

## **Chapter 7**

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# **Evaluation of Build Alternative and Design Options**

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## Chapter 7 Evaluation of Build Alternative and Design Options

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NEPA requires agency decision makers to make informed and transparent decisions based on the environmental consequences of a proposed action and feedback from stakeholders received during public scoping and other outreach. The decision to advance one alternative or option over another typically balances engineering and transportation needs with social, economic, and environmental factors. Public participation is a critical component in federal decision making and the development of better projects that can yield the best results. The Selected Alternative will be the alternative identified in the FEIS and Record of Decision after the public hearing.

This chapter summarizes the information from other chapters of this DEIS to describe the effects of the Build Alternative and Design Options. Section 7.1 summarizes public engagement activities and public comments received prior to and during the DEIS scoping period.

**Appendix B** provides more information on the scoping process. Section 7.2 describes the Cooperating and Participating Agencies and feedback received. Section 7.3 compares potential beneficial and adverse effects of the Build Alternative and Design Options. Section 7.4 provides Design Option recommendations, and Section 7.5 provides the rationale for identification of the Preferred Alternative.

### 7.1 Summary of Scoping Comments

ATP hosted a total of six public scoping meetings and 34 outreach events during the scoping period between January 19, 2024 and March 4, 2024. More than 480 people attended the six scoping meetings, and ATP received 3,863 comments during this scoping period.

A complete summary of the public scoping process and all comments received during the scoping period can be found in **Appendix B**. This DEIS will be available for public and agency review and comment for 60 days from January 10, 2025, through March 11, 2025. ATP will hold public hearings during this comment period to receive input on the analyses and findings of the DEIS.

After consideration of public and agency comments on the DEIS, FTA intends to issue a combined FEIS and Record of Decision pursuant to 23 United States Code § 139(n)(2) unless statutory criteria preclude issuance of a combined document (i.e., the FEIS includes substantial changes to the proposed federal action that are relevant to environmental or safety concerns, or there is a significant new circumstance or information relevant to environmental concerns that affect the proposed federal action or its impacts).

The combined FEIS and Record of Decision will include responses to public and agency comments received on the DEIS, state FTA's NEPA determination on the Project, and list mitigation commitments that ATP and its contractors will implement. The combined FEIS and

Record of Decision must be issued before any federal funding can be awarded for the Project, and FTA is currently evaluating the Project's eligibility for discretionary federal funding under FTA's Capital Investment Grants program.

## 7.2 Cooperating and Participating Agency Coordination

The following agencies, organizations, and community groups have agreed to serve as Cooperating and Participating Agencies pursuant to NEPA for the Project:

- **Cooperating Agencies:**
  - Texas Department of Transportation;
  - U.S. Army Corps of Engineers; and
  - U.S. Environmental Protection Agency.
  
- **Participating Agencies:**
  - Austin Independent School District;
  - Capital Metropolitan Transportation Authority;
  - Central Texas Regional Mobility Authority;
  - City of Austin;
  - Downtown Austin Alliance;
  - Federal Aviation Administration;
  - Federal Highway Administration, Texas Division;
  - Texas Commission on Environmental Quality, Region 11;
  - Texas Historical Commission;
  - Texas Parks and Wildlife Department;
  - The University of Texas at Austin; and
  - The University of Texas at Austin – Office of Governmental Affairs and Initiatives.

The following public agencies and partners submitted written comment letters during scoping:

- City of Austin;
- National Park Service; and
- U.S. Environmental Protection Agency, Region 6.

In April 2024, ATP submitted its Project Coordination Plan, which provided a status update on the Project and provided a NEPA timeline, to Cooperating and Participating Agencies for review and comment. ATP requested edits or questions concerning details presented in the Project Coordination Plan; no comments were received on the proposed NEPA timeline. ATP received a request from TxDOT to hold a meeting to discuss crossing TxDOT facilities. A coordination meeting with TxDOT was held in September 2024.

The City reiterated its deep commitment to Project Connect, of which Austin Light Rail Phase 1 is a component, and outlined its priorities for inclusion in the environmental scope. The City requested the following as topics to study: coordinating with key stakeholders along the Project alignment, including low-income and minority communities to address displacement and gentrification; minimizing effects on small businesses and cultural resources; minimizing and

mitigating effects on City utilities; minimizing and mitigating effects on trees and critical environmental features; continuing to coordinate on effects on parkland; and designing the light rail system to provide seamless connections to the broader transportation network. The City also stated that it supports the Project purpose and need statement and the scope of the DEIS.

