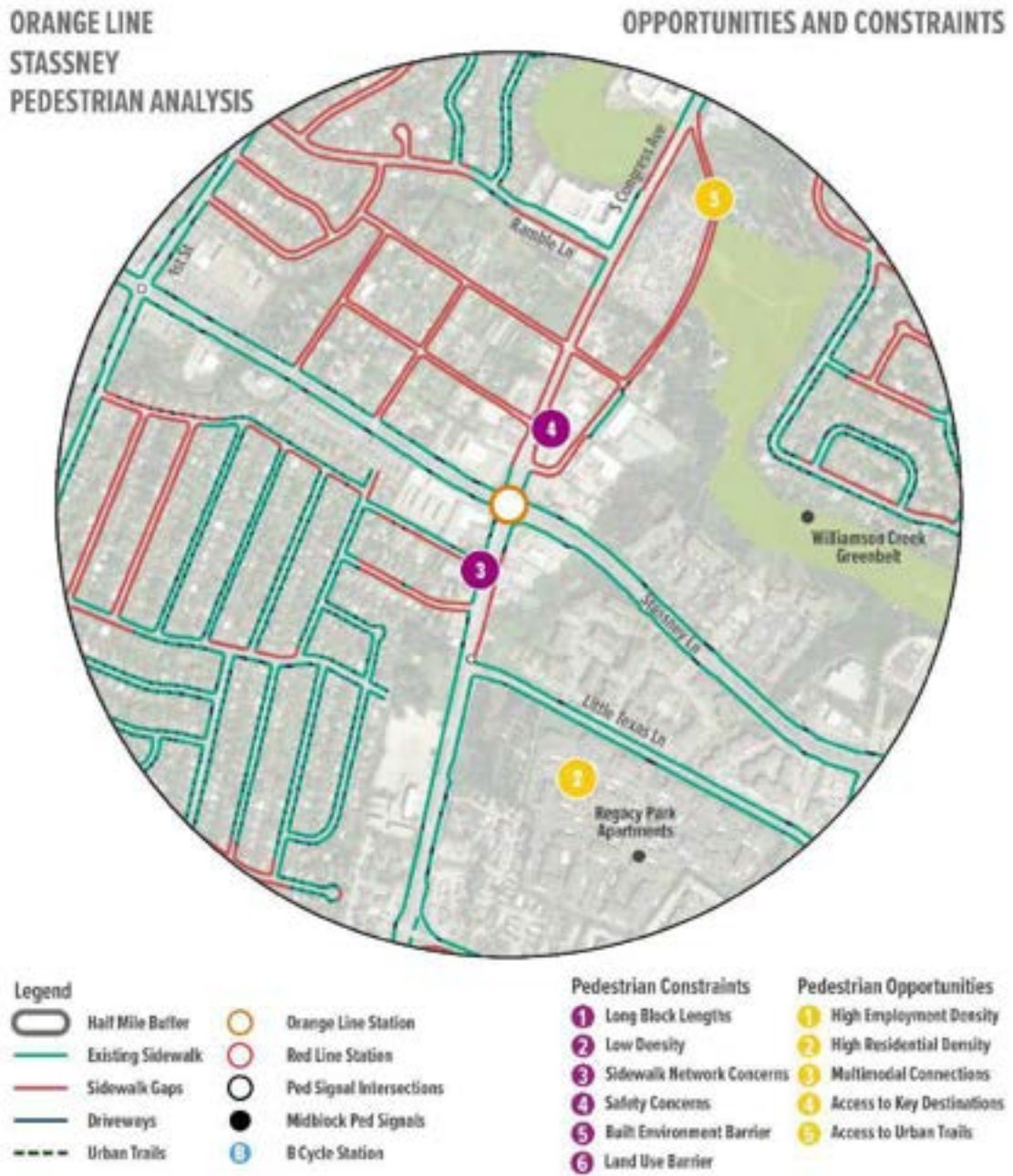


Figure 79: Stassney Pedestrian Opportunities and Constraints



Existing and Planned Bicycle Facilities Assessment

There are approximately 77.9 miles of bicycle facilities within a 3-mile travel shed of the Stassney Station. Most of these facilities are low comfort/high stress for users, such as shared lanes along the I-35 frontage road. There are a few specific gaps in the network (e.g. the 290/Lamar intersection) that should be considered to improve connectivity to the Stassney Station.

Table 44: Stassney Bicycle Metrics

Bicycle Facilities	
Characteristic	within 3 Miles of Station
Existing Bicycle Facilities (Miles)	77.9
Bike Lanes	15.8
Shared Lanes	42.5
Protected Bikeway	1.3
Buffered Bike Lanes	11.4
Undefined	6.9
Planned Bicycle Facilities (Miles)	--
Bike Lanes	--
Shared Lanes	--
Protected Bikeway	--
Buffered Bike Lanes	--
Trails (Miles)	0.5
# of Bicycle Facility Gaps	4
Shared Mobility Services	
# of Bike Shares Kiosks	0
# of Car Share Location	--
# of Parking Spaces	--
Multimodal Connectivity	
# of Key Destinations	17
# of Local Bus Stops within 3 Miles	419

# of HCT Stations within 3 Miles	0
----------------------------------	---

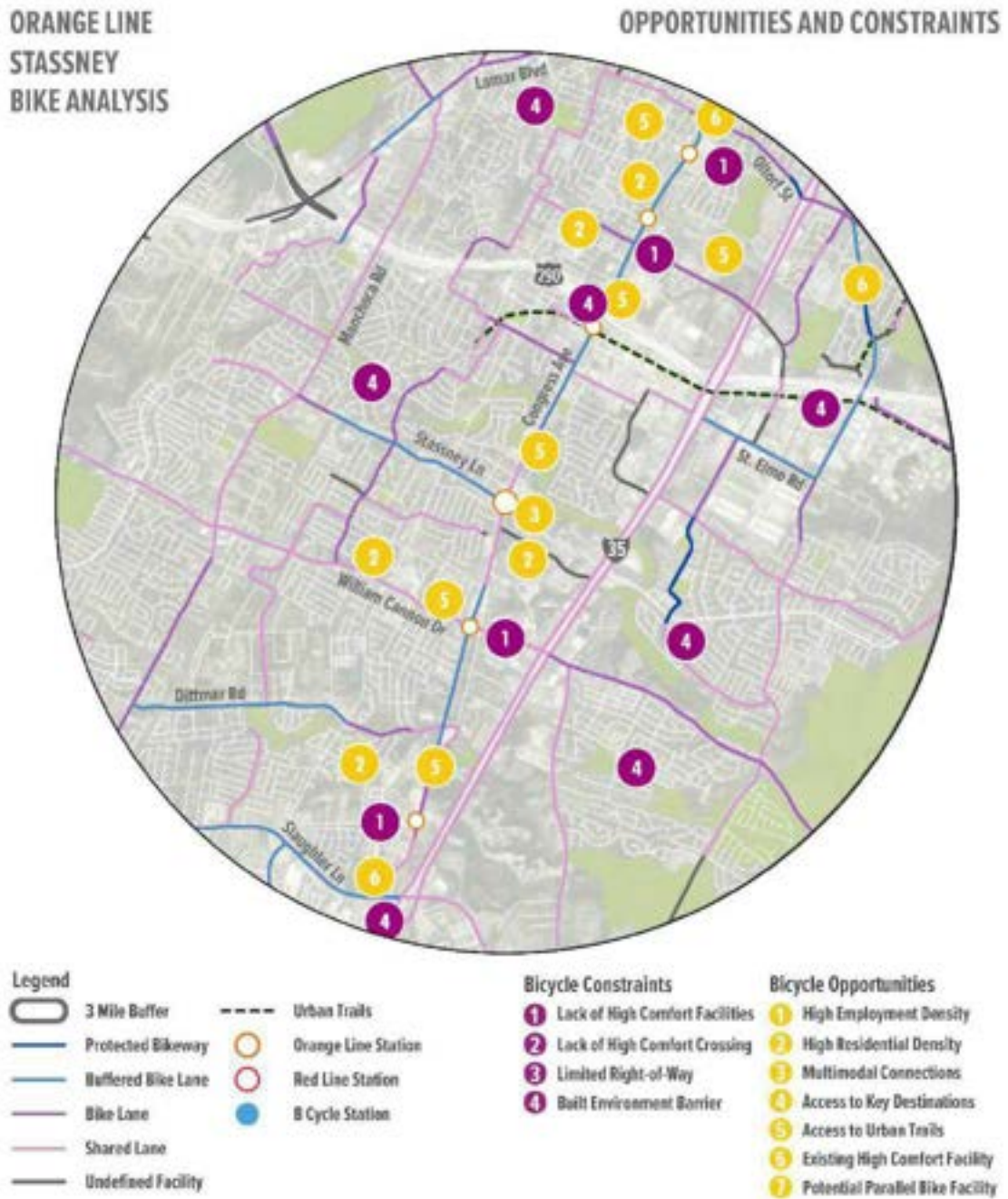
Bicycle Opportunities and Constraints

A number of opportunities and constraints exist for the Stassney Station. Constraints include built environment accessibility barriers, connectivity issues, and lack of appropriate facilities. Opportunities include high quality existing facilities, access to key destinations such as schools and retail/grocery stores, and high-density development. Table 3 and Table 4 reference bicycle opportunities and constraints along with the legend under each map.

Figure 80: Stassney Bicycle Facilities



Figure 81: Stassney Bicycle Opportunities and Constraints



William Cannon Station

The William Cannon Station is located at the intersection of S. Congress Ave. and William Cannon Dr. The area is mainly medium density residential land use, however, also contains commercial land uses as well. The area's major thoroughfares (i.e. William Canon Dr., S. Congress Ave.) and cross streets provide contiguous pedestrian connectivity to surrounding streets/destinations. Bicycle infrastructure is lacking in the area other than along S. Congress Ave., which still generates gaps in the network. The station provides connectivity to MetroBus Local route 333.

Existing and Planned Pedestrian Facilities Assessment

The William Cannon Station includes 12.51 miles of existing sidewalks and gaps of about 7.66 miles. Those gaps highlight public ROW as there are a substantial number of sidewalks and sidewalk gaps on private property. Overall the location contains moderate pedestrian activity and is limited due to its suburban setting.

Table 45: William Cannon Pedestrian Metrics

Characteristic	within 1/2 Mile of Station
Existing Sidewalks (Miles)	12.5
Good Condition	--
Fair Condition	--
Poor Condition	--
Sidewalk Gaps (Miles)	7.7
Average Block Length (Feet)	478
Sidewalk to Roadway Ratio (%)	0.97
Trails (Miles)	0
# of Pedestrian Signalized Intersections	5
# of Signalized Midblock Crossings	0

% ADA Crosswalks relative to # of Intersections	--
Shared Mobility Services	
# of Bike Shares Kiosks	0
# of Car Share Location	--
# of Parking Spaces	--
Multimodal Connectivity	
# of Key Destinations	0
# of Local Bus Stops within 1/2 Mile	16
# of HCT Stations within 1/2 Mile	0

Pedestrian Opportunities and Constraints

A number of opportunities and constraints exist for the William Cannon Station. Constraints include long block lengths, access management/driveway issues along S. Congress Ave. from Eberhart Ln. to W. William Cannon Dr., and sidewalk gaps along S. Congress Ave. from Clearday Dr. to Cloudview Dr. Opportunities include major destinations (retail and commercial centers), medium density residential development, and easy transit and/or HCT connections (routes 801 and 1). Table 1 and Table 2 reference pedestrian opportunities and constraints along with the legend under each map.

Figure 82: William Cannon Pedestrian Facilities

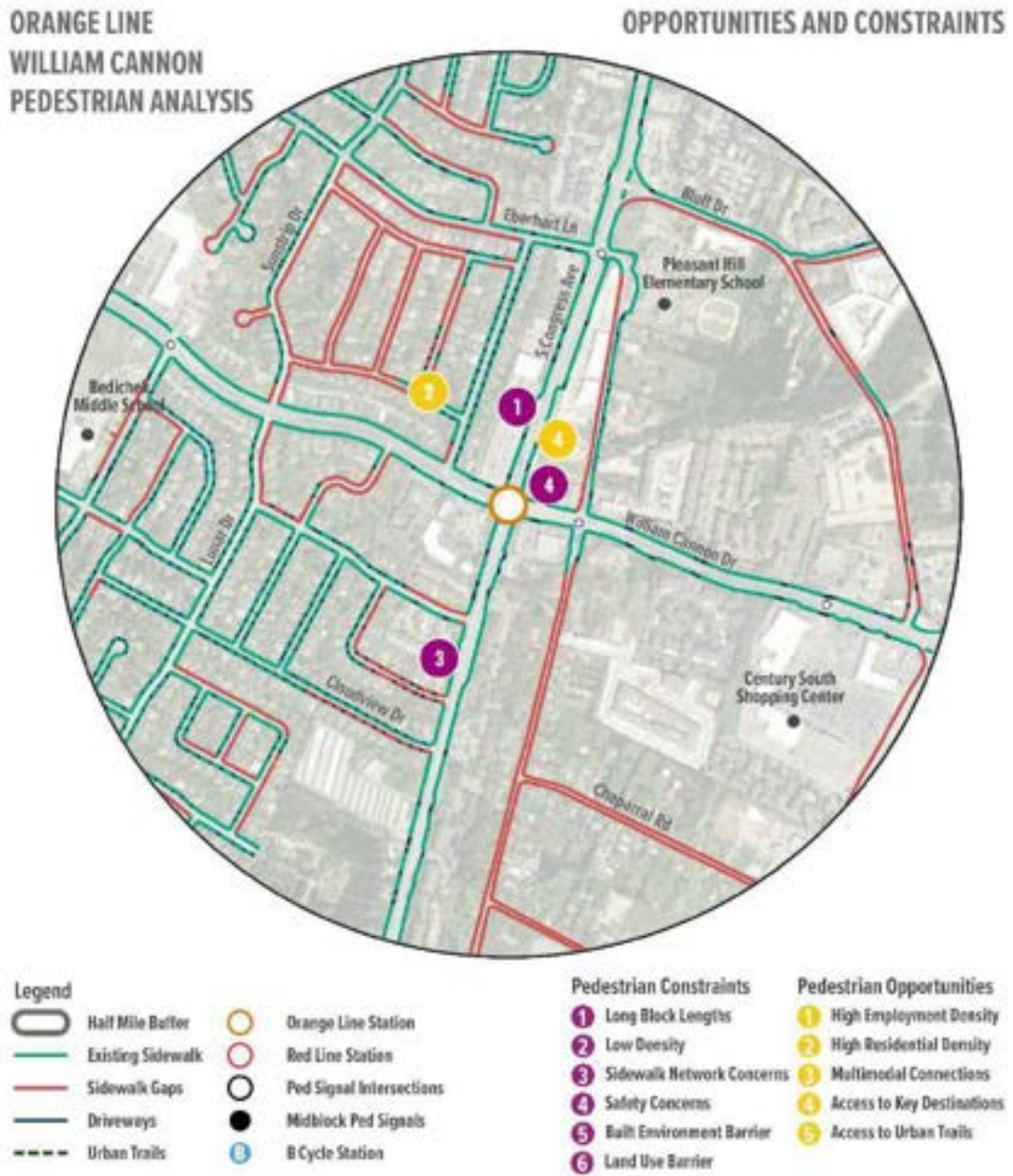
ORANGE LINE
WILLIAM CANNON
PEDESTRIAN ANALYSIS

FACILITIES



- Legend**
-  Half Mile Buffer
 -  Existing Sidewalk
 -  Sidewalk Gaps
 -  Driveways
 -  Urban Trails
 -  Orange Line Station
 -  Red Line Station
 -  Ped Signal Intersections
 -  Midblock Ped Signals
 -  B Cycle Station

Figure 83: William Cannon Pedestrian Opportunities and Constraints



Existing and Planned Bicycle Facilities Assessment

There are approximately 71.9 miles of bicycle facilities within a 3-mile travel shed of the William Cannon Station, however, most of these facilities are low comfort/high stress for users, such as the shared lane along William Cannon Dr. Overall, there is adequate bicycle connectivity in the station area, however, improvement of bicycle facility types could increase safety and rider comfort.

Table 46: William Cannon Bicycle Metrics

Bicycle Facilities	
Characteristic	within 3 Miles of Station
Existing Bicycle Facilities (Miles)	71.9
Bike Lanes	11.9
Shared Lanes	41.8
Protected Bikeway	0.8
Buffered Bike Lanes	11.5
Undefined	5.9
Planned Bicycle Facilities (Miles)	--
Bike Lanes	--
Shared Lanes	--
Protected Bikeway	--
Buffered Bike Lanes	--
Trails (Miles)	0.2
# of Bicycle Facility Gaps	4
Shared Mobility Services	
# of Bike Shares Kiosks	0
# of Car Share Location	--
# of Parking Spaces	--
Multimodal Connectivity	
# of Key Destinations	6
# of Local Bus Stops within 3 Miles	368

# of HCT Stations within 3 Miles	0
----------------------------------	---

Bicycle Opportunities and Constraints

A number of opportunities and constraints exist for the William Cannon Station. Constraints include built environment barriers, connectivity issues due to large developments, and lack of appropriate facilities. Opportunities include high density residential areas, connections to transit, access to key destinations, and multimodal connections. Table 3 and Table 4 reference bicycle opportunities and constraints along with the legend under each map.