The National Park Service noted that its National Trails Office administers the El Camino Real de los Tejas National Historic Trail, which intersects the eastern portion of the Project planning area. The National Park Service asked that an analysis of potential effects on the National Historic Trail be included in this DEIS. Additionally, the National Park Service Natural Sounds and Night Skies Division requested that consideration be given to effects of potential noise and light pollution on the National Historic Trail and that developers include mitigation strategies. The National Park Service also expressed concern for potential direct and indirect effects on two National Historic Landmarks: the Texas State Capitol and the Governor's Mansion.

EPA expressed an interest in analysis of potential air quality effects regarding construction, maintenance, and operational activities; seeing permitting requirements for stormwater discharges from construction activities as outlined in the National Pollutant Discharge Elimination System Permitting Program; and ensuring EJ effects and considerations are included as part of this DEIS.

On May 22, 2024, ATP held a Project Update meeting with the Cooperating Agencies, presenting an overview of the Project definition and the Design Options shared during scoping. The U.S. Army Corps of Engineers suggested that FTA and ATP continue coordination to determine permitting requirements related to water resources affected by the Project. ATP and FTA coordinated with all Cooperating Agencies prior to the release of this DEIS and will continue to do so.

Cooperating Agencies and the Texas Parks and Wildlife Department were provided an opportunity to review the DEIS in September 2024. EPA did not have any additional comments. TxDOT provided minor design-related comments, which will be considered as the Project design advances. The U.S. Army Corps of Engineers reiterated the need for additional information to determine whether a Nationwide or Individual permit under Section 404 of the Clean Water Act would be required. They corrected a reference to a regulatory requirement under their jurisdiction and reiterated the need to revisit the Project's alternatives analysis as it pertains to impact avoidance required for an Individual Section 404 permit if an Individual 404 permit is warranted. The Texas Parks and Wildlife Department confirmed that the National Park Service concurred with the identified APE for properties protected by Section 6(f) of the Land and Water Conservation Fund Act of 1965. No further comments were received from the Texas Parks and Wildlife Department. Agency correspondence is included in **Appendix K**.

### **7.2.1 Federal Permits and Approvals Needed for the Project**

The Project would involve regulated activity in jurisdictional waters and authorization under Section 404 of the Clean Water Act. Compensatory mitigation for the loss of streambed in Lady Bird Lake is anticipated to be required and would be completed in accordance with the Section 404 permitting process with the U.S. Army Corps of Engineers.

The Project would require permanent use of a portion of Waller Beach at Town Lake Metro Park, which was improved with funding through the Land and Water Conservation Fund Act of 1965. Prior approval by the National Park Service, through the Texas Parks and Wildlife Department's State Liaison Officer, is required for the conversion and replacement of parkland subject to this regulation.

### **7.2.2 Section 106 Consulting Party Coordination**

Section 106 Consulting Parties, including the Texas Historical Commission, were provided an opportunity to review and comment on the cultural resource archaeology and historic properties survey reports that included ATP's initial eligibility recommendations. ATP held a Consulting Party meeting on September 9, 2024. Following review of the cultural resource reports and the Consulting Party meeting, the Consulting Parties provided comments regarding properties they felt should be considered historic, potential visual considerations related to existing historic properties, potential changes to property access, considerations related to neighborhoods, and utility/construction easements. ATP responded to Consulting Party comments and will coordinate with the Consulting Parties during the DEIS public comment period.

The Texas Historical Commission conditionally concurs with ATP's determinations for Section 106 eligibility and requests to review a revised or amended report containing the archaeology survey of areas currently not accessible and any changes to the historic determinations that could result from a refinement of the Project design. ATP will continue to coordinate with the Texas Historical Commission throughout the development of the FEIS and through final design and construction. The Texas Historical Commission's response to their review of the cultural resource reports is included in **Appendix K**.

## **7.3 Comparison of the Build Alternative and Design Options**

The DEIS analyses indicate that negligible or beneficial effects are expected to result from Project construction and operation on land use and zoning, neighborhoods and community resources, hazardous materials, utilities, safety and security, air quality and GHG emissions, energy, and threatened and endangered species with the implementation of mitigation that is integral to the Project (i.e., best management practices) and following regulatory requirements and guidance that govern these resources.

The Project has the potential to adversely affect some traffic and parking, business and residential units, visual resources, noise and vibration levels, wetlands, floodplains, protected and heritage trees, parkland, and EJ communities, and would result in some cumulative effects. There is potential for disproportionately high and adverse human health or environmental effects, including interrelated social and economic effects, on minority populations and low-income populations as a result of residential and business relocations required in EJ Study Areas and the Project's indirect effects related to increased displacement pressures. Effects of the Preferred Alternative and ATP proposed mitigation measures are presented in **Table 7-1**.