Figure 84: William Cannon Bicycle Facilities

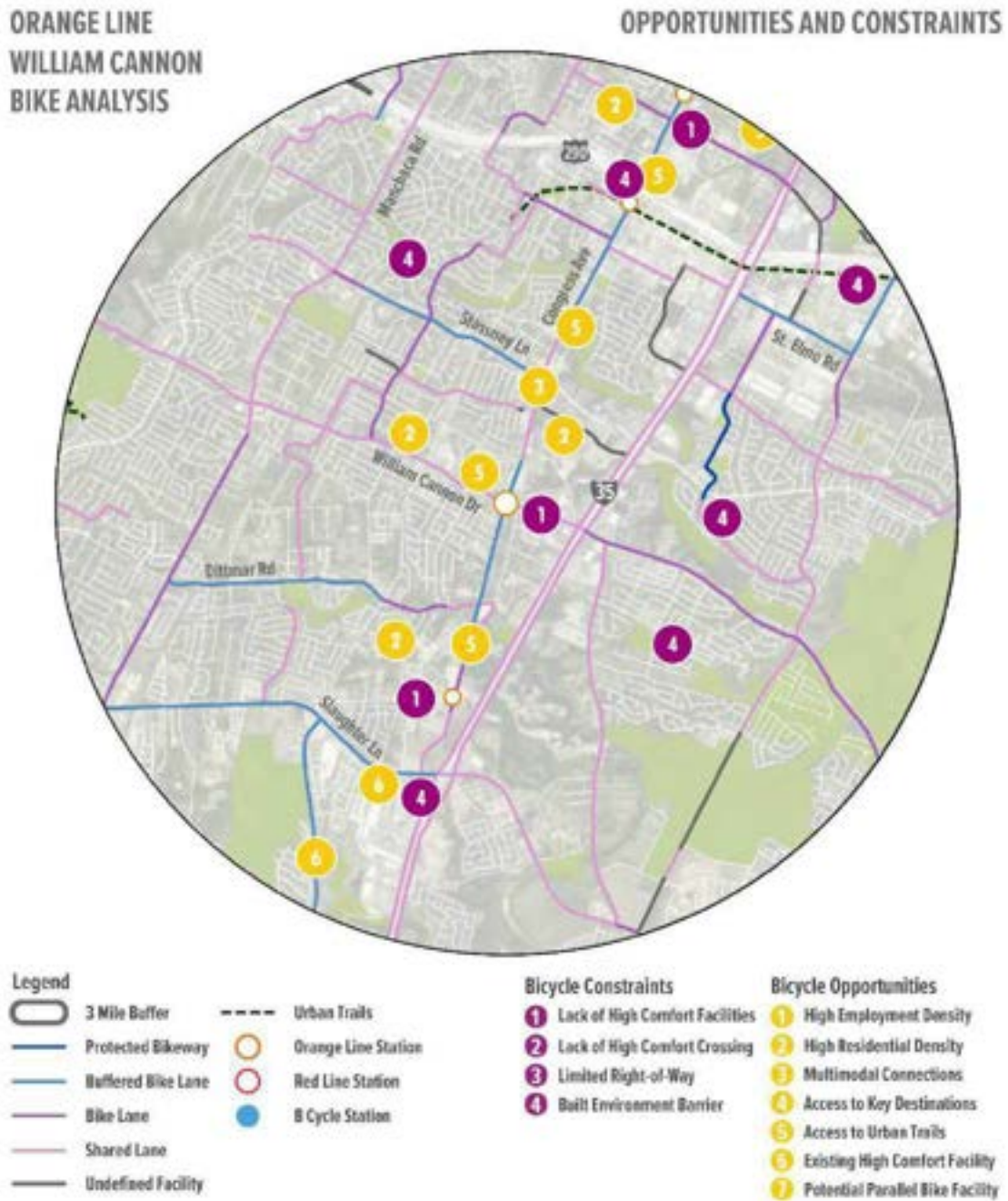
ORANGE LINE
WILLIAM CANNON
BIKE ANALYSIS

FACILITIES



- Legend
- 3 Mile Buffer
 - Protected Bikeway
 - Buffered Bike Lane
 - Bike Lane
 - Shared Lane
 - Undefined Facility
 - Urban Trails
 - Orange Line Station
 - Red Line Station
 - B Cycle Station

Figure 85: William Cannon Bicycle Opportunities and Constraints



Slaughter Station

The Slaughter Station is located at the intersection of Hubach Ln. and S. Congress Ave. just north of Slaughter Ln. The station area includes a mixture of low-density land uses, however, the immediate area surrounding the station is primarily industrial. The area is not well connected to the active transportation network and is largely auto oriented. The station provides connectivity to MetroBus Local routes 3, 10, and 318.

Existing and Planned Pedestrian Facilities Assessment

The Slaughter Station includes approximately 4.97 miles of existing sidewalks and gaps of roughly 5.43 miles. These gaps only highlight public ROW as there are a significant number of both sidewalks and sidewalk gaps on private property. Overall, this location has limited pedestrian accessibility due to its residential setting.

Table 47: Slaughter Pedestrian Metrics

Characteristic	within 1/2 Mile of Station
Existing Sidewalks (Miles)	4.9
Good Condition	--
Fair Condition	--
Poor Condition	--
Sidewalk Gaps (Miles)	5.4
Average Block Length (Feet)	811
Sidewalk to Roadway Ratio (%)	0.52
Trails (Miles)	0
# of Pedestrian Signalized Intersections	0
# of Signalized Midblock Crossings	0
% ADA Crosswalks relative to # of Intersections	--

Shared Mobility Services	
# of Bike Shares Kiosks	0
# of Car Share Location	--
# of Parking Spaces	--
Multimodal Connectivity	
# of Key Destinations	0
# of Local Bus Stops within 1/2 Mile	4
# of HCT Stations within 1/2 Mile	0

Pedestrian Opportunities and Constraints

A number of opportunities and constraints exist for the Slaughter Station. Constraints include large parcels without pedestrian cut throughs (Centennial Park), lack of sidewalk connectivity, long block lengths, and freeway proximity (I-35). Opportunities include trail connections (South Boggy Creek Greenbelt), medium density residential development, and multimodal connections (bicycle lanes along S. Congress Ave.). Table 1 and Table 2 reference pedestrian opportunities and constraints along with the legend under each map.

Figure 86: Slaughter Pedestrian Facilities

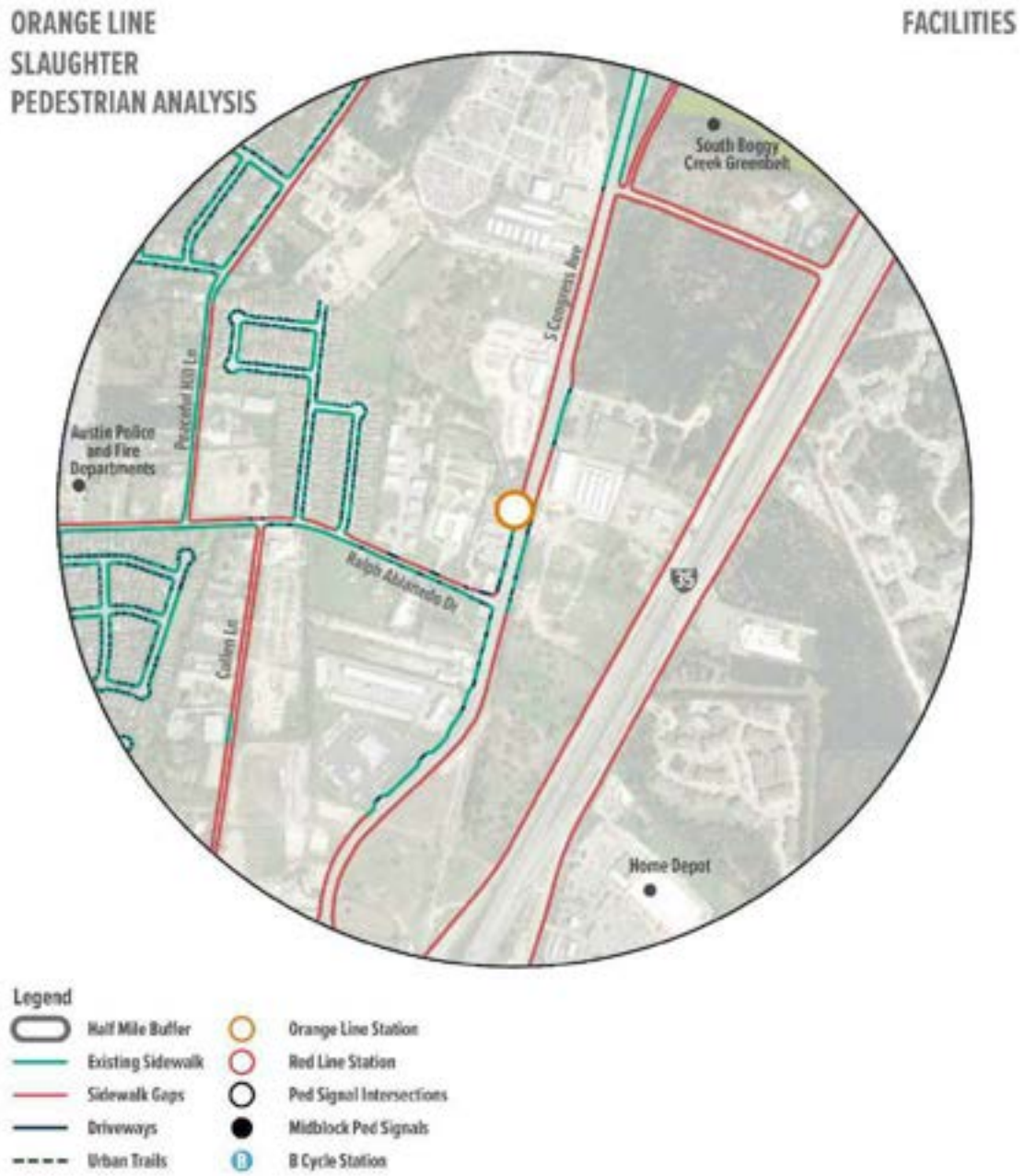
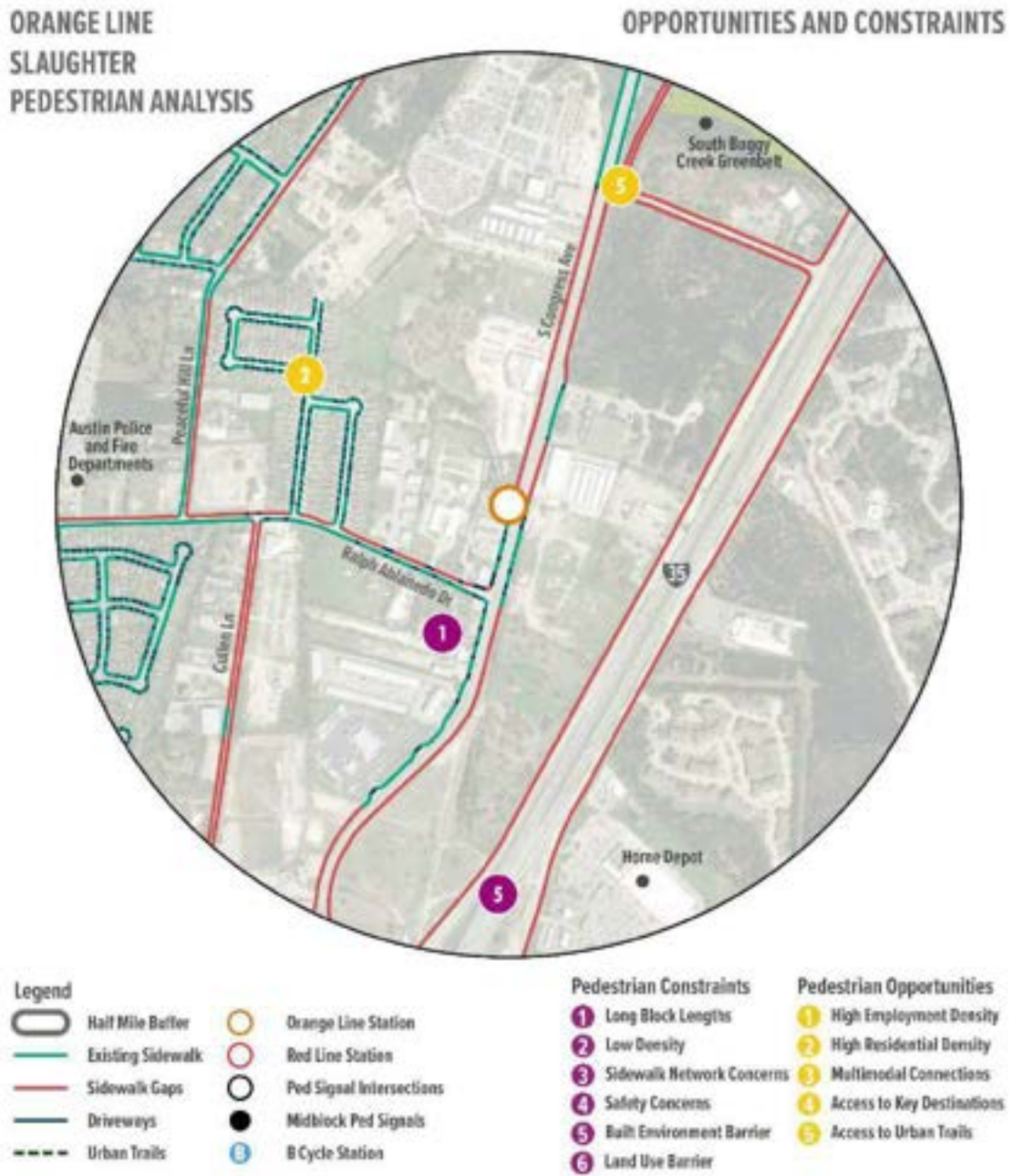


Figure 87: Slaughter Pedestrian Opportunities and Constraints



Existing and Planned Bicycle Facilities Assessment

There are approximately 57.5 miles of bicycle facilities within a 3-mile travel shed of the Slaughter Station, however, most of these facilities are low comfort/high stress for users, such as shared lanes along the I-35 frontage road. Overall, there is adequate bicycle connectivity in the station area, however, improvement of bicycle facility types could increase safety and rider comfort.

Table 48: Slaughter Bicycle Metrics

Bicycle Facilities	
Characteristic	within 3 Miles of Station
Existing Bicycle Facilities (Miles)	57.5
Bike Lanes	9.9
Shared Lanes	33.0
Protected Bikeway	0.8
Buffered Bike Lanes	9.7
Undefined	4.1
Planned Bicycle Facilities (Miles)	--
Bike Lanes	--
Shared Lanes	--
Protected Bikeway	--
Buffered Bike Lanes	--
Trails (Miles)	0
# of Bicycle Facility Gaps	2
Shared Mobility Services	
# of Bike Shares Kiosks	0
# of Car Share Location	--
# of Parking Spaces	--
Multimodal Connectivity	
# of Key Destinations	0
# of Local Bus Stops within 3 Miles	253

# of HCT Stations within 3 Miles	0
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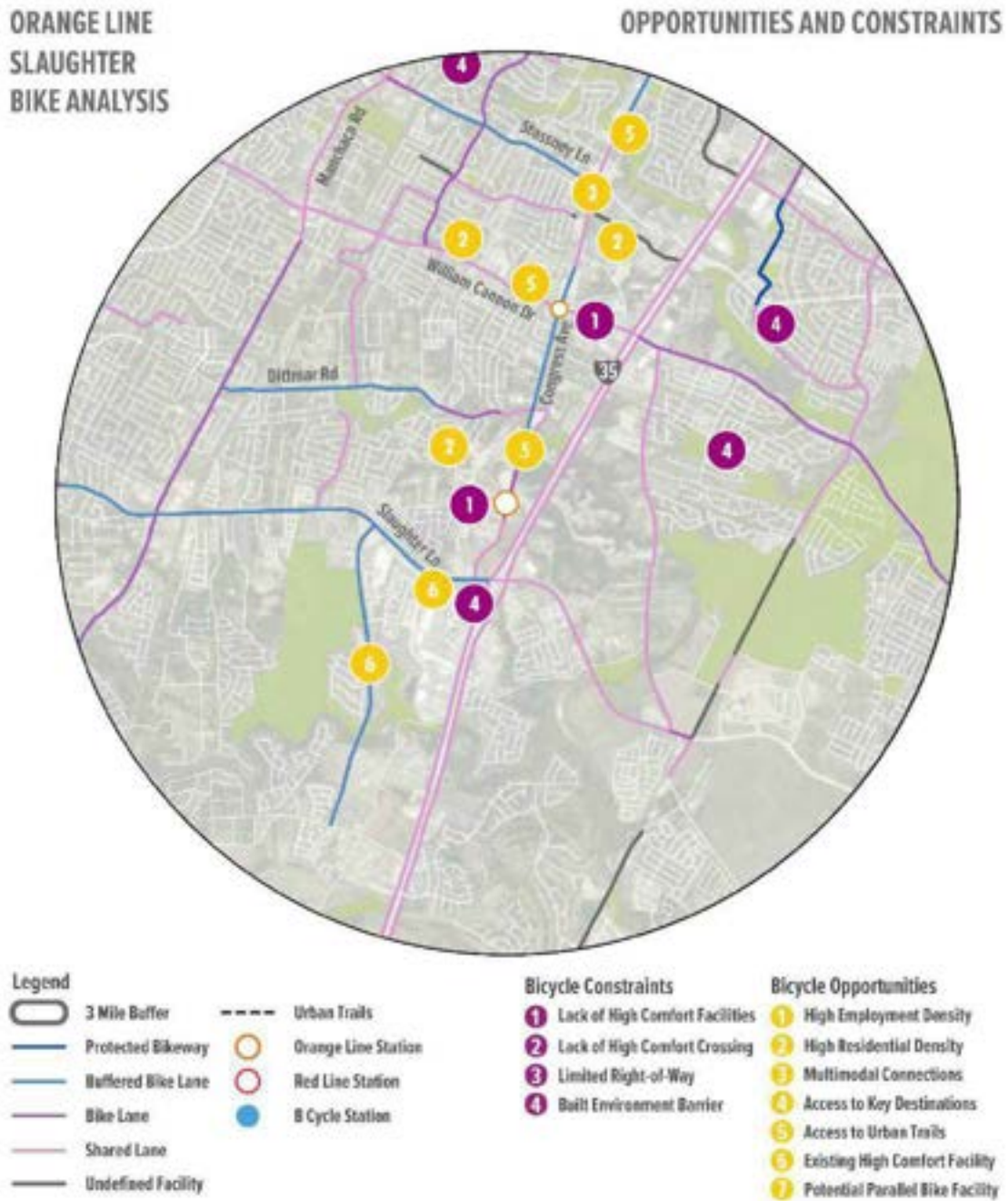
Bicycle Opportunities and Constraints

A number of opportunities and constraints exist for the Slaughter Station. Constraints include connectivity issue due to the built environment and accessibility barriers and lack of facilities. Opportunities include trail connections, connections to transit, access to key destinations, multimodal connections, and medium to high density residential development. Table 3 and Table 4 reference bicycle opportunities and constraints along with the legend under each map.

Figure 88: Slaughter Bicycle Facilities



Figure 89: Slaughter Bicycle Opportunities and Constraints



Orange Line Transportation Network Impacts

Parking Analysis



October 30, 2019

Parking Impacts Analysis

On-street parking along the Orange Line Corridor was counted by segment to determine the supply of parking spaces that may be impacted by the addition of an HCT Guideway. Parking spaces in segments 3, 4, and 5 were observed during two field visits, and data in the other segments was collected through a desktop survey. A total of 494 on-street parking spots were analyzed for occupancy rates in segments 3-5. Nine spots in segment 3 were not analyzed for occupancy but are identified and included in the Parking Right-of-Way Impacts section. Another 92 spots were identified in Segments 2 and 6. Segments 1 and 7 do not have on-street parking.

Occupancy data were collected on two occasions during walking visits to segments 3, 4, and 5. On the first day of collection, Wednesday, August 28th, 2019, there were 386 spots occupied during the midday collection period. A second observation was collected during the peak PM hour from 4:45 PM to 5:45 PM on October 8, 2019. Of the 444 spots studied, 291 were occupied. The occupancy rates are intended to give a snapshot of possible on-street parking utilization in the corridor. Based on the data collected, a possible condition of the on-street parking network is full utilization during the midday period followed by under-utilization during the PM peak hour.

The Downtown Austin Alliance’s Parking Strategy Report published in 2018 estimates that 71,504 total parking spaces in the downtown study area, including an estimated 6,405 on-street spaces. The cost per hour of 5,251 of these spaces ranges from \$1.00 per hour to \$1.20 per hour, and the remaining spots are free or reserved for employers, residents, and visitors.

Parking Along the Orange Line HCT Corridor

Overall, the midday parking occupancy rate in segments 3, 4, and 5 together was observed to be 86% and the PM peak rate was 49%. Below, information about parking occupancy is broken down further by segment.

Segment 1

There is no on-street parking on Lamar Avenue between Tech Ridge and the North Lamar Transit Center.

Segment 2

There is no on-street parking on Lamar Avenue between the North Lamar Transit Center and the intersection of Lamar and Guadalupe Street. Table 2.1 shows a breakdown of the on-street parking spots in segment 2. These spaces were analyzed at a desktop level using the most recent Google Street view imagery.

There are about 40 free on-street spaces adjacent to the Triangle and 36 free on-street spaces adjacent to Hyde Park businesses. Occupancy was not collected at these locations



and data limitations restrict the possibility to analyze other on-street parking and off-street parking that could serve the corridor should these spots be removed to accommodate the Orange Line HCT Guideway.

Segment 3

Table 2.2 shows a breakdown of the on-street parking spots in segment 3. The overall occupancy in this segment is the lowest of the three segments collected during the midday collection period at 75%. This is below the “efficient utilization” rate of 85%. In the PM peak period of collection, the utilization rate in this segment was 55%, well below the efficient utilization rate.

A breakdown of on-street parking utilization by block in Segment 3 indicates that some blocks are more than efficiently utilized in both periods of data collection. In the midday period, five blocks in Segment 3 experienced functionally full parking conditions, where it is difficult or

frustrating to find a parking space. Searching for parking in this period along segment 3 could contribute to vehicles “circling” for parking, contributing to delay and vehicular congestion. In addition to the 93 parking spots for vehicles on the street in this segment, there are 28 BCycle docking spaces.

Segment 4

Table 2.3 shows the data collected for parking in segment 4. This segment had the highest rate of vehicle occupancy in the midday collection period and the lowest rate of occupancy in the PM peak period. It is likely that the high volume of activity in the downtown area during business hours explains this recession in parking occupancy.

Under-utilization of this parking indicates that there could be less of an impact on those trying to park downtown during the PM Peak than in the Midday peak.

On Lavaca Street between 11th and 10th on the east side of the ROW, there are no delineated parking spaces, but two police vehicles were parked in the lane in front of the Governor’s mansion during the midday, and three were parked in this location during the PM peak collection period. Further coordination with the State of Texas is required to determine the impact of any change on the ROW on Lavaca Street on the parking lane in front of the Governor’s Mansion.

TABLE 2.1 - Segment 2 On-street Parking

Segment	Block	Side of Street	# of Vehicle Spots
2	Lamar Blvd Research Blvd-Airport	Both	0
2	Lamar Blvd Airport-Denson	Both	0
2	Lamar Blvd Denson-Koenig	Both	0
2	Lamar Blvd Koenig-Guadalupe	Both	0
2	Guadalupe Street Lamar-47 th	West	2
2	Guadalupe Street 47 th -46 th	West	14
2	Guadalupe Street 46 th -45 th	West	24
2	Guadalupe Street 45 th -43 rd	East	0
2	Guadalupe Street 43 rd -42 nd	East	14
2	Guadalupe Street 42 nd -41 st	East	18
2	Guadalupe Street 41 st -40 th	East	4
2	Guadalupe Street 40 th -38 th	Both	0
Totals			76

Given that downtown parking has the highest utilization rate of the three segments analyzed during the midday, if downtown parking lanes are removed to accommodate an HCT guideway, downtown could see an impact on street parking during the midday as drivers must shift to other on-street or available off-street parking. Figure 2.1 shows a map from the City of Austin of Downtown off-street parking locations. These parking lots have different rates and occupancy rules than on-street parking.

It may be more likely that users of on-street parking on Guadalupe will shift to on-street parking on one of the side-streets or parallel

streets to reach their destinations downtown. Figure 2.2 shows the zone of downtown where on-street metered parking is available. On-street parking is not available at every location indicated by the layer. This map intends to show the zones where such on-street metered parking may exist. The 40 BCycle parking spots in the segment will potentially be affected by the HCT guideway, and they could be relocated to the sidewalk or to side-streets if they cannot be accommodated in the Guadalupe Street or Lavaca Street ROWs.

Segment 5

Parking data were also collected in South Congress – Segment 5. If the Eastern block of Congress Avenue between Mary and Crockett is excluded, then the occupancy rate of this segment was 95% during the midday collection period. The overall parking rate during the midday period was 86% and the rate during the PM peak was 66%. Most parking directly in front of businesses was occupied at the time of collection in the midday. Twelve of the 16 blocks in this segment were at 100% utilization during the midday collection period. Parking not directly in front of shops or restaurants was more likely to be under-utilized. Supply was temporarily limited to 11 spaces on the western block of Congress between Monroe and Milton due to construction. When PM peak parking data were collected, parking spots on the East side of Congress across from the School of the Deaf were blocked off due to construction. They were open during the midday collection period.

South Congress is a relatively short segment compared to segments 3 and 4 and has the distinction of being surrounded by neighborhood streets on both sides. Parking on some neighborhood streets is free and other streets have resident-only parking restrictions. Congress Avenue parking data is summarized in Table 2.4.

Segment 6

There are 16 parking spaces on the East side of Congress Avenue between Pickle Rd and Ben White Blvd. These are recessed spaces and are the only spaces in Segment 6.

Segment 7

There are no on-street parking spaces on Congress Avenue between Ben White and Slaughter Lane. The ROW through this segment sometimes contains a shoulder that is not intended to be used for parking.

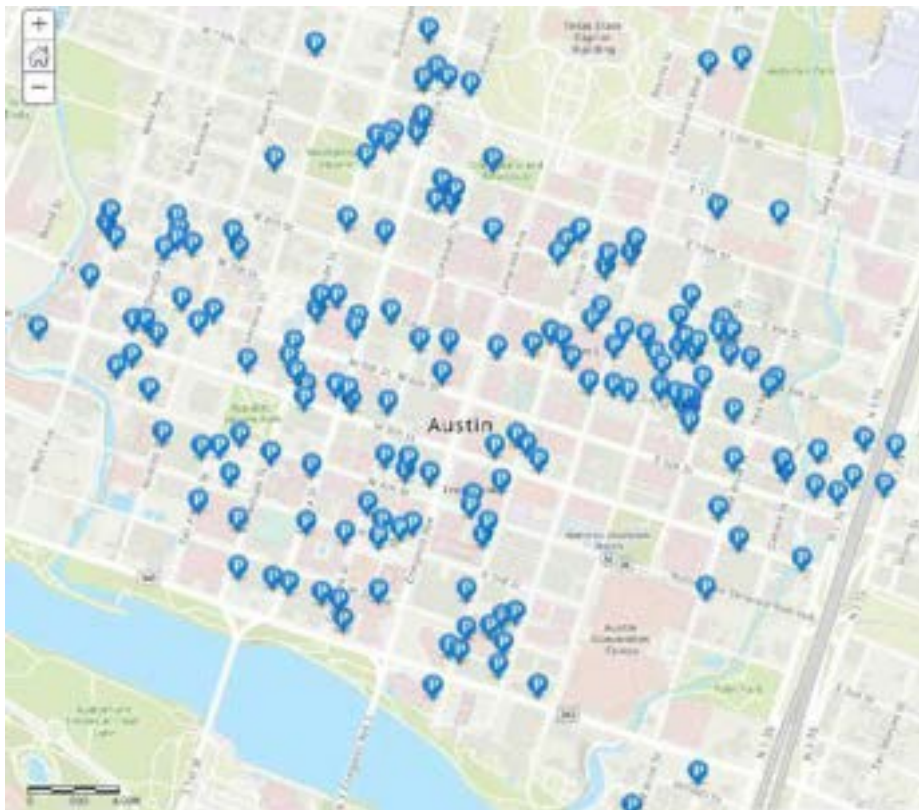


Figure 2.1 – Downtown Parking Entrances/Exits

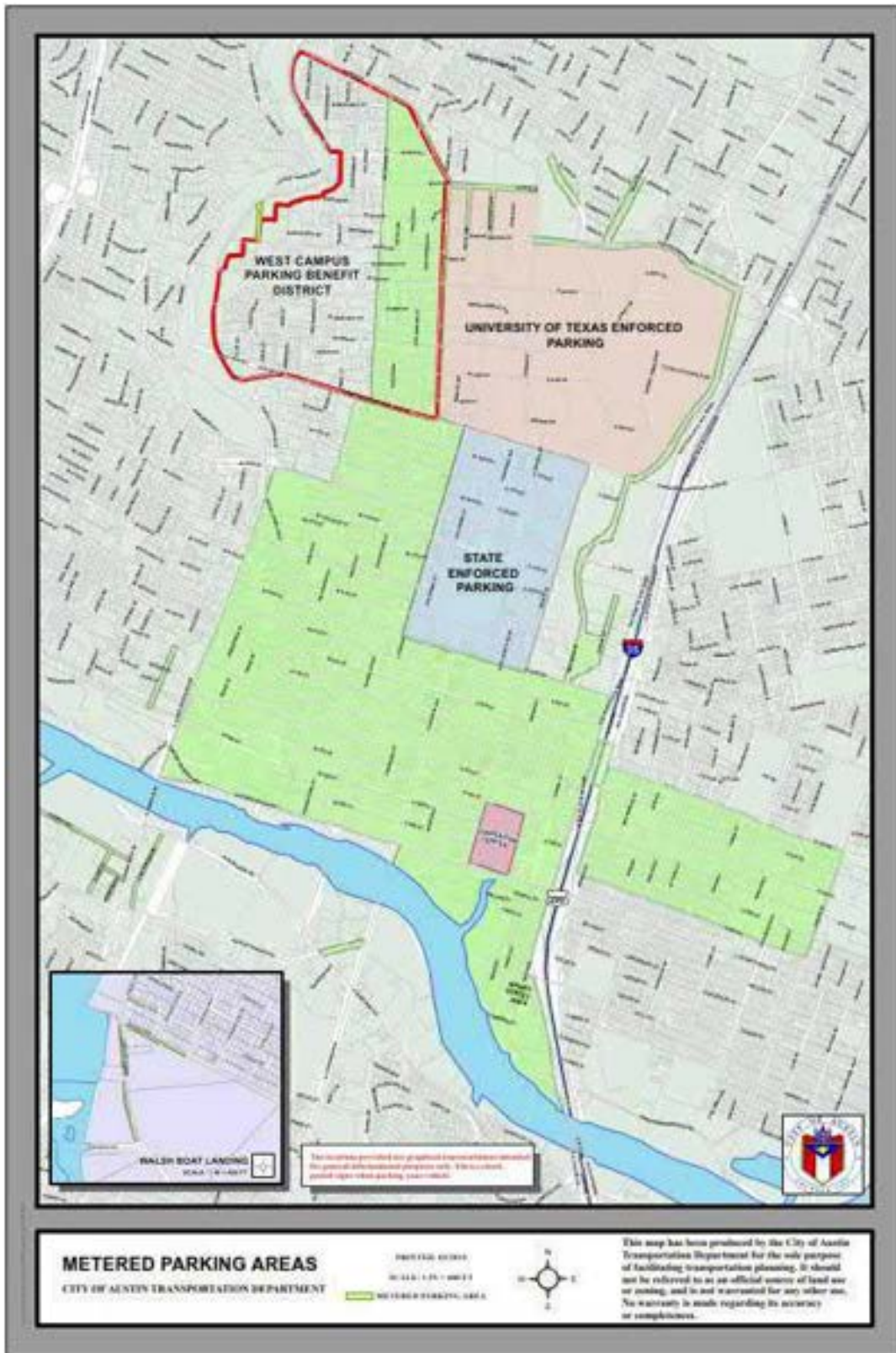


Figure 2.2 – Metered Parking Areas in Austin

TABLE 2.2 - Segment 3 On-street Parking

Segment	Block	Side of Street	# of Vehicle Spots	Time of Collection 1	Vehicle		Time of Collection 2	Vehicle		# of Bicycle Spots
					Spots Occupied 1	Occupancy Rate 1		Spots Occupied 2	Occupancy Rate 2	
3	Guadalupe St 38 th -35 th	East	0	-	-	-	-	-	-	-
3	Guadalupe St 35 th -34 th	East	6	-	-	-	-	-	-	-
3	Guadalupe St 34 th -31 st	East	0	-	-	-	-	-	-	-
3	Guadalupe St 31 st -30 th	East	0	-	-	-	-	-	-	-
3	Guadalupe St 30 th -29 th	East	3	-	-	-	-	-	-	-
3	Guadalupe St 29 th -Dean Keeton	West	0	-	-	-	-	-	-	-
3	Guadalupe St Dean Keeton-25 th	West	5	11:00am-12:00pm	5	100%	4:45pm-6:00pm	2	40%	
3	Guadalupe St 25 th -24 th	West	2	11:00am-12:00pm	2	100%	4:45pm-6:00pm	1	50%	
3	Guadalupe St 24 th -22 nd	West	16	11:00am-12:00pm	15	94%	4:45pm-6:00pm	8	50%	15
3	Guadalupe St 22 nd -21 st	West	12	11:00am-12:00pm	5	42%	4:45pm-6:00pm	9	75%	13
3	Guadalupe St 21 st -MLK	West	15	11:00am-12:00pm	10	67%	4:45pm-6:00pm	10	67%	
3	Guadalupe St MLK-18 th	East	0	11:00am-12:00pm	0	-	4:45pm-6:00pm	0	-	
3	Lavaca St MLK-18 th	West	10	11:00am-12:00pm	8	80%	4:45pm-6:00pm	2	20%	
3	Lavaca St 18 th -17 th	West	11	11:00am-12:00pm	9	82%	4:45pm-6:00pm	7	64%	
3	Guadalupe St 17 th -16 th	East	2	11:00am-12:00pm	2	100%	4:45pm-6:00pm	2	100%	
3	Lavaca St 17 th -16 th	West	10	11:00am-12:00pm	8	80%	4:45pm-6:00pm	6	60%	
3	Guadalupe St 16 th -15 th	East	2	11:00am-12:00pm	2	100%	4:45pm-6:00pm	1	50%	
3	Lavaca St 16 th -15 th	West	8	11:00am-12:00pm	4	50%	4:45pm-6:00pm	3	38%	
Totals			102		70	75%		51	55%	28