Table 7-1: Effects of the Preferred Alternative and ATP Proposed Mitigation Measures

Impact Category	Preferred Alternative	ATP Proposed Mitigation Measures
Traffic and Parking (Chapter 3)	<ul style="list-style-type: none"> <li>Modified roadway configurations, traffic patterns, and intersection operations.</li> <li>Conversion of Guadalupe Street between 29th and 27th Streets to a light rail/pedestrian corridor.</li> <li>Conversion of Guadalupe Street between 27th and 21st Streets to a transit/bike/pedestrian corridor.</li> <li>Conversion of 3rd Street between Colorado Street and Congress Avenue to a light rail/pedestrian-only corridor and relocation of 3rd Street bicycle lane to 4th Street.</li> <li>Localized level of service impacts and delays at intersections.</li> <li>Loss of up to 607 on-street parking spaces along Guadalupe Street, in Downtown Austin, and on South Congress Avenue.</li> <li>Potential increase in travel time for emergency response due to increased delay at light rail crossings; emergency access would be accommodated through design.</li> </ul>	<ul style="list-style-type: none"> <li>Traffic signal optimization, additional turning lanes, and optimized queue storage.</li> <li>New bicycle lanes (15 blocks) and improved bicycle lanes (3 blocks) on Nueces Street to mitigate the loss of lanes on Guadalupe and Lavaca Streets.</li> <li>Continued coordination with Austin Transportation and Public Works Department and emergency response providers to minimize effects on traffic and parking during construction and operation.</li> <li>Preparation of a Construction Management Plan addressing maintenance and protection of traffic, truck routes, maintaining access to businesses and residences, and communication protocols for road and lane closures and bus stop relocations.</li> </ul>
Acquisitions and Displacements (Chapter 4, Section 4.1)	<ul style="list-style-type: none"> <li>Permanent acquisition of approximately 85 acres, which includes the 62-acre OMF site.</li> <li>28 full parcels and 280 partial parcels totaling 308 parcel acquisitions.</li> <li>Potential residential displacement due to acquisition of up to four single-family homes; continuing design will prioritize reducing the impacts on potential residential displacements.</li> <li>Up to 64 business displacements resulting from full acquisitions.</li> <li>Loss of some parking and/or access to businesses resulting from partial acquisitions, which could require relocations.</li> </ul>	<ul style="list-style-type: none"> <li>Financial compensation and relocation assistance in accordance with the Uniform Act.</li> <li>Coordination with affected property owners to reach formal agreements for acquisitions and address access and parking needs.</li> <li>Implementation of best management practices to minimize construction effects.</li> <li>Restoration of temporary easement areas to existing conditions or better once construction is complete</li> <li>Development of a Business Assistance Program to reduce the burden on businesses prior to and during construction.</li> </ul>
Land Use and Zoning (Chapter 4, Section 4.2)	<ul style="list-style-type: none"> <li>Consistent with local and regional land use plans and zoning.</li> <li>Supports the City's mobility, clean air, and equity goals.</li> <li>OMF operations permitted under the City's zoning code.</li> </ul>	No adverse effects anticipated; mitigation not required.
Neighborhoods and Community Resources (Chapter 4, Section 4.3)	<ul style="list-style-type: none"> <li>Consistent with neighborhood character and fosters neighborhood cohesion.</li> <li>Relocation of one community facility, the Waller Creek Boathouse.</li> <li>Vehicular and pedestrian access affected by changes in circulation patterns.</li> </ul>	<ul style="list-style-type: none"> <li>Relocation of Waller Creek Boathouse in accordance with Section 6(f) of the Land and Water Conservation Fund Act.</li> </ul>