TABLE 2.3 - Segment 4 On-street Parking

Segment	Block	Side of Street	# of Vehicle Spots	Time of Collection 1	Vehicle Spots Occupied 1	Occupancy Rate 1	Time of Collection 2	Vehicle Spots Occupied 2	Occupancy Rate 2	# of Bicycle Spots
4	Lavaca Street 15 th -14 th	West	6	11:00-12:00pm	6	100%	4:45pm-6:00pm	4	67%	
4	Lavaca Street 14 th -13 th	West	7	11:00-12:00pm	7	100%	4:45pm-6:00pm	1	14%	
4	Guadalupe Street 13 th -12 th	East	11	11:00-12:00pm	9	82%	4:45pm-6:00pm	3	27%	
4	Lavaca Street 13 th -12 th	West	6	11:00-12:00pm	6	100%	4:45pm-6:00pm	2	33%	
4	Guadalupe Street 12 th -11 th	East	11	11:00-12:00pm	10	91%	4:45pm-6:00pm	5	45%	
4	Lavaca Street 12 th -11 th	West	8	11:00-12:00pm	6	75%	4:45pm-6:00pm	1	13%	
4	Lavaca Street 11 th -10 th	West	3	11:00-12:00pm	3	100%	4:45pm-6:00pm	0	0%	
4	Guadalupe Street 11 th -10 th	East	9	11:00-12:00pm	6	67%	4:45pm-6:00pm	2	22%	
4	Lavaca Street 11 th -10 th	East	*	11:00-12:00pm	2	-	4:45pm-6:00pm	3	-	
4	Guadalupe Street 10 th -9 th	East	5	11:00-12:00pm	5	100%	4:45pm-6:00pm	2	40%	
4	Lavaca Street 10 th -9 th	West	5	11:00-12:00pm	5	100%	4:45pm-6:00pm	1	20%	9
4	Guadalupe Street 9 th -8 th	East	3	11:00-12:00pm	3	100%	4:45pm-6:00pm	2	67%	12
4	Lavaca Street 9 th -8 th	West	4	11:00-12:00pm	4	100%	4:45pm-6:00pm	2	50%	
4	Guadalupe Street 8 th -7 th	East	12	11:00-12:00pm	12	100%	4:45pm-6:00pm	8	67%	
4	Lavaca Street 8 th -7 th	West	10	11:00-12:00pm	10	100%	4:45pm-6:00pm	11	110%	
4	Guadalupe Street 7 th -6 th	East	8	11:00-12:00pm	8	100%	4:45pm-6:00pm	3	38%	
4	Lavaca Street 7 th -6 th	West	3	11:00-12:00pm	3	100%	4:45pm-6:00pm	3	100%	
4	Guadalupe Street 6 th -5 th	East	0	11:00-12:00pm	0	-	4:45pm-6:00pm	0	-	
4	Lavaca Street 6 th -5 th	West	5	11:00-12:00pm	5	100%	4:45pm-6:00pm	4	80%	
4	Guadalupe Street 5 th -4 th	East	0	11:00-12:00pm	0	-	4:45pm-6:00pm	0	-	
4	Lavaca Street 5 th -4 th	West	0	11:00-12:00pm	0	-	4:45pm-6:00pm	0	-	19
4	Guadalupe Street 4 th -3 rd	East	0	11:00-12:00pm	0	-	4:45pm-6:00pm	0	-	
4	Lavaca Street 4 th -3 rd	West	0	11:00-12:00pm	0	-	4:45pm-6:00pm	0	-	
4	Guadalupe Street 3 rd -2 nd	East	3	11:00-12:00pm	3	100%	4:45pm-6:00pm	2	67%	
4	Lavaca Street 3 rd -2 nd	West	0	11:00-12:00pm	0	-	4:45pm-6:00pm	0	-	
4	Guadalupe Street 2 nd -CC	West	3	11:00-12:00pm	3	100%	4:45pm-6:00pm	2	67%	
4	Guadalupe Street 2 nd -CC	East	3	11:00-12:00pm	3	100%	4:45pm-6:00pm	2	67%	
4	Lavaca Street 2 nd -CC	West	2	11:00-12:00pm	2	100%	4:45pm-6:00pm	2	100%	
4	Lavaca Street 2 nd -CC	East	3	11:00-12:00pm	3	100%	4:45pm-6:00pm	1	33%	
Totals			130		124	95%		66	51%	40

*No public vehicle spots – these spots are reserved for law enforcement in front of the Governor’s Mansion

TABLE 2.4 - Segment 5 On-street Parking

Segment	Block	Side of Street	# of Vehicle Spots	Time of Collection 1	Vehicle Spots Occupied 1	Occupancy Rate 1	Time of Collection 2	Vehicle Spots Occupied 2	Occupancy Rate 2	# of Bicycle Spots
5	Congress Ave TX School for the Deaf	West	32	1:00pm-2:00pm	25	78%	4:45pm-6:00pm	10	31%	
5	Congress Ave TX School for the Deaf	East	13	1:00pm-2:00pm	11	85%	4:45pm-6:00pm	0	0%	13
5	Congress Ave Nellie-James	West	14	1:00pm-2:00pm	12	86%	4:45pm-6:00pm	10	71%	10
5	Congress Avenue James-Gibson	West	19	1:00pm-2:00pm	19	100%	4:45pm-6:00pm	19	100%	
5	Congress Avenue James-Gibson	East	20	1:00pm-2:00pm	20	100%	4:45pm-6:00pm	20	100%	
5	Congress Avenue Gibson-Elizabeth	West	18	1:00pm-2:00pm	18	100%	4:45pm-6:00pm	18	100%	
5	Congress Avenue Gibson-Elizabeth	East	14	1:00pm-2:00pm	14	100%	4:45pm-6:00pm	13	93%	
5	Congress Avenue Elizabeth-Monroe	West	16	1:00pm-2:00pm	16	100%	4:45pm-6:00pm	15	94%	
5	Congress Avenue Elizabeth-Monroe	East	15	1:00pm-2:00pm	15	100%	4:45pm-6:00pm	12	75%	
5	Congress Avenue Monroe-Milton	West	11	1:00pm-2:00pm	11	100%	4:45pm-6:00pm	11	100%	
5	Congress Avenue Milton-Annie	West	19	1:00pm-2:00pm	19	100%	4:45pm-6:00pm	15	79%	
5	Congress Avenue Milton-Annie	East	11	1:00pm-2:00pm	11	100%	4:45pm-6:00pm	9	82%	
5	Congress Avenue Annie-Mary	West	7	1:00pm-2:00pm	7	100%	4:45pm-6:00pm	1	14%	
5	Congress Avenue Annie-Mary	East	6	1:00pm-2:00pm	6	100%	4:45pm-6:00pm	2	33%	
5	Congress Avenue Mary-Crockett	West	12	1:00pm-2:00pm	12	100%	4:45pm-6:00pm	8	67%	
5	Congress Avenue Mary-Crockett	East	43	1:00pm-2:00pm	13	30%	4:45pm-6:00pm	14	33%	
Totals			270		229	85%		177	66%	23

Parking Right-of-Way Impacts

The impact of an HCT guideway on on-street parking depends upon the alignment and grade level of the HCT guideway. In most cases, this requires the conversion of any on-street parking spaces sharing the ROW with the HCT guideway. This means the conversion of up to 173 of 6,405 on-street downtown parking spaces, or about 2.7%. For HCT alignments that only utilize Guadalupe Street downtown and do not change the ROW of Lavaca Street, only 72 on-street spaces are impacted, or about 1.1% of downtown on-street spaces.

Due to data limitations, the proportion of spaces impacted on Guadalupe Street north of MLK and in the South Congress area are not available. The maximum number of spaces of on-street parking on Guadalupe Street between MLK and 29th Street impacted is 50. No on-street parking spaces on the UT campus will be impacted. In the South Congress Area, up to 267 on-street parking spaces will be impacted. Tables 2.4 – 2.6 show the number of parking spaces by block expected to be impacted by the different HCT alternatives. Figures 2.3-2.5 show the location of on-street spaces on the Orange Line Corridor. Numbers to the left of the line indicate on-street parking spaces on the west side of the street. Numbers to the right of the line indicate on-street parking spaces on the east side of the street.

Tables for parking impacts in segments 2 and 6 are not provided. All on-street parking is expected to be impacted in these segments. It may be possible that the above-grade scenario maintains some on-street spaces between columns, but the number is not clear.

The overall supply of on-street parking spaces impacted by the Orange Line will be slightly reduced by the addition of an HCT guideway. There is a possible under-utilization of parking in the Orange Line Corridor based on the data presented in this report and the previous Downtown Austin Alliance Parking Report. Downtown parking especially appears to be underutilized outside of normal business hours. Further analysis of the location and design of parking spaces that will not

be impacted by the HCT guideway will be addressed in the subsequent phase of this project.

TABLE 2.5 - Segment 2 On-street Parking Impacts

Segment	Block	Side of Street	Supply of On-street Vehicle Spots	Number of On-Street Spots Impacted by Different Alternatives	
				At-Grade	Grade Option Change
2	Lamar Blvd Research Blvd-Airport	Both	0	0	0
2	Lamar Blvd Airport-Denson	Both	0	0	0
2	Lamar Blvd Denson-Koenig	Both	0	0	0
2	Lamar Blvd Koenig-Guadalupe	Both	0	0	0
2	Guadalupe Street Lamar-47th	West	2	2	2
2	Guadalupe Street 47th-46th	West	14	14	14
2	Guadalupe Street 46th-45th	West	24	24	24
2	Guadalupe Street 45th-43rd	East	0	0	0
2	Guadalupe Street 43rd-42nd	East	14	14	14
2	Guadalupe Street 42nd-41st	East	18	18	18
2	Guadalupe Street 41st-40th	East	4	4	4
2	Guadalupe Street 40th-38th	East	0	0	0
	Totals		76	76	76

TABLE 2.6 - Segment 3 On-street Parking Impacts

Segment	Block	Side of Street	Supply of On-street Vehicle Spots	Number of On-Street Spots Impacted by Alternatives	
				Center-Running	Guad-Nueces Couplet
3	Guadalupe Street 38 th -35 th	East	0	0	0
3	Guadalupe Street 35 th -34 th	East	6	6	6
3	Guadalupe Street 34 th -31 st	East	0	0	0
3	Guadalupe Street 31 st -30 th	East	0	0	0
3	Guadalupe Street 30 th -29 th	East	3	3	3
3	Guadalupe Street 29 th - Dean Keeton	West	0	0	0
3	Guadalupe Street Dean Keeton-25 th	West	5	5	0
3	Guadalupe Street 25 th -24 th	West	2	2	0
3	Guadalupe Street 24 th -22 nd	West	16	16	0
3	Guadalupe Street 22 nd -21 st	West	12	12	0
3	Guadalupe Street 21 st -MLK	West	15	15	0
3	Guadalupe Street MLK-18 th	East	0	0	0
3	Lavaca Street MLK-18 th	West	10	0	0
3	Lavaca Street 18 th -17 th	West	11	0	0
3	Guadalupe Street 17 th -16 th	East	2	2	2
3	Lavaca Street 17 th -16 th	West	10	0	0
3	Guadalupe Street 16 th -15 th	East	2	2	2
3	Lavaca Street 16 th -15 th	West	8	0	0
	Totals		102	63	13

TABLE 2.7 - Segment 4 On-street Parking Impacts

Segment	Block	Side of Street	Supply of On-street Vehicle Spots	Number of On-Street Spots Impacted by Different Alternatives			
				West-Running	West-Running With Lavaca Conversion	Aerial	Couplet
4	Lavaca Street 15 th -14 th	West	6	0	0	0	6
4	Lavaca Street 14 th -13 th	West	7	0	0	0	7
4	Guadalupe Street 13 th -12 th	East	11	11	11	11	11
4	Lavaca Street 13 th -12 th	West	6	0	0	0	6
4	Guadalupe Street 12 th -11 th	East	11	11	11	11	11
4	Lavaca Street 12 th -11 th	West	8	0	0	0	8
4	Lavaca Street 11 th -10 th	West	3	0	0	0	3
4	Guadalupe Street 11 th -10 th	East	9	9	9	9	9
4	Lavaca Street 11 th -10 th	East	*	0	0	0	0
4	Guadalupe Street 10 th -9 th	East	5	5	5	5	5
4	Lavaca Street 10 th -9 th	West	5	0	0	0	5
4	Guadalupe Street 9 th -8 th	East	3	3	3	3	3
4	Lavaca Street 9 th -8 th	West	4	0	0	0	4
4	Guadalupe Street 8 th -7 th	East	12	12	12	12	12
4	Lavaca Street 8 th -7 th	West	10	0	0	0	10
4	Guadalupe Street 7 th -6 th	East	8	8	8	8	8
4	Lavaca Street 7 th -6 th	West	3	0	0	0	3
4	Guadalupe Street 6 th -5 th	East	0	0	0	0	0
4	Lavaca Street 6 th -5 th	West	5	0	0	0	5
4	Guadalupe Street 5 th -4 th	East	0	0	0	0	0
4	Lavaca Street 5 th -4 th	West	0	0	0	0	0
4	Guadalupe Street 4 th -3 rd	East	0	0	0	0	0
4	Lavaca Street 4 th -3 rd	West	0	0	0	0	0
4	Guadalupe Street 3 rd -2 nd	East	3	3	3	3	3
4	Lavaca Street 3 rd -2 nd	West	0	0	0	0	0
4	Guadalupe Street 2 nd -CC	West	3	3	3	3	3
4	Guadalupe Street 2 nd -CC	East	3	3	3	3	3
4	Lavaca Street 2 nd -CC	West	2	0	0	0	2
4	Lavaca Street 2 nd -CC	East	3	0	0	0	3
	Totals		130	68	68	68	130

TABLE 2.8 - Segment 5 On-street Parking Impacts

Segment	Block	Side of Street	Supply of On-street Vehicle Spots	Number of On-Street Spots Impacted by Different Alternatives	
				Center-Running At-grade	Center-Running Grade Change
5	Congress Ave TX School for the Deaf	West	32	32	32
5	Congress Ave TX School for the Deaf	East	13	13	13
5	Congress Ave Nellie-James	West	14	14	14
5	Congress Avenue James-Gibson	West	19	19	19
5	Congress Avenue James-Gibson	East	20	20	20
5	Congress Avenue Gibson-Elizabeth	West	18	18	18
5	Congress Avenue Gibson-Elizabeth	East	14	14	14
5	Congress Avenue Elizabeth-Monroe	West	16	16	16
5	Congress Avenue Elizabeth-Monroe	East	15	15	15
5	Congress Avenue Monroe-Milton	West	11	11	11
5	Congress Avenue Milton-Annie	West	19	19	19
5	Congress Avenue Milton-Annie	East	11	11	11
5	Congress Avenue Annie-Mary	West	7	7	7
5	Congress Avenue Annie-Mary	East	6	6	6
5	Congress Avenue Mary-Crockett	West	12	12	12
5	Congress Avenue Mary-Crockett	East	43	43	43
	Totals		270	270	270

Orange Line Transportation Network Impacts

Traffic Analysis



October 30, 2019

Transportation Analysis Memorandum

This memorandum provides a summary of the transportation analysis completed for the Orange Line at-grade high capacity transit alternatives. The remainder of this memorandum provides a summary of the existing conditions and analysis results.

Project Connect is the community's plan for a complete system of reliable and frequent transit operating in a limited congestion environment free from other traffic. This plan will connect people, places and opportunities in an affordable, efficient and sustainable way.

The Project Connect System Plan includes two dedicated pathway high-capacity transit (HCT) corridors, seven BRT light corridors, two commuter rail corridors, eight commuter bus corridors, and downtown circulator corridors, as well as numerous enhancement projects. Together, this "program of projects" constitutes a cohesive HCT system that will deliver real mobility solutions and benefits for the region in concert with the underlying fixed route network and other complementary mobility programs and services.

The focus of this Transportation Analysis summary is the Orange Line dedicated pathway HCT corridor, a 21-mile corridor that Capital Metro's (CMTA) MetroRapid 801 currently serves from Tech Ridge at the northern extent to Southpark Meadows near Congress and Slaughter Lane at the southern extent. **Figure 1** illustrates the corridor segments and potential stops.

The transportation analyses for this study are meant to be a limited effort. Due to the number of alternatives under consideration at this stage this traffic analysis was completed using a screening process. The first stage of screening evaluated the results of various City of Austin Corridor Mobility Program reports and other available data / reports to identify existing traffic operational issues and segments with more challenging conflicts. Based on that review, the segments 3 and 4 (Central Austin and Downtown)

were determined to require more detailed analysis.

Existing Conditions

This section summarizes the current traffic conditions in the Orange Line corridor between Cesar Chavez Street and 29th Street on Guadalupe and Lavaca. This provides a basis of comparison for any changes that may occur in these segments as a result of adding an at-grade HCT Guideway. Based on the existing conditions, areas where the HCT guideway will have substantial conflicts with pedestrians, bicyclists, scooter operators, and motorists are identified. This section is informed by both desktop analysis and a field visit to the Downtown and The Drag Segments conducted on 8/28/2019 – 8/29/2019.

Downtown Segment

Guadalupe Street and Lavaca Street form a major north/south couplet through downtown Austin. Guadalupe between MLK and Cesar Chavez forms the southbound (SB) portion of the couplet and Lavaca forms the northbound (NB) portion of the couplet. Both streets serve as multimodal corridors for transit, bicycles, scooters, pedestrians, and transportation network companies (TNCs).

Table 1 summarizes the lane configurations on Guadalupe and Lavaca Streets. The Right of way (ROW) varies between Cesar Chavez and MLK on Lavaca Street. Between Cesar Chavez and 3rd Street, three through lanes with turning lanes as necessary on 2nd and 3rd Streets, and a bicycle lane. The bus/shared right turn lane on Lavaca begins north of the intersection with 3rd Street. From 3rd Street to MLK, the easternmost lane on Lavaca is a bus-only lane where vehicles turning right onto the cross-streets share the bus lanes. The ROW widens north of 5th Street to include a parking lane on Lavaca that is mostly not recessed, other than the block between 7th and 8th street.