Socioeconomics and Environmental Justice (Chapter 4, Section 4.4 and Chapter 6)	<ul style="list-style-type: none"> <li>Sustainably supports economic growth in the region.</li> <li>Creates jobs and supports increased economic activity during construction and operation; over 7,200 jobs each year during construction are estimated and over 1,100 new permanent jobs each year during operations.</li> <li>Potential for disproportionate and adverse effects in EJ communities reduced through the efforts of ATP and the City's Displacement Prevention team.</li> <li>Loss of tax revenue from property acquired and converted to transportation use, which would be offset by the increased land value of higher density development near stations.</li> <li>Potential short-term loss of business revenue due to reduction of on-street parking supply offset by station area activity and growth in population.</li> </ul>	<ul style="list-style-type: none"> <li>Continued support of the CAC's Anti-Displacement objectives to develop and implement programs funded by the \$300 million allocated for anti-displacement efforts.</li> <li>Support of regional Workforce Programs to provide community members with access to jobs and career growth opportunities in the infrastructure industry.</li> <li>Implementation of a Business Assistance Program to reduce the burden on small and local businesses prior to and during construction.</li> </ul>
Visual Quality and Aesthetics (Chapter 4, Section 4.5)	<ul style="list-style-type: none"> <li>New light rail visual features introduced into the urban realm; prominent new bridge spanning Lady Bird Lake would result in neutral effects on park and trail users on both sides of the lake.</li> <li>The Lady Bird Lake Bridge extension would be visible to several residents on East Riverside Drive, and park users and may experience obstructed views.</li> <li>No impacts on Capitol View Corridors because Project elements would be below the height restrictions.</li> </ul>	<ul style="list-style-type: none"> <li>Incorporation of context-sensitive design features at stations, new bridges, elevated structures, the OMF, and associated facilities.</li> <li>Coordination with affected stakeholders for architectural treatments, visual screening, landscaping, and outdoor lighting design.</li> </ul>
Cultural Resources (Chapter 4, Section 4.6)	<ul style="list-style-type: none"> <li>Partial acquisitions of historic built properties, which would not result in adverse effects on their qualifying characteristics or the activities, features, or attributes qualifying the property for protection under Section 106 and Section 4(f) regulations.</li> <li>Disturbance of areas with moderate or high probability of containing archaeological deposits.</li> </ul>	No adverse effects anticipated; mitigation includes: <ul style="list-style-type: none"> <li>Section 106 consultation with Texas Historical Commission and Consulting Parties on determination of effects and measures to minimize construction effects.</li> <li>Pre-construction archaeological surveys conducted in areas with moderate and high probability for containing deposits.</li> <li>Archaeological monitoring during construction of sensitive areas that are currently inaccessible for survey because of existing pavement or structures.</li> </ul>
Hazardous Materials (Chapter 4, Section 4.7)	<ul style="list-style-type: none"> <li>Disturbance, removal, and transporting of hazardous materials.</li> </ul>	No adverse effects anticipated; mitigation includes: <ul style="list-style-type: none"> <li>Adherence to local, state, and federal regulations governing the removal, handling, storage, and transport of hazardous materials.</li> <li>Pre-construction site investigations, remediation (if required), and preparation of hazardous waste and safety plans in accordance with regulatory requirements.</li> <li>Monitoring of contractor compliance.</li> </ul>