Figure 1: Orange Line Corridor Segments and Proposed Stations

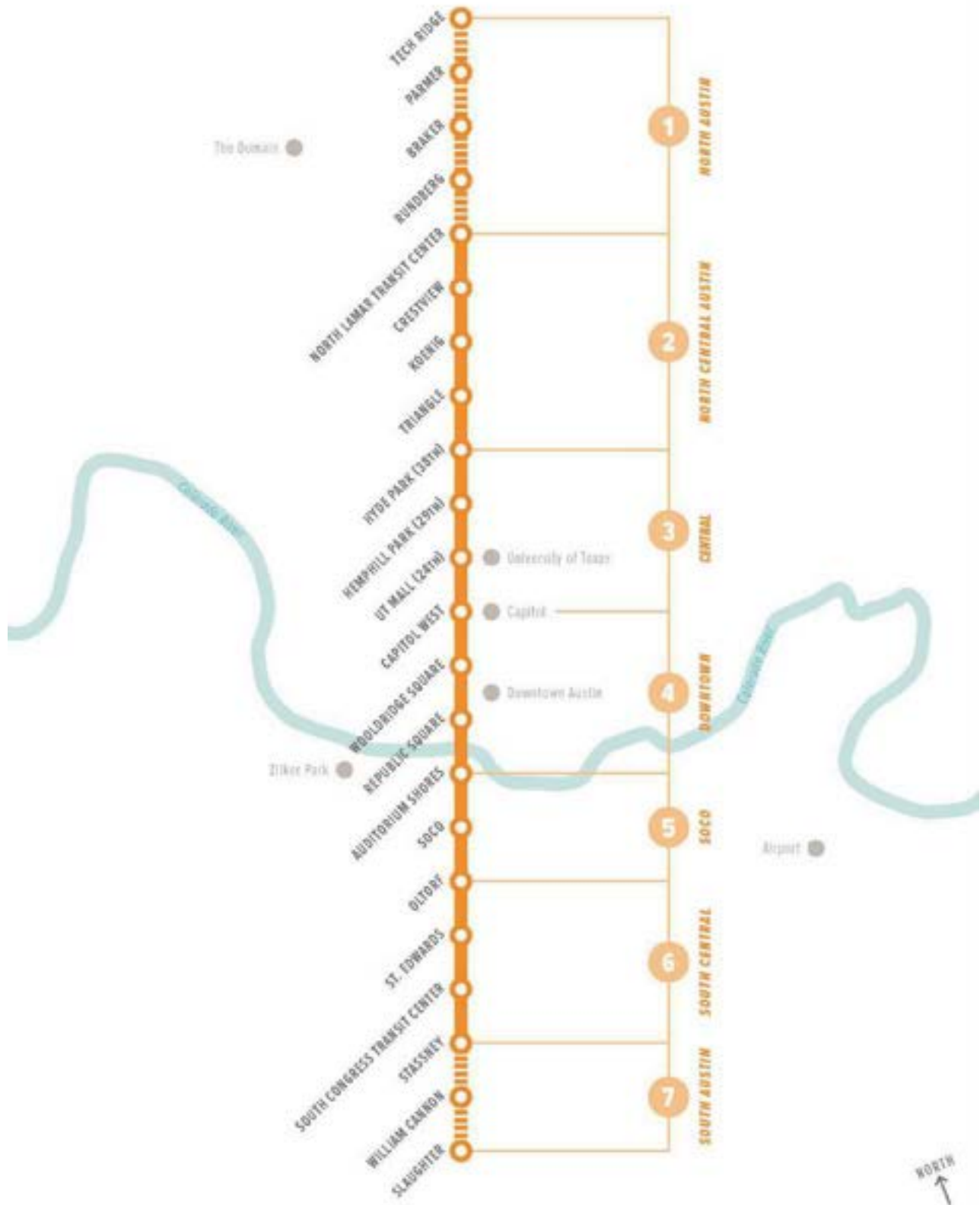


Table 1: Intersection Lane Configuration -

Existing Conditions

Intersection	Signal?	Intersection Leg				Bus Lane?	Bike Lane?
		W	E	S	N		
1st St / Barton Springs Rd	Y	L, L, T, TR, Bk	L, T, TR, Bk	L, T, T, Bk, R	L, T, T, R, Bk	N	Y
1st St / Riverside Dr	Y	L, T, TR	L, T, TR	L, T, T, TR, Bk	L, T, T, T, Bk, R	N	Y
Riverside Dr / Barton Springs	Y	LT, T, Bk, R	LT, TR, Bk	L, T, TR	L, T, TR	N	Y
Cesar Chavez St / Guadalupe St	Y	T, T, T, R	T, T		LT, T, T, Bk, R	N	Y
Cesar Chavez St / Lavaca St	Y	L, L, T, T	T, TR	LT, T, T, RBk		N	Y
Cesar Chavez St / Colorado St	Y	T, T, T	T, T		P, L, LR, R	N	N
Cesar Chavez St / San Antonio St	Y	LT, T, T	T, TR		L, R	N	N
2nd St / Guadalupe St	Y	TR	L, T		LT, T, T, TRBk		
2nd St / Lavaca St	Y	LT	TR, P	LT, T, TR, Bk			
3rd St / Guadalupe St	Y	TR, P, Bk	LT, P, Bk		LT, T, T, BR, Bk	Y	Y
3rd St / Lavaca St	Y	LT, P, Bk	TR, P, Bk	LT, T, TR, Bk		N	Y
4th St / Guadalupe St	Y	TR	LT		LT, T, T, BR, Bk	Y	Y
4th St / Lavaca St	Y	LT	T, R, P	LT, T, T, BR, Bk		Y	Y
5th St / Guadalupe St	Y	P, T, T, T, TR, P			L, LT, T, T, B, Bk	Y	Y
5th St / Lavaca St	Y	P, LT, T, T, T, P		T, T, T, B, Bk, R		Y	Y
6th St / Guadalupe St	Y		P, LT, T, T, T, P		P, T, T, T, BR, Bk	Y	Y
6th St / Lavaca St	Y		P, T, T, T, TR, P	P, LT, T, T, B, Bk		Y	Y
7th St / Guadalupe St	Y	P, T, TR, P			P, LT, T, T, B, Bk	Y	Y
7th St / Lavaca St	Y	P, L, T, T, T, P		P, T, T, T, B, Bk, R		Y	Y
8th St / Guadalupe St	Y	P, R	P, L, T, P		P, T, T, T, BR, Bk	Y	Y
8th St / Lavaca St	Y		P, T, TR	P, T, T, T, B, Bk		Y	Y
9th St / Guadalupe St	Y	P, TR			P, LT, T, T, BR, Bk	Y	Y
9th St / Lavaca St	Y	LT, T, T, P		P, T, T, T, BR, Bk		Y	Y

Intersection	Signal?	Intersection Leg				Bus Lane?	Bike Lane?
		W	E	S	N		
10th St / Guadalupe St	Y		P, L, T, P		P, T, T, T, BR, Bk	Y	Y
10th St / Lavaca St	Y		T, TR	P, LT, T, T, B, Bk		Y	Y
11th St / Guadalupe St	Y	TR	L, T, Bk, P		P, LT, T, T, BR, Bk	Y	Y
11th St / Lavaca St	Y	L, T, Bk, P	T, R, Bk	P, LT, T, T, BRBk, P		Y	Y
12th St / Guadalupe St	Y	T, TR, P	L, T, T, P		P, T, T, T, BRBk	Y	Y
12th St / Lavaca St	Y	L, T, T, P	T, TR, P	P, LT, T, T, BRBk		Y	Y
13th St / Guadalupe St	N	TR, P	LT, P		LT, T, T, BR, Bk	Y	Y
13th St / Lavaca St	Y	LT	P, TR	P, LT, T, T, BR, Bk		Y	Y
14th St / Guadalupe St	N	TR, P	LT, P		LT, T, T, BRBk	Y	Y
14th St / Lavaca St	N	P, LT	P, TR	P, LT, T, T, BR, Bk		Y	Y
15th St / Guadalupe St	Y	T, T, TR	L, T, T, T		P, LT, T, T, BBk, R	Y	Y
15th St / Lavaca St	Y	L, T, T, T	T, T, TR	P, LT, T, T, BRBk		Y	Y
16th St / Guadalupe St	N		P, LT, P		T, T, BR, Bk	Y	Y
16th St / Lavaca St	Y		P, TR, P	P, LT, T, T, B, Bk		Y	Y
17th St / Guadalupe St	Y	P, T, R			P, LT, T, Bk	N	Y
17th St / Lavaca St	Y	P, LT		P, T, T, T, BR, Bk		Y	Y
18th St / Guadalupe St	N		P, LT, P		T, TR, Bk	N	Y
18th St / Lavaca St	N		P, LT	P, LT, T, B, Bk, TR			
MLK / Guadalupe St	Y	L, T, TR, Bk	L, T, T, Bk, R		L, T, T, Bk, R, P	N	Y
MLK / Lavaca St	Y	T, T, Bk	T, T, Bk	P, L, L, B, Bk, R		Y	Y
MLK / San Antonio St	N	L, T, TR, Bk	L, T, TR, Bk	LTR		N	Y
MLK / Nueces St (East)	Y	T, TR, Bk	L, T, T	LR	LTR	N	Y
MLK / Nueces St (West)	Y	T, TR, Bk	T, T		L, R	N	Y

Intersection	Signal?	Intersection Leg				Bus Lane?	Bike Lane?
		W	E	S	N		
21st St / Guadalupe St	Y	L, TR	L, T, R	T, TR, Bk	LT, TR, P, Bk	N	Y
22nd St / Guadalupe St	Y	LR	TR	T, T, Bk	T, T, P, Bk	N	Y
24th St / Guadalupe St	Y	LT, R	T, TR	T, TR, Bk	T, T, Bk, R	N	Y
Dean Keeton / Guadalupe St	Y		L, L, R, P	T, TR, Bk	L, T, T	N	Y
26th St / Guadalupe St	Y	L, R	R	T, T, Bk	T, TRBk	N	Y
27th St / Guadalupe St	Y		LT, R, Bk	L, T, TR, Bk	L, T, TRBk	N	Y
29th St / Guadalupe St	Y	L, T, R	L, TR	L, T, TR, Bk	L, T, TR, Bk	N	Y

Note:

Lane Abbreviations: L=left-turn lane, T=through lane, R=right=turn lane, LT=shared through/left, TR=shared through/right, BR=shared bus/right, Bk=Bike lane, B=bus lane, P=parking lane

Generally, the ROW is narrower closer to Cesar Chavez, widens north of 3rd Street, and stays wide enough to accommodate a parking lane, bus lane/right turn lane, three vehicular travel lanes and a bicycle lane between 4th Street and MLK.

The sidewalk is nearly continuous on Lavaca Street, aside from the eastern block between 10th and 11th Streets – the site of the Governor’s Mansion. There is no developed sidewalk on the eastern side of Lavaca on that block, and there is a reserved police parking lane on the street in front of the Governor’s Mansion. Figure 2 shows the current layout of the ROW in front of the Governor’s Mansion on Lavaca Street.



Figure 2 – Governor’s Mansion on Lavaca Street

Guadalupe Street has an inconsistent cross section width between MLK and Cesar Chavez Streets. South of the MLK/Guadalupe intersection, there are two SB through lanes. Bicycle traffic on the east side of Guadalupe must share the sidewalk with pedestrians. A contraflow bus lane serves as the only NB movement through the MLK & Guadalupe intersection. Northbound buses from Downtown on Lavaca Street turn left from the easternmost lane at the intersection of 18th & Lavaca, then turn right into the protected contraflow lane at the intersection of 18th & Guadalupe and

proceed north through the MLK & Guadalupe intersection. Figure 3 shows the layout of the protected bus lane at 18th & Lavaca.



Figure 3 –Lavaca Street & 18th Street

In the link of Guadalupe between 18th and MLK, the ROW is at its narrowest in the downtown segment. An at-grade HCT guideway may require widening the ROW or taking existing SB travel lanes. Figure 4 shows the layout of the contraflow bus lane, SB lanes, and shared bicycle/pedestrian path at the intersection of Guadalupe & MLK.

Between 18th and 17th Streets on Guadalupe Streets, there are two vehicular through lanes and a non-recessed parking lane and a bicycle lane. South of 17th Street, the parking lane is removed, there are two vehicular through lanes, the shared bus/right turn lane begins, and the bicycle lane is preserved. South of 16th Street, the ROW widens to include three vehicle traffic lanes, a bicycle lane, and a shared bus/right turn lane. The intersection of 16th & Guadalupe marks a big lane shift, where the western curb is moved to the west. The three through lane + bus lane/shared right turn + bicycle configuration continues, with a parking lane consistently added on the eastern curb, until south of the 6th & Guadalupe intersection.



Figure 4 – Guadalupe & MLK Contraflow Bus Lane

Here, the parking lane becomes a left turn only lane, and south of the 5th & Guadalupe intersection, the ROW narrows and the east parking lane is removed. There are 3 through lanes, a bus/shared right turn lane, and a bicycle lane from south of 5th & Guadalupe to 3rd & Guadalupe. South of 3rd & Guadalupe, the shared bus/right turn lane ends, and the bicycle lane merges with the right lane. Between 2nd & Guadalupe and Cesar Chavez & Guadalupe, there is recessed parking on both sides of the street. Through this narrower segment of ROW, an at-grade HCT guideway would likely require taking more existing travel lanes (non-parking lanes) because it is not possible to expand the ROW.

Republic Square, located on the western block between 4th and 5th streets on Guadalupe, is a major transit stop for downtown bus routes. There is a transit signal at the intersection of 4th & Guadalupe allowing bus traffic to jump the queues at this intersection and rejoin traffic after stopping at the Republic Square bus stop. Bus dwell time at Republic Square may have a substantial impact on the capacity of the right turn lane at both 5th & Guadalupe and 4th & Guadalupe. Vehicles making right turns at these

intersections will conflict with the buses as they queue and make stops to pick up passengers.

The Drag Segment

North of MLK, traffic from Guadalupe Street and Lavaca Street merge and the north/south couplet ends. In the segment between MLK and 29th Street, the ROW width and lane configurations vary. At the intersection of MLK & Guadalupe, there are two SB through lanes, one NB through lane, a SB left turn lane, NB and SB bicycle lanes, and a SB right turn lane channelized with a median. North of MLK & Guadalupe, there are generally two vehicular through lanes in each direction and a protected SB bicycle lane. The NB bicycle lane is adjacent to the sidewalk and the eastern NB traffic lane. North of 24th Street on Guadalupe, the ROW narrows, and the parking lane is removed. Between Dean Keeton and 27th, there is a two-way left turn (TWLT) lane. Between 27th and 29th Street, the ROW narrows further – there are two lanes in both directions, with bicycles sharing through lanes, and no on-street parking on either side.

Guadalupe between MLK and 29th street is a heavy use multimodal corridor with student pedestrian, bicycle, and scooter traffic. Many major north/south transit routes have multiple stops on this segment. On-street parking is intermittent, with most of the parking existing in a non-recessed parking lane between MLK and Dean Keeton.

The 2017 Guadalupe Corridor Mobility report indicated that in the PM peak hour, over 7,500 pedestrians and bicyclists crossed Guadalupe Street. These high volumes of pedestrians and bicycles may influence right turn and left turn capacities at intersections in this segment. For example, 21st and Guadalupe is a popular pedestrian, scooter, and bicycle crossing, owing to its proximity to the UT Austin campus. westbound (WB) right turns on red are not permitted, and vehicles must yield to pedestrians before turning at this intersection. SB vehicles turning left onto 21st have a short, protected, left turning phase, but must otherwise yield to pedestrians during the SB/NB phase. Left turns along Guadalupe are prohibited at 21st Street

(only NB prohibited), 22nd Street, 24th Street, 25th Street and 26th Street. These turns are likely not allowed due to the large volumes of pedestrians, bicyclists, and scooter operators reducing turning movement capacity. Conflicts between different travel modes may cause safety concerns that would be exacerbated by the addition of left turns.

At the intersection of 22nd and Guadalupe Street, buses turn right onto Guadalupe, making wide right turns. As with 21st Street, this intersection experiences pedestrian, bicycle, and scooter conflicts that may decrease the capacity of the turning movements. Figure 5 shows a bus yielding to pedestrians crossing while waiting to make a right turn. There is a pedestrian only signal on Guadalupe Street between 22nd Street and 24th Street. This serves as another crossing for pedestrians, bicyclists, and scooters, many of whom are students at the University of Texas.



Figure 5 – Guadalupe Street & 22nd Street

Similar conflicts exist at 24th Street. Semi-trucks were observed making wide right turns onto Guadalupe from 24th street. One semi-truck was observed encroaching on NB lanes in the middle

of the intersection. Figure 6 shows a semi-truck observed making a wide right turn at this intersection. In the 2017 Corridor Mobility Report for Guadalupe Street, it was reported that 1200 EB/WB pedestrians and 900 NB/SB pedestrians cross in the PM peak, conflicts that are likely to severely limit the turning movement capacities at this intersection.



Figure 6 – Guadalupe Street & 24th Street

North of 24th Street, NB traffic on Guadalupe Street is impacted by buses queuing to stop at the bus stop at the intersection of Dean Keeton & Guadalupe Streets. Dean Keeton & Guadalupe is another large pedestrian crossing, serving UT students and visitors. Pedestrian crossings at this intersection coupled with bus dwelling times may have a substantial impact on the capacity of the intersection serving NB right-turning traffic. Multiple buses were observed queuing to stop at the bus stops south of the intersection. Buses at these bus stops conflict with bicyclists and scooters using the NB bicycle lane. Buses making these stops are required to get as close to the curb as possible when loading / unloading passengers. Cyclists and scooters must wait behind buses dwelling at the bus stop, just like other motor vehicles, or attempt to make a pass around waiting buses. Figure 7 shows this conflict looking south from the Guadalupe & Dean Keeton intersection.



Figure 7 – Guadalupe Street & Dean Keeton Bus Stops

At Guadalupe & 26th Street in the PM peak, pedestrians were observed crossing the north leg of the intersection though this was not allowed according to signage. Pedestrians also were observed disobeying when to cross the intersection – several crossed long after the pedestrian beacon stopped flashing and the north/south phase was green. The EB approach at this intersection is currently operating with only one lane causing significant queuing and delay. The queue was observed in the PM peak to end west of Nueces & 26th Street, as shown in Figure 8. In addition to the queue, vehicles were observed using the Two-Way Left Turn (TWLT) median north of 26th Street as a through lane at the intersection, with the intention of turning left at the intersection of Guadalupe Street and Dean Keeton Street. The queue at Dean Keeton through the intersection at 26th Street blocks EB vehicles attempting to merge into this lane to turn left onto Dean Keeton.



Figure 8 – Queue along eastbound 26th at Guadalupe

At the intersection of Guadalupe Street with 27th Street, there are no eastbound lanes west of Guadalupe Street as 27th is one-way WB. North of the intersection, Guadalupe Street skews to the northwest, causing vehicles moving through the intersection to slow down as they must ensure they stay in the proper lane as the roadway alignment changes. Just north of the intersection is a one-way extension NB with Hemphill Park, a one-way street with one through lane and intermittent parking on the east and west sides. This street is aligned with Guadalupe Street south of the 27th Street intersection. Vehicles turning onto Hemphill Park must yield to pedestrians crossing the intersection. Pedestrians, cyclists, and scooter operators moving north on Guadalupe across Hemphill Park must cross with their backs to oncoming traffic. Hemphill Park is a residential street with apartment complexes serving students. From 5:15 PM to 5:30 PM on 8/28/2019, 12 vehicles were observed entering Hemphill, 11 bicycles/scooters were counted, and 46 pedestrians were observed conflicting with Hemphill. Vehicles observed entering Hemphill Park by way of the Fedex Parking lot were not included in the count. Though Hemphill Park is a one-way street, vehicles have been observed turning right at the 29th & Hemphill

Park intersection to access the driveway of the large apartment complex on the west side of the street just south of the intersection. Figure 9 shows the intersection of Guadalupe Street with Hemphill Park.



Figure 9 – Guadalupe Street & Hemphill Park

Guadalupe Street & Nueces Street is an unsignalized, uncontrolled intersection south of the intersection of Guadalupe & 29th Street. Nueces is a one-way SB street with two through lanes and parking lanes on both the east and west side. The intersection is wide and does not have a developed pedestrian crossing. Pedestrians crossing this intersection must cross with their backs to oncoming vehicles at a crossing where the distance is substantially longer than the distance of normal crossings with no traffic signal. The SB bicycle lane also ends in the middle of the intersection of Guadalupe & Nueces. Figure 10 shows the intersection.



Figure 10 – Guadalupe Street & Nueces Street

Vehicles turning right from Guadalupe Street to Nueces Street were observed to hug the right curb, entering the bicycle lane just south of the sidewalk. The pavement condition is poor and lane striping is missing at the intersection. Heavy bicycle traffic was observed turning right onto Nueces. This was expected, as south of the intersection on Guadalupe, bicyclists must merge with the right SB lane.

Guadalupe & 29th street has a skewed alignment that slows down through traffic in both SB and NB directions. SB vehicles were observed to move faster through the intersection when there were no vehicles queuing to make a left turn from the south. Pedestrian crossings are not permitted across the south leg of this intersection. Buses are impacted by the skewed alignment of the intersection. Figure 11 shows the intersection from the south.



Figure 11 – Guadalupe Street & 29th Street

Traffic Analysis

This section presents the traffic analysis for at-grade high capacity transit (HCT) alternative configurations for the Orange Line Corridor between Cesar Chavez and 29th Street. The study area was split into two segments - the Couplet area south of Martin Luther King Jr. Boulevard (MLK) and The Drag to the north of MLK. Due to the number of alternatives, this is a macro analysis of traffic under existing traffic control conditions (signalization and signal timings). No network improvements beyond those described in this report were accounted for.

This analysis assumes that the current traffic volume demand would remain even with the high capacity transit in place. This study has not attempted to quantify mode shift (i.e., private vehicle to transit) or redistribution of traffic to other parallel corridors (e.g., N. Lamar Boulevard).

Turning Movement Counts (TMCs) for the AM and PM peak hours were adopted from the City of Austin Corridor Mobility Program's 2019 Guadalupe Corridor Traffic Operational Analysis. These counts were used to model The Drag's intersections on Guadalupe Street between MLK and 29th Street and 24th Street between West Nueces and Guadalupe. They

were collected on September 5th, 11th, and 12th, 2018. The most recent turning movement counts for the Downtown Couplet were collected from the City of Austin GIS database. To update TMCs from years before the existing analysis, a growth factor of 1% per year was applied, and volume balancing was completed between intersections where necessary. Because of a lack of existing TMC data for downtown intersections in the AM peak, only the PM Peak was analyzed for the couplet segment.

For this analysis the assumed headway for HCT operations is 10 minutes per direction.

Table 2 displays the Level of Service (LOS) classified by intersection delay. These classifications are as described in the 6th Edition of the Highway Capacity Manual (HCM). Delay and corresponding LOS will be presented to compare the alternative network configurations.

Table 2- Level of Service by Delay

LOS	Average Control Delay for Intersections	
	Signalized (s/veh)	Unsignalized / Stop-Controlled (s/veh)
A	≤ 10	≤ 10
B	> 10 and ≤ 20	> 10 and ≤ 15
C	> 20 and ≤ 35	> 15 and ≤ 25
D	> 35 and ≤ 55	> 25 and ≤ 35
E	> 55 and ≤ 80	> 35 and ≤ 50
F	> 80	> 50

The Drag

The impact on traffic operations for two alternative configurations for adding a High Capacity Transit (HCT) guideway were analyzed for The Drag. This section will describe the alternative network configurations, note major assumptions and constraints in the models, and present the resulting delays and LOS at key intersections.

The City of Austin provided existing Synchro models for the AM and PM peaks from the Guadalupe Street Corridor Traffic Operations Technical Memorandum from March 2019. The modeling tool to determine delay at intersections was Synchro 10. These macro analyses do not include pedestrian, bicyclist, and transit activity that have an impact on intersection capacity and ultimately the delay experienced by vehicles in the network. For example, bus dwell times and the mixing of modes in travel lanes (e.g. bicyclists and electric scooter operators using the right lane where bicycle lanes do not exist) are not included in these macro analyses. Existing data

were available at the following intersections in the Drag segment:

- Guadalupe Street & 29th Street
- Guadalupe Street & 27th Street
- Guadalupe Street & 26th Street
- Guadalupe Street & Dean Keeton Street
- Guadalupe Street & 24th Street
- Guadalupe Street & 22nd Street
- Guadalupe Street & 21st Street
- Guadalupe Street & Martin Luther King Jr. Boulevard (MLK Boulevard)
- 24th Street & Nueces Street (West)
- 24th Street & Nueces Street (East)
- 24th Street & San Antonio Street (West)
- 24th Street & San Antonio Street (East)

Existing data were not available for other intersections in this segment. Delay for these intersections is reported only with traffic re-routed from Guadalupe Street where possible for the alternate configurations. Intersections with no current TMCs available include:

- Nueces Street & 28th Street

- Nueces Street & 27th Street
- Nueces Street & 26th Street
- Nueces Street & 25th Street
- San Antonio Street & 23rd Street
- San Antonio Street & 22nd Street
- San Antonio Street & 21st Street
- San Antonio Street & MLK Boulevard
- Guadalupe Street & Hemphill Park
- Hemphill Park & 29th Street

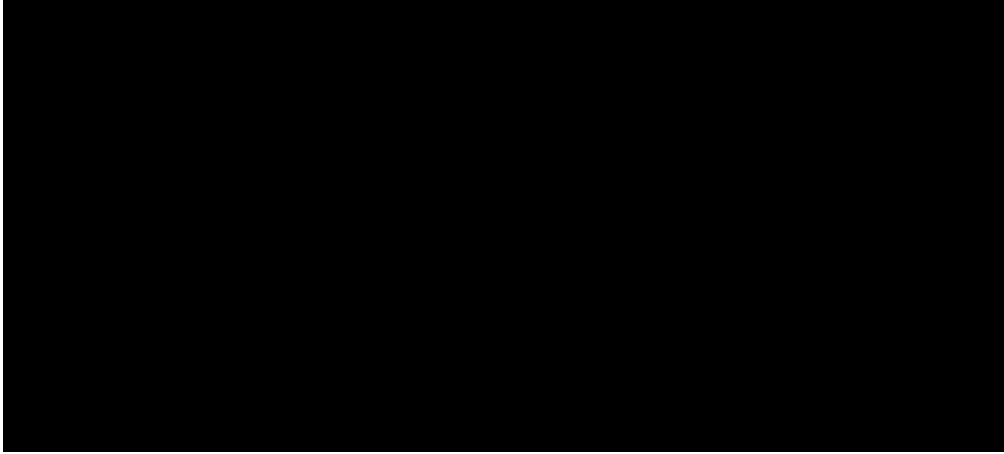
The Guadalupe Center Running alternative has a center guideway HCT and stations that would utilize the existing center lanes of Guadalupe Street from MLK in the south to 27th Street, leaving one through lane in both directions and prohibiting left turns originating on Guadalupe. Between 27th and 29th streets, the narrow right-of-way (ROW) would preclude vehicles from using Guadalupe Street. In this segment,

northbound (NB) vehicles would head north through the intersection of Guadalupe & 27th Street and merge onto Hemphill Park, then turn left at the intersection of Hemphill Park and 29th Street. To continue north, vehicles would then turn right at the intersection of Guadalupe & 29th Street. Southbound (SB) vehicles in this segment would continue south through the intersection of Guadalupe & 29th Street and merge right onto Nueces Street then turn left at 26th street. To continue south, vehicles would turn right onto Guadalupe at the intersection of Guadalupe & 26th Street. This alternative is presented in Figure 12, but with the westbound connection shown on 27th Street. Typical cross sections for the Guadalupe Center-running alternative are presented in Figure 13. Figures for three different layouts are presented, with the label corresponding to the possible limits of each cross section.

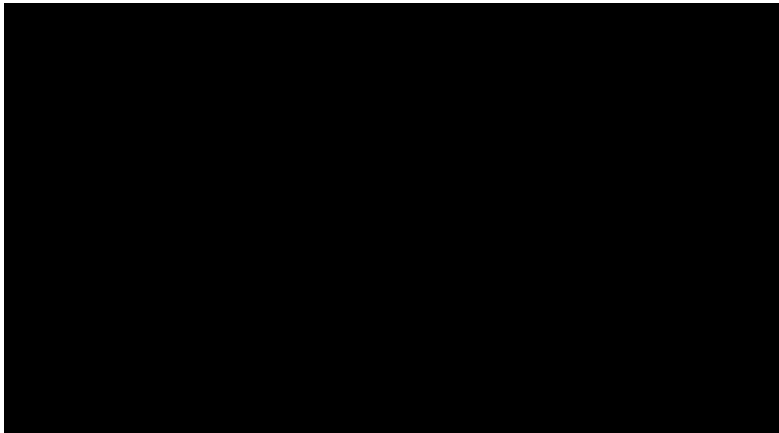


Figure 12 – Guadalupe Center-Running with 27th Street Conversion

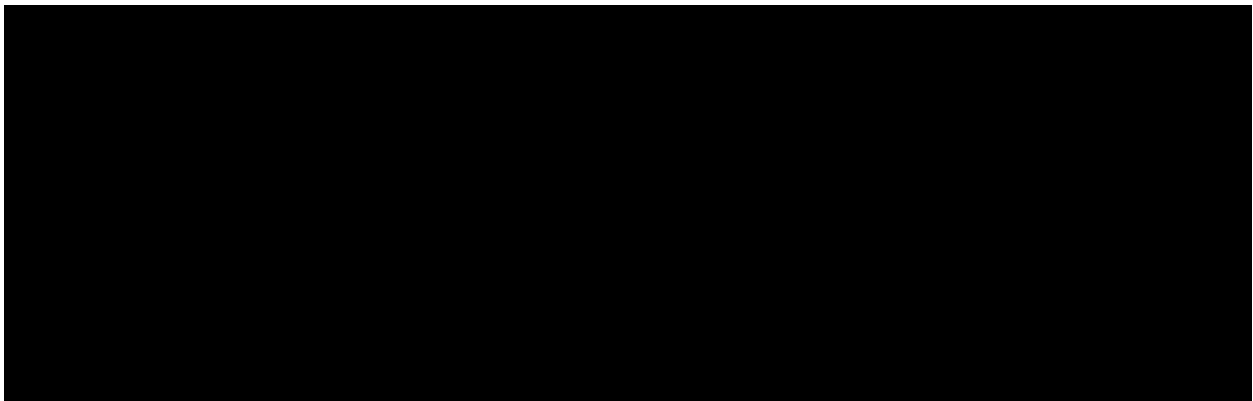
Note: Orange lines represent the HCT guideway(s), Purple lines represent the general purpose traffic lanes, and Red arrows represent driveways or access points.



Center-Running HCT (North of 29th Street)



Center-Running HCT (Hemphill Park to 29th Street)



Center-Running HCT (MLK to Hemphill Park)

Figure 13 – Guadalupe Center Running HCT Typical Sections

A scenario with an alternative path back onto Guadalupe was also analyzed. The existing 27th street west of Guadalupe is a one-way westbound (WB) street but may be flipped to one-way eastbound (EB), allowing traffic from Guadalupe to re-join at a point further north than 26th Street. This alternative will have the same cross sections as those presented for the Guadalupe Center-running alternative.

The next alternative was to create a north-south couplet using Guadalupe Street for northbound vehicles and Nueces/San Antonio Streets for southbound vehicles. In this option, the side guideway HCT would be built on the east side of Guadalupe Street, preserving two northbound through lanes on Guadalupe between MLK and 27th street. northbound (NB) vehicles would head

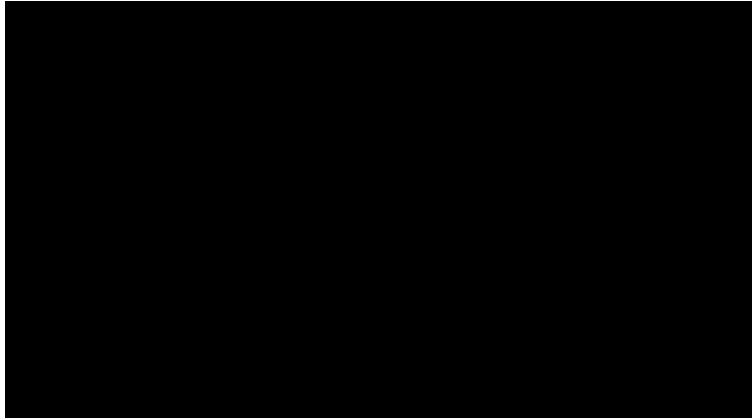
north through the intersection of Guadalupe & 27th Street and merge onto Hemphill Park, then turn left at the intersection of Hemphill Park and 29th Street. To continue north, vehicles would then turn right at the intersection of Guadalupe & 29th Street. SB traffic formerly utilizing Guadalupe Street would be shifted to Nueces Street and continue south until reaching 24th street. South of 24th Street, SB vehicles would use San Antonio Street to continue to MLK Boulevard. This alternative includes the reversal of San Antonio Street south of 24th from one-way northbound to one-way SB. The Guadalupe-Nueces couplet alternative is presented in Figure 14.



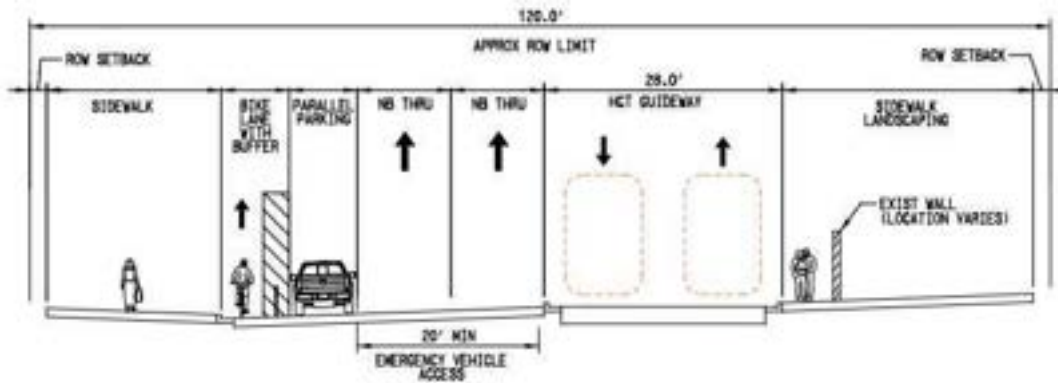
Figure 14 – Guadalupe-Nueces Couplet

Note: Orange lines represent the HCT guideway(s), Purple lines represent the general purpose traffic lanes, and Red arrows represent driveways or access points.

Proposed cross sections corresponding to the side-running HCT guideway alternative are presented in Figure 15.



Side-Running HCT (Hemphill Park to 29th Street)



Side-Running HCT (MLK to Hemphill Park)

Figure 15 – Guadalupe Side-Running Typical Sections

Delays presented in seconds per vehicle for the existing and alternate configurations in both AM and PM peak hours are presented in Table 3. Existing delays are as reported in the 2019 Guadalupe Street Corridor Mobility Program Report. Both Center-running alternatives and the couplet option increase intersection delays at most intersections. Delays are higher in the PM for the existing and alternative configurations. Guadalupe Street in this segment operates with the least delay for the Guadalupe-Nueces Couplet option. However, it must be considered that the true delay experienced on the Nueces/San Antonio SB arm of the couplet may be considerably worse than presented in this report due to the lack of data in this corridor. Reported delays in the table only represent

delays calculated from SB traffic diverted from Guadalupe Street to Nueces/San Antonio. The delay at the intersection of the eastern leg of Nueces Street and 24th Street is indicative of the heavy delay possible on Nueces Street for this configuration. Guadalupe & 29th and Guadalupe & Dean Keeton are substantially delayed by the addition of the at-grade HCT guideway for all scenarios.

Table 3 - Intersection Delay and LOS for the Drag

Intersection	Control Type	Existing		Guadalupe Center Running				Guadalupe Center Running with 27th Street Flipped				Guadalupe-Nueces Couplet					
		AM		PM		AM		PM		AM		PM		AM		PM	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Guadalupe/MLK	Signalized	24.7	C	30.8	C	46.5	D	95.2	F	46.5	D	95.2	F	36.6	D	78.7	E
Guadalupe/21st	Signalized	18.0	B	22.1	C	34.4	C	33.1	C	34.4	C	33.1	C	15.2	B	27.9	C
Guadalupe/22nd	Signalized	6.0	A	6.1	A	9.3	A	8.5	A	9.3	A	8.5	A	8.1	A	7.0	A
Guadalupe/24th	Signalized	30.7	C	33.7	C	101.9	F	118.6	F	101.8	F	119.1	F	70.7	E	60.5	E
Guadalupe/Dean Keeton	Signalized	12.7	B	29.9	C	92.6	F	180.7	F	92.3	F	180.1	F	18.7	B	28.4	C
Guadalupe/26th	Signalized	10.4	B	20.5	C	56.7	E	54.7	D	12.3	B	50.6	D	38.5	D	21.9	C
Guadalupe/27th	Signalized	14.7	B	12.8	B	10.9	B	27.0	C	26.6	C	26.6	C	11.1	B	17.0	B
Guadalupe/29th	Signalized	24.0	C	24.5	C	85.9	F	332.5	F	85.9	F	332.5	F	52.5	D	282.0	F
Nueces/28th*	Unsignalized	--	--	--	--	19.5	C	16.4	C	19.5	C	16.4	C	26.3	D	16.4	C
Nueces/27th*	Unsignalized	--	--	--	--	0.0	A	0.0	A	0.0	A	0.0	A	22.5	C	33.3	D
Nueces/26th*	Unsignalized	--	--	--	--	319.5	F	215.4	F	319.5	F	215.4	F	43.6	E	108.3	F
Nueces/25th*	Unsignalized	--	--	--	--	--	--	--	--	--	F	--	F	43.6	E	30.7	D
Nueces/24th (West)	Signalized	4.1	A	1.9	A	5.3	A	4.4	A	5.3	A	4.4	A	13.9	B	4.5	A
Nueces/24th (East)	Signalized	9.0	A	13.0	B	18.1	B	45.8	D	18.1	B	45.8	D	110.3	F	168.6	F
San Antonio/24th (West)	Signalized	5.9	A	12.1	B	8.5	A	44.2	D	8.5	A	44.2	D	8.8	A	53.2	D
San Antonio/24th (East)	Signalized	4.4	A	8.0	A	4.8	A	6.9	A	4.8	A	6.9	A	5.1	A	2.9	A
San Antonio/23rd*	Unsignalized	--	--	--	--	7.8	A	8.3	A	7.8	A	8.3	A	16.5	C	13.3	B
San Antonio/22nd*	Unsignalized	--	--	--	--	--	--	--	--	--	--	--	--	16.5	C	13.3	B
San Antonio/21st*	Unsignalized	--	--	--	--	--	--	--	--	--	--	--	--	16.1	C	17.0	C
San Antonio/MLK*	Signalized	--	--	--	--	--	--	--	--	--	--	--	--	13.7	B	15.3	B
Hemphill Park/29th*	Unsignalized	--	--	--	--	13.6	B	174.5	F	13.6	B	174.5	F	12.5	B	79.3	F

*No existing TMCs; Guadalupe center-running and Nueces couplet options only include diverted traffic from Guadalupe at these intersections. The delays reported are considered minimum values since no existing traffic volumes are incorporated.

Downtown Couplet – Guadalupe & Lavaca

The impact on traffic operations for three alternative configurations for adding an at-grade HCT were analyzed for the downtown couplet. This section will describe the alternatives, note assumptions and constraints in the models, and present the resulting delays at key intersections of the Synchro models. The four alternatives are the Guadalupe West-Running alternative, the Guadalupe West-Running with Lavaca Two-Way Conversion Alternative, the At-Grade to Aerial alternative and the HCT Couplet.

Delay at intersections was determined using Synchro 10 analysis. Existing data were available at the following intersections for the PM Peak hour in this segment:

- Cesar Chavez & San Antonio Street
- Cesar Chavez Street & Colorado Street
- Cesar Chavez Street & Congress Avenue
- Cesar Chavez Street & Guadalupe Street
- Cesar Chavez Street & Lavaca Street
- Guadalupe & 2nd Street
- Lavaca & 2nd Street
- Guadalupe & 3rd Street
- Lavaca & 3rd Street
- Guadalupe & 4th Street
- Lavaca & 4th Street
- Guadalupe & 5th Street
- Lavaca & 5th Street
- Guadalupe & 6th Street
- Lavaca & 6th Street
- Guadalupe & 7th Street
- Lavaca & 7th Street
- Guadalupe & 8th Street
- Lavaca & 8th Street
- Guadalupe & 9th Street
- Lavaca & 9th Street
- Guadalupe & 10th Street
- Lavaca & 10th Street
- Guadalupe & 11th Street
- Lavaca & 11th Street
- Guadalupe & 12th Street

- Lavaca & 12th Street
- Lavaca & 14th Street
- Guadalupe & 15th Street
- Lavaca & 15th Street
- Lavaca & 17th Street
- Guadalupe & 18th Street
- Lavaca & 18th Street
- Guadalupe & MLK
- Lavaca & MLK

Due to a lack of AM peak turning movement count data at numerous key intersections, only the PM Peak Hour traffic was analyzed in the downtown segment. The PM peak also experiences greater congestion in the Guadalupe and Lavaca St corridors. Existing conditions and alternative traffic scenarios were analyzed in the corridor from Cesar Chavez to MLK. Intersections with no PM Peak turning movement counts available were:

- Guadalupe Street & 13th Street
- Lavaca Street & 13th Street
- Guadalupe Street & 14th Street
- Guadalupe Street & 16th Street
- Lavaca Street & 16th Street
- Guadalupe Street & 17th Street

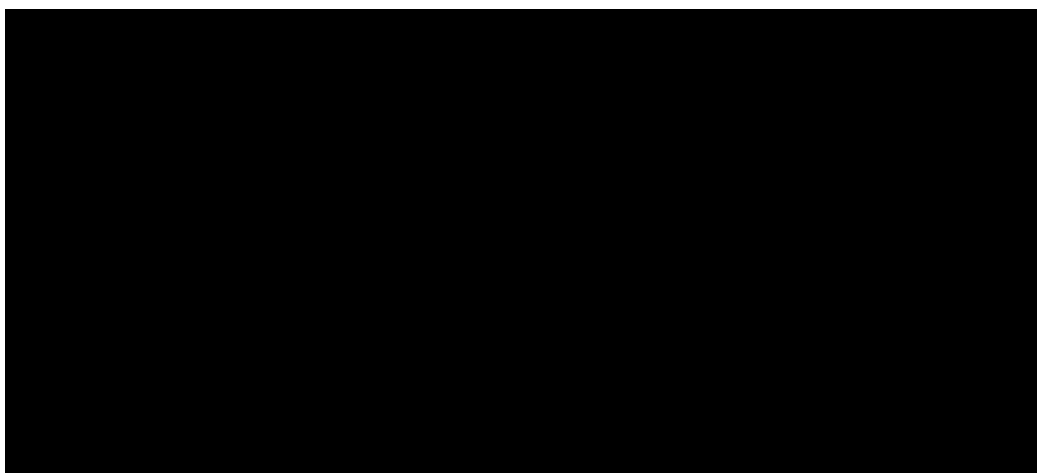
The Guadalupe West-Running alternative layout assumes removal of the existing bus lane, parking lane, bike lane and reducing sidewalk widths along Guadalupe Street to accommodate the bidirectional HCT guideway on the west side of Guadalupe Street. SB left turns on Guadalupe Street will be allowed in this alternative. There is no impact to the configuration of Lavaca Street. Figure 16 shows the lane layout of the Guadalupe West-Running alternative.

Proposed cross sections for the Guadalupe West-Running downtown alternative are presented in Figure 17. This alternative will accommodate three general purpose in most block segments and two lanes in those blocks with a proposed station.



Figure 16 – Guadalupe West-Running Alternative

Note: Orange lines represent the HCT guideway(s), Purple lines represent the general purpose traffic lanes, and Red arrows represent driveways or access points.



West-Running HCT (from Cesar Chavez to MLK)

Figure 17 – Guadalupe West-Running HCT Typical Section

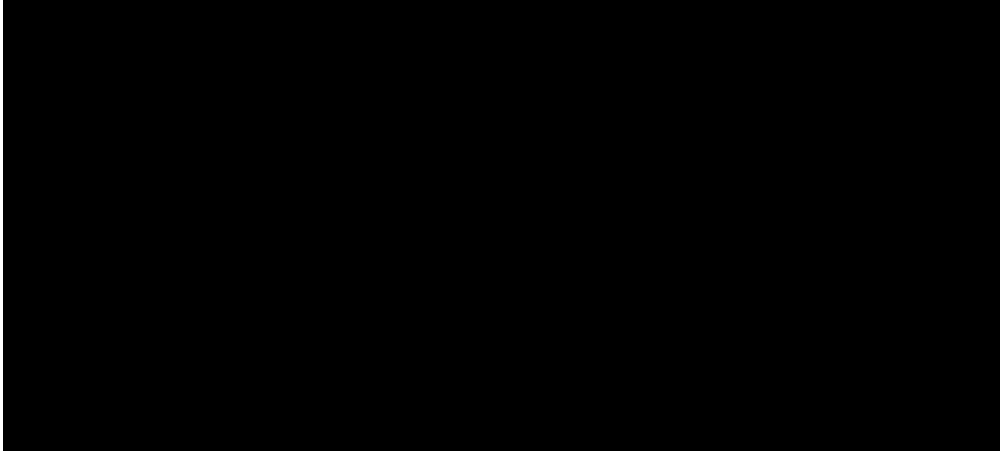
Another alternative was formed from the Guadalupe West-Running alternative by converting one lane on Lavaca to become a SB travel lane, preserving the northbound bus lane/shared right turn lane on Lavaca Street and two northbound lanes on Lavaca. No SB left turns on Lavaca Street will be allowed in this configuration. For this analysis, it was assumed that two thirds of the SB through and SB right turn movements from Guadalupe Street would

remain on Guadalupe and one third of the SB through and SB right turning movements from Guadalupe Street would shift to the SB lane on Lavaca Street.

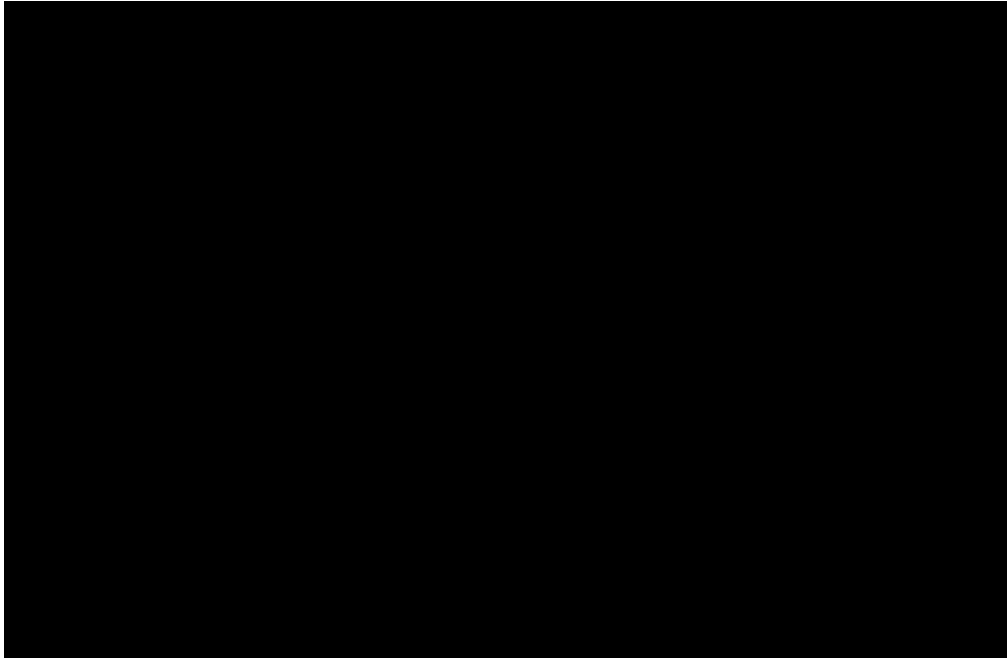
The last option analyzed was the At-Grade to Aerial (Aerial) alternative. This alternative also uses the Guadalupe West-Running option as a base. This alternative includes a grade separated HCT guideway between Cesar

Chavez and 8th St and between 12th St and MLK. An at-grade HCT guideway is utilized between 8th and 12th St. As with the Guadalupe West-Running alternative, no changes are made to Lavaca Street in this alternative. Typical Sections for the Aerial alternative are presented in Figure 18.

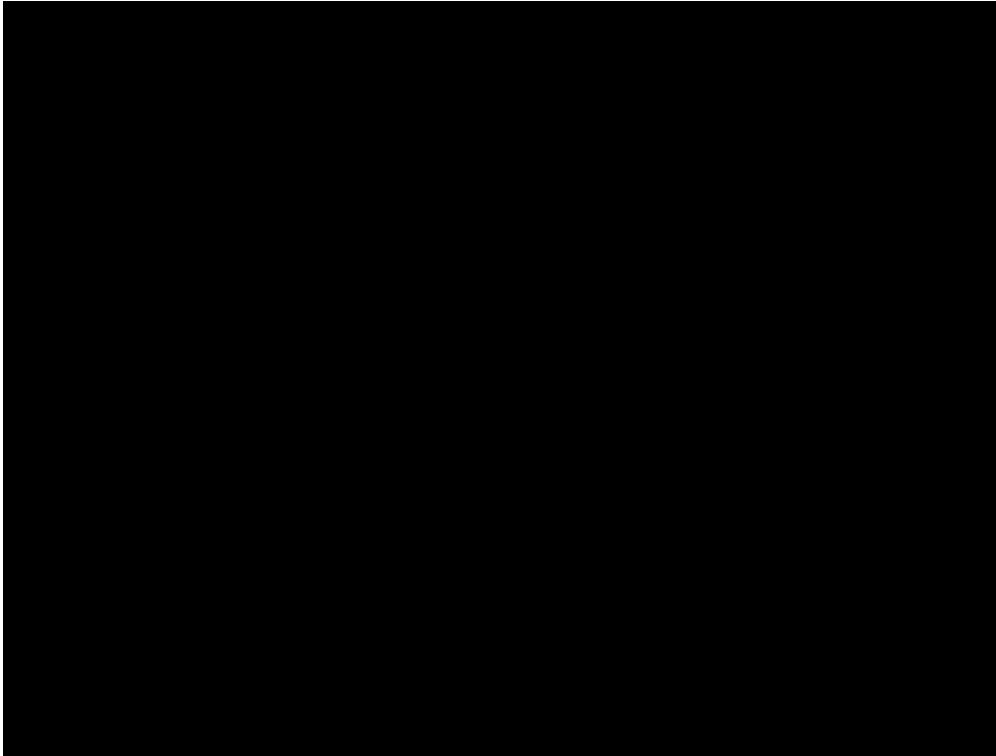
The Guadalupe-Lavaca couplet Option places the at-grade northbound HCT guideway on Lavaca Street and the at-grade southbound HCT guideway on Guadalupe Street. This option assumes that one travel lane would be removed on both streets. The layout of this alternative is presented in Figure 19.



At-Grade West-Running HCT (8th to 12th Street)



Transition from At-grade to Aerial HCT (North of 12th Street and South of 8th St)



West-Running Aerial HCT (Cesar Chavez to 8th St and 12th St to MLK)

Figure 18 – Aerial HCT Typical Sections



Figure 19 – Guadalupe-Lavaca HCT Couplet

Delays presented in seconds per vehicle for the existing and alternate configurations for the PM peak hour are presented in Table 4. The corresponding Synchro reports are available in the appendix. The removal of a SB travel lane on Guadalupe increases vehicle delay at most intersections. Substantial delays are incurred in the Guadalupe West-Running alternative at intersections on Guadalupe between Cesar Chavez and 15th Street. This alternative does not substantially impact Lavaca Street. The aerial option performs better south of 8th street than the west-running option because the SB capacity is maintained from 8th to Cesar Chavez. The Guadalupe West-Running with Lavaca two-way conversion experiences better performance on Guadalupe than the West-running or aerial alternative because of the demand shift to Lavaca. However, this induces large delays at several intersections on Lavaca Street, including at the intersections with Cesar Chavez, 6th Street, 7th Street, 8th Street, 10th Street, 12th Street, and 15th Street.

As expected, the aerial alternative shows the smallest magnitude of changes in delay because of the limited removal of capacity. Guadalupe Street intersections see a decrease in delay at some downtown intersections at the expense of increases in delay on Lavaca. However, these impacts should be studied in more detail with a microsimulation analysis, as the re-distribution of traffic throughout the entire downtown network was not accounted for with these analyses. These analyses do not consider the other bus routes and stops and the bus contraflow lane in the Guadalupe Street corridor.

North and South Segments

The impact of traffic operations for the areas north and south of the Downtown / The Drag area was completed using a screening process. This screening process used the results from the various City of Austin Corridor Mobility Program reports to identify intersections that currently experience LOS E or worse conditions. The introduction of at-grade HCT through those intersections will require measures to mitigate the impacts on vehicular traffic and other travel modes. The mitigation measures could include

identifying additional right of way needs or grade separation.

North Lamar

The evaluation of North Lamar was completed using the North Lamar / Burnet Corridor Development Program, December 2013 report. This report was reviewed to identify intersections that currently experience significant delay. That study covers the segment of N. Lamar Boulevard between US 183 and Parmer Lane and the following intersections were identified that currently experience LOS E or worse operations:

- Rundberg Lane – PM peak
- Braker Lane – AM and PM peaks
- Parmer Lane – AM and PM peaks

North Guadalupe / North Lamar

The City of Austin is currently developing a Corridor Mobility Plan for the segment of Guadalupe Street between 29th Street and North Lamar Boulevard and the segment of North Lamar Boulevard between Lady Bird Lake and US 183. As of this time that study has not developed their preliminary engineering report. A preliminary investigation of the intersections along this this corridor was completed that identified intersections with significant eastbound / westbound traffic volumes and/or higher turn movement volumes. Those intersections are more likely to experience increased traffic delays and they include the following intersections:

- Guadalupe Street / 38th Street
- Guadalupe Street / 45th Street
- North Lamar Boulevard / Koenig Lane
- North Lamar Boulevard / Airport Boulevard

South Congress

The evaluation of South Congress was completed using the South Congress Avenue Corridor Preliminary Engineering Report – Existing Conditions Technical Memorandum, May 2018. This report was reviewed to identify intersections that currently experience significant delay. That study covers the segment of S. Congress Avenue between Slaughter Lane and Barton Springs Road and the following intersections were

identified that currently experience LOS E or worse operations:

- Slaughter Lane – PM peak
- US 290 (Ben White Blvd) EB Frontage Road – AM and PM peaks
- US 290 (Ben White Blvd) WB Frontage Road – PM peak

Mitigation/Next Steps Section

The introduction of at-grade HCT through the Orange Line Corridor will require trade-offs and efforts to mitigate the impact to vehicular traffic and other modes. In the case that at-grade HCT is added, the following mitigation strategies may be implemented:

- To accommodate a station, at-grade HCT guideway, or elevated HCT guideway, on-street parking lanes in the corridor may be utilized so existing travel lanes are not taken.
- Where possible, ROW expansion or a limited conversion of sidewalk and bicycle lanes may alleviate traffic impacts. Expanded ROW space is not possible in all locations but may accommodate HCT guideway and preservation of vehicular travel lanes in some areas.
- Existing bus-only lanes on Guadalupe Street and Lavaca Street downtown may be shifted to other roadways – the impacts of this have not been studied in this report and should be analyzed further in the next phase if considered.
- The impact on parallel routes to the corridor should be studied to determine whether underutilized capacity (e.g. on Colorado St, Congress Ave, S 1st St, Lamar Ave) may accommodate some traffic shifting from Orange Line Corridor to other routes as drivers adjust to longer travel times on Guadalupe and Lavaca Street with addition of stations and HCT guideway.
- Congestion pricing for vehicles, especially in the downtown zone, will mitigate traffic

impact as drivers unwilling to pay a fee to enter the Orange Line Corridor during peak hours will choose alternative routes or mode shift to transit or other options.

- Based on the likely operating scenario of the Locally Preferred Alternative, the headways for HCT will be adjusted, which is to be reflected in subsequent modeling. Signal timing must be adjusted to accommodate the frequency of HCT.
- Predictive signal timing and coordination based on HCT operations may be implemented. Adaptive signal timing may be implemented in some areas to adjust cycle lengths to demand.
- Business access mitigation may be necessary should left turns need to be removed, driveways closed, parking is removed, or other ROW changes have an impact on customer access to businesses on the corridor.

The next steps in addressing traffic impacts and applying mitigation strategies will depend upon the selection of the Locally Preferred Alternative (LPA). The selection and application of mitigation strategies will vary based upon the station locations, grade of the HCT guideway, and other factors. For example, if the HCT guideway is at-grade, the necessary mitigation will be substantially different from the mitigation required if the HCT guideway is above-grade or below-grade. An HCT guideway that is built on the existing street level will have much greater impact on travel lanes than one built beneath the street. In the next phase, the mitigation strategies discussed above, and others should be identified and applied to specific areas where they may be required.

Table 4 - Intersection Delay and LOS for Downtown Options

Intersection	Control Type	Existing Conditions		Guad. West-Running		Guad. W-Running Lavaca Conversion		Aerial Option *		Couplet Option	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Cesar Chavez/San Antonio	Signalized	60.3	E	61.2	E	61.9	E	60.8	E	61.2	E
Cesar Chavez/Colorado	Signalized	28.8	C	29.4	C	29.4	C	28.8	C	34.7	C
Cesar Chavez/Congress	Signalized	34.9	C	34.9	C	34.9	C	34.9	C	34.5	C
Cesar Chavez/Guadalupe	Signalized	73.3	E	208.4	F	88.1	F	115.9	F	128.4	F
Cesar Chavez/Lavaca	Signalized	40.8	D	48.2	D	225.3	F	43.9	D	52.8	D
2nd/Guadalupe	Signalized	31.9	C	58.1	E	17.8	B	51.6	D	54.8	D
2nd/Lavaca	Signalized	16.3	B	16.0	B	62.6	E	16.2	B	19.9	B
3rd/Guadalupe	Signalized	55.1	E	277.8	F	66.7	E	260.0	F	268.8	F
3rd/Lavaca	Signalized	13.6	B	13.5	B	73.6	E	13.5	B	16.5	B
4th/Guadalupe	Signalized	66.8	E	206.3	F	70.3	E	164.0	F	171.5	F
4th/Lavaca	Signalized	25.1	C	24.7	C	29.4	C	25.1	C	33.0	C
5th/Guadalupe	Signalized	46.3	D	148.8	F	35.3	D	74.5	E	79.6	E
5th/Lavaca	Signalized	21.6	C	20.9	C	54.9	D	21.1	C	24.6	C
6th/Guadalupe	Signalized	39.0	D	70.2	E	15.3	B	61.1	E	65.3	E
6th/Lavaca	Signalized	53.1	D	53.1	D	390.5	F	53.1	D	53.0	D
7th/Guadalupe	Signalized	58.4	E	57.9	E	10.5	B	57.0	E	58.0	E
7th/Lavaca	Signalized	52.3	D	52.3	D	125.9	F	52.3	D	114.3	F
8th/Guadalupe	Signalized	9.7	A	44.5	D	8.1	A	13.7	B	14.7	B
8th/Lavaca	Signalized	18.8	B	18.8	B	195.9	F	18.8	B	21.9	C
9th/Guadalupe	Signalized	19.8	B	196.0	F	33.5	C	62.7	E	29.1	C
9th/Lavaca	Signalized	15.0	B	15.9	B	50.4	D	15.9	B	18.0	B
10th/Guadalupe	Signalized	12.6	B	64.1	E	16.8	B	56.2	E	16.5	B
10th/Lavaca	Signalized	17.1	B	17.0	B	259.5	F	17.0	B	16.8	B
11th/Guadalupe	Signalized	51.0	D	75.7	E	34.2	C	86.1	F	65.0	E
11th/Lavaca	Signalized	14.8	B	15.1	B	73.1	E	15.5	B	15.6	B
12th/Guadalupe	Signalized	22.0	C	66.8	E	23.6	C	57.2	E	24.2	C
12th/Lavaca	Signalized	10.1	B	10.2	B	117.2	F	10.3	B	10.7	B
14th/Lavaca	Unsignalized	91.0	F	91.0	F	619.3	F	91.0	F	104.3	F
15th/Guadalupe	Signalized	32.2	C	37.7	D	65.4	E	35.2	D	37.2	D
15th/Lavaca	Signalized	37.8	D	37.5	D	99.7	F	37.6	D	49.4	D
17th/Lavaca	Signalized	10.6	B	10.6	B	13.6	B	10.6	B	13.1	B
18th/Guadalupe	Unsignalized	15.2	C	15.2	C	12.1	B	15.2	C	15.2	C
18th/Lavaca	Unsignalized	14.6	B	14.6	B	29.5	D	14.6	B	12.9	B
MLK/Guadalupe	Signalized	24.3	C	49.7	D	30.4	C	42.5	D	25.8	C
MLK/Lavaca	Signalized	23.3	C	23.1	C	31.5	C	23.2	C	24.7	C
MLK/Nueces	Signalized	66.7	E	66.7	E	66.7	E	66.7	E	66.7	E

* = This option has HCT operating at-grade between 8th and 12th St, and grade separated south of 8th St and north of 12th St.

APPENDIX F: CAPITAL METRO AND CITY OF AUSTIN JUNE 2020 RESOLUTIONS

**RESOLUTION OF THE
CAPITAL METROPOLITAN TRANSPORTATION AUTHORITY
BOARD OF DIRECTORS**

STATE OF TEXAS

COUNTY OF TRAVIS

RESOLUTION (ID # AI-2020-1273)

Adoption of Project Connect System Plan and Locally Preferred Alternatives

WHEREAS, Project Connect is a vision for how we move people today and plan for tomorrow, and will create an integrated transit system that eases traffic, brings jobs to our region, improves the environment and better connects people so everyone in our community can thrive; and

WHEREAS, making public transportation a real, viable alternative for more people will make the greatest positive impact for the environment and help achieve the city's goal of shifting commuter modeshare to less than 50 percent single-occupancy vehicles; and

WHEREAS, in accordance with the City of Austin's Climate Action Plan and Capital Metro's vision of a zero-emission fleet of transit vehicles, Project Connect will amplify transit's positive effects on air quality in Central Texas; and

WHEREAS, implementation of the Project Connect Vision Plan would generate 20,000 jobs per \$1 billion spent, potentially creating 200,000 new jobs as a result of implementation of the full Project Connect vision; and

WHEREAS, an investment in public transportation is an investment in the economy and we cannot have sustained economic development in this region without a significant investment in transit; and

WHEREAS, investment in transit is an investment in equity, and a significant action we at Capital Metro can take to correct historical inequities is to make the Capital Metro transit system more robust, more affordable and more widely available; and

WHEREAS, prevention of displacement of lower income residents from areas served by Project Connect's new infrastructure is a guiding principle to Capital Metro and the City of Austin, the Austin City Council has passed a resolution (Austin City Council Resolution 20200423-038) calling for data-driven policies and funding that "prevent transportation investment-related displacement and ensure people of different incomes can benefit from transportation investments," and Capital Metro's longstanding Transit Oriented Development Policy has been designed to support equitable growth that acts as a force multiplier for transit's benefits for the entire community; and

WHEREAS, Capital Metro and its partners at the City of Austin have put in more than two years of outreach and engaged nearly 55,000 community members about the



benefits of Project Connect, and those community members have overwhelmingly said they want to see significant improvements to transit, with 93% of survey participants saying it is time to act; and

WHEREAS, infrastructure in Central Texas was not built for the 2 million residents who live and work here now, much less the 4 million who will call the Austin area home by 2040, and Project Connect will allow us to make better use of the physical space we have to support our growth in a more sustainable manner; and

WHEREAS, the Capital Metro Board unanimously adopted the Project Connect Vision Plan in December 2018; and

WHEREAS, Project Connect was included as an integral part of the Austin Strategic Mobility Plan, which was unanimously approved by the Austin City Council in 2019; and

WHEREAS, the Orange Line and Blue Line Corridors have been studied in accordance with Federal requirements and refined to identify three separate lines: the Orange, Blue and Gold lines; and

WHEREAS, in order to apply for and receive federal funding through the Federal Transit Administration (FTA) to assist in building these necessary projects, Capital Metro is required to adopt locally preferred alternatives that incorporate sound technical analysis and community input; and

WHEREAS, Capital Metro intends to enter these projects into the federal funding process upon local voter funding approval; and

WHEREAS, a Locally Preferred Alternative for the Orange Line has been recommended based on its technical merits and the advice and consent of our partners and community, and will serve the city's busiest activity centers like the University of Texas, the State Capitol, Downtown, South Congress and Auditorium Shores, as well as growing neighborhoods along North Lamar Boulevard, in Downtown Austin and on South Congress Avenue; and

WHEREAS, a Locally Preferred Alternative for the Blue Line corridor has been recommended to include the Blue and Gold Lines; and

WHEREAS a Locally Preferred Alternative for the Blue Line has been recommended based on its technical merits and the advice and consent of our partners and community, connecting diverse transit dependent populations in neighborhoods along East Riverside Drive and major employment centers such as the airport and downtown; and

WHEREAS, a Locally Preferred Alternative for the Gold Line has been recommended



based on projected growth, its technical merits and the advice and consent of our partners and our community, and will connect downtown to major hospitals, the UT Campus and the ACC Highland area, ensuring its growth is managed sustainably; and

WHEREAS, Locally Preferred Alternatives for a new commuter rail service in the Green Line, which will bring access to jobs, health care and education to East Austin, including Colony Park and surrounding neighborhoods, and improvements to the Red Line, which will increase connections to activity centers like Broadmoor/The Domain and the soccer stadium at McKalla Place; and

WHEREAS, Locally Preferred Alternatives for the MetroRapid Lines have been recommended based on projected growth, their technical merits and the advice and consent of our partners and our community, and will bring Capital Metro's most popular service to more of the region, including Expo Center (Manor Road), Pleasant Valley, Burnet/Lamar to Menchaca/Oak Hill, MLK, Crosstown, ACC Highland to Tech Ridge and Parmer Lane corridors, connecting them to local businesses, hospitals and into the larger Project Connect system; and

WHEREAS, Project Connect includes an expansion of the MetroExpress program with additional Park & Rides throughout the region, additional neighborhood circulators, enhancements to MetroBus and MetroAccess, improved customer technology that makes transit simpler and fairer to use for everyone, and additional maintenance facilities and improvements; and

WHEREAS, changes to the System Plan may be considered and adopted over the course of time to add projects as additional transit studies are performed and completed, which shall include consideration of current studies being conducted by the City of Austin, Capital Metro and CAMPO of the Bergstrom Spur and the MoKan corridor; and

WHEREAS, Capital Metro has established a Capital Expansion Fund and will commit future operations and maintenance funding to Project Connect, and upon local funding commitment will serve as the FTA grantee for federal funding; and

WHEREAS, with the understanding that this cannot be accomplished alone, Capital Metro appreciates the partnership with the City of Austin that will assist in securing the local funding commitment required to move into the federal funding process; and

WHEREAS, Capital Metro further appreciates the partnership with the City of Austin to advance a formal partnership through a Local Government Corporation for guidance and oversight of Project Connect.

NOW, THEREFORE, BE IT RESOLVED by the Capital Metropolitan Transportation Authority Board of Directors that the attached Project Connect System Plan that



includes the Locally Preferred Alternatives for the Orange, Blue, Gold, Green, and MetroRapid Lines are adopted.

NOW BE IT FURTHER RESOLVED that the Project Connect System Plan also includes infrastructure improvements on the MetroRail Red Line, new customer technologies, MetroBus and MetroAccess improvements, and maintenance and support facilities.

Secretary of the Board
Eric Stratton

Date: June 10, 2020

RESOLUTION NO. 20200610-002

WHEREAS, Austin faces growing demands on our existing transportation network, resulting in increased traffic congestion and travel delay; and

WHEREAS, strategically planned transportation systems that supply our network with the appropriate infrastructure, in both size and location, are what enable us to travel around our community safely, reliably, and efficiently; and

WHEREAS, on April 11, 2019 the Council unanimously passed Ordinance No. 20190411-033 adopting the Austin Strategic Mobility Plan (ASMP) as the transportation element of the Imagine Austin Comprehensive Plan to guide future growth of the city's transportation network; and

WHEREAS, the ASMP establishes a 2039 target of 50-50 mode split, where 50 percent of residents are taking any mode other than driving a single occupancy vehicle, in order to increase system reliability and decrease personal travel time; and

WHEREAS, in order for the City of Austin to accomplish our mode share goals, our community must create a complete transit system, including investing in high-capacity transit; and

WHEREAS, the ASMP establishes a policy of investing in, and supporting, the creation of a high-capacity transit system in Austin, noting "we must work with

our public transportation partners and enhance services to create an experience that attracts and retains riders”; and

WHEREAS, the ASMP establishes a policy for the City to coordinate transportation infrastructure projects with other public capital investments early in the planning process to increase cost-effectiveness and minimize disruptions to the community; and

WHEREAS, the Street Network Table of the ASMP forms the basis for which the City negotiates with other partners to deliver transportation improvements collaboratively and therefore should be inclusive of all elements necessary to achieve the ultimate cross section; and

WHEREAS, Project Connect is a vision for how we move people today and plan for tomorrow, and will create an integrated transit system that eases traffic, brings jobs to our region, improves the environment, and better connects people so everyone in our community can thrive; and

WHEREAS, the Capital Metropolitan Transit Authority (Capital Metro) Board unanimously approved the Project Connect high-capacity transit vision plan for the Capital Metro service area on December 17, 2018; and

WHEREAS, since 2018, Capital Metro, in partnership with the City of Austin, community members, and other stakeholders, has refined the Project

Connect vision plan in order to create an Austin-focused System Plan

Recommendation; and

WHEREAS, more than 50,000 people have participated in the creation of the draft System Plan Recommendation through in person and online public input opportunities; and

WHEREAS, in accordance with the City of Austin's Climate Action Plan and Capital Metro's vision of a zero-emission fleet of transit vehicles, Project Connect will amplify transit's positive effects on air quality in Central Texas; and

WHEREAS, implementation of the Project Connect Vision Plan would generate 20,000 jobs per \$1 billion spent, potentially creating 200,000 new jobs as a result of implementation of the full Project Connect vision; and

WHEREAS, an investment in public transportation is an investment in the economy, and we cannot have sustained economic development in this region without a significant investment in transit; and

WHEREAS, investment in transit is an investment in equity, and a significant action we can take to correct historical inequities is to make the Capital Metro transit system more robust, more affordable, and more widely available; and

WHEREAS, prevention of displacement of lower income residents from areas served by Project Connect's new infrastructure is a guiding principle to Capital Metro and the City of Austin, the Austin City Council approved Resolution

No. 20200423-038 calling for data-driven policies and funding that “prevent transportation investment-related displacement and ensure people of different incomes can benefit from transportation investments,” and Capital Metro’s longstanding Transit Oriented Development Policy has been designed to support equitable growth that acts as a force multiplier for transit’s benefits for the entire community; and

WHEREAS, the preliminary draft System Plan Recommendation was presented to the Austin City Council and Capital Metro Board on March 9, 2020; and

WHEREAS, the Project Connect System Plan includes multiple transit enhancements and expansions to help our community better connect to jobs, entertainment, school, and more; and

WHEREAS, in order to apply for and receive federal funding through the Federal Transit Administration (FTA) to assist in building these necessary projects, Capital Metro is required to adopt locally preferred alternatives that incorporate sound technical analysis and community input, and Capital Metro will enter these projects into the federal funding process upon local voter funding approval; and

WHEREAS, the Capital Metro Board of Directors adopted the Project Connect System Plan that includes the Locally Preferred Alternatives for the Orange, Blue, Gold, Green, and MetroRapid Lines on June 10, 2020; and

WHEREAS, changes to the System Plan may be considered and adopted over the course of time to add projects as additional transit studies are performed and completed, which shall include consideration of current studies being conducted by the City of Austin, Capital Metro, and CAMPO of the Bergstrom Spur and the MoKan corridor; and

WHEREAS, the City's support for the Project Connect System Plan that includes the Locally Preferred Alternatives does not in and of itself commit the City's financial resources to the advancement of the System Plan

Recommendation; **NOW, THEREFORE,**

BE IT RESOLVED BY CITY COUNCIL OF THE CITY OF AUSTIN:

The City Council formalizes its support for Project Connect System Plan that includes the Locally Preferred Alternatives for the Orange, Blue, Gold, Green, and MetroRapid Lines, as adopted by the Capital Metro Board of Directors on June 10, 2020.

BE IT FURTHER RESOLVED:

The City Manager is directed to immediately initiate a process to amend the Austin Strategic Mobility Plan (Ordinance No. 20190411-033) to add the Project Connect System Plan that includes the Locally Preferred Alternatives for the Orange, Blue, Gold, Green, and MetroRapid Lines, as adopted by the Capital Metro Board of Directors, to the ASMP and associated technical elements. The

City Manager is further directed to bring the amendment or amendments to the City Council for consideration in 2021.

ADOPTED: June 10, 2020

ATTEST:



Jannette S. Goodall
City Clerk