Impact Category	Preferred Alternative	ATP Proposed Mitigation Measures
Utilities (Chapter 4, Section 4.8)	<ul style="list-style-type: none"> <li>Relocation of utilities in advance of construction.</li> <li>Overall reduction in energy consumption compared to the No Build Alternative.</li> </ul>	No adverse effects anticipated; best management practices would be implemented.
Safety and Security (Chapter 4, Section 4.9)	<ul style="list-style-type: none"> <li>Introduction of new transit mode designed for safety in accordance with FTA design criteria.</li> <li>Improved safety for bicyclists and pedestrians from new protected lanes and the traffic calming effect of light rail.</li> </ul>	No adverse effects anticipated; mitigation includes: <ul style="list-style-type: none"> <li>Compliance with local, state, and federal safety and security regulations, including development of an Agency Safety Plan in accordance with federal requirements.</li> <li>Monitoring contractor compliance.</li> </ul>
Noise and Vibration (Chapter 4, Section 4.10)	<ul style="list-style-type: none"> <li>FTA's methodology for identifying noise impacts is conservative, and the predicted increases in noise due to the Project would be barely perceptible or not noticeable in most locations. Noise impacts would be noticeable in areas where there is relatively low ambient noise; in areas where noise levels are typical of dense urban environments, moderate and severe impacts are identified by FTA criteria when the incremental change would not be noticeable.</li> <li>Moderate impacts at 22 buildings (514 dwelling units); severe impacts at 9 buildings (439 dwelling units).</li> <li>Vibration impacts at a hotel along Riverside Drive and a multi-family building as a result of the lead track to the OMF.</li> </ul>	<ul style="list-style-type: none"> <li>Evaluation of special trackwork, noise barriers, and building sound insulation, and identification of mitigation in the FEIS and Record of Decision.</li> </ul>
Air Quality and Greenhouse Gases (Chapter 4, Section 4.11)	<ul style="list-style-type: none"> <li>The Project would be electrically powered with no direct operational emissions.</li> <li>Reduction in greenhouse gas emissions.</li> <li>Temporary and localized increase in dust and air emissions during construction.</li> </ul>	No adverse effects anticipated; mitigation includes: <ul style="list-style-type: none"> <li>Compliance with local, state, and federal air quality regulations.</li> <li>Implementation of best management practices to minimize dust and air quality emissions during construction.</li> <li>Monitoring of contractor compliance.</li> </ul>
Energy and Electromagnetic Fields (Chapter 4, Section 4.12)	<ul style="list-style-type: none"> <li>Energy savings.</li> <li>Potential for EMI to result from EMF.</li> </ul>	No adverse effects anticipated; mitigation includes: <ul style="list-style-type: none"> <li>Coordination with property owners that operate sensitive equipment and implementation of EMI shielding, if required.</li> </ul>
Soils and Geologic Resources (Chapter 4, Section 4.13)	<ul style="list-style-type: none"> <li>Effects would be minor and manageable through typical design efforts.</li> </ul>	No adverse effects anticipated; mitigation is not needed.
Water Resources (Chapter 4, Section 4.14)	<ul style="list-style-type: none"> <li>100-year floodplain impacts in 16 acres and 500-year floodplain impacts in 17 acres.</li> <li>Wetland impacts of 4.2 acres (National Wetlands Inventory) and 0.05 acre (City-identified wetlands).</li> </ul>	<ul style="list-style-type: none"> <li>Compliance with regulatory permit requirements and adherence to best management practices and conservation measures.</li> <li>Identification of wetland mitigation in coordination with U.S. Army Corps of Engineers and the City, which will be presented in FEIS.</li> <li>Incorporation of green infrastructure to reduce runoff and risk of flooding and to promote groundwater recharge.</li> </ul>
Threatened and Endangered Species Chapter 4, Section 4.15)	<ul style="list-style-type: none"> <li>No adverse effect on threatened or endangered species habitat.</li> <li>245 protected trees and 211 heritage trees are within the limits of Project construction and require protection or removal.</li> </ul>	No adverse effects anticipated on threatened and endangered species. Mitigation for tree impacts includes: <ul style="list-style-type: none"> <li>Adherence to best management practices and use of regionally native plants to provide natural habitat.</li> <li>Development of tree mitigation plan in consultation with City Arborist.</li> <li>Preservation and protection of protected and heritage trees and replacement in consultation with City Arborist.</li> </ul>
Cumulative Effects (Chapter 5)	<ul style="list-style-type: none"> <li>Adds incrementally to past, current, and future actions that contribute to gentrification.</li> <li>During construction, increases number of detours and adds incrementally to visual intrusion; dust, noise, and vibration levels; and traffic congestion resulting from overlapping construction of public and private developments.</li> <li>Encroachment on Waller Beach at Town Lake Metro Park resulting from past, present, and future projects.</li> </ul>	<ul style="list-style-type: none"> <li>Collaboration with the City's Displacement Prevention team to develop and implement programs funded by the \$300 million allocated for anti-displacement efforts.</li> <li>Support of regional Workforce Programs to provide community members with access to jobs and career growth opportunities in the infrastructure industry.</li> <li>Implementation of a Business Assistance Program to reduce the burden on small and local businesses prior to and during construction.</li> <li>Coordination through the Construction Partnership Program to minimize construction effects and notify the public of detours and construction activities.</li> <li>Development of a Construction Management Plan addressing best management practices and communication protocols.</li> <li>Replacement parkland and mitigation in accordance with Section 6(f) of the Land and Water Conservation Fund Act.</li> </ul>
Parkland (Appendices G and H)	<ul style="list-style-type: none"> <li>Improved access to parkland through light rail service, and bicycle and pedestrian lanes on new bridge and throughout corridor.</li> <li>Improvements to the Ann and Roy Butler Hike and Bike Trail for ADA accessibility.</li> <li>Section 4(f) use and conversion of approximately 45,371 square feet (3.6% of 28.8-acre park) of Waller Beach at Town Lake Metro Park to transportation use.</li> <li>Section 4(f) use of approximately 49,287 square feet (11.9% of 9.5 acres) of Norwood Tract at Town Lake Metro Park (which would be avoided under the Travis Heights Station Design Option).</li> </ul>	<ul style="list-style-type: none"> <li>Replacement parkland for conversion property at Waller Beach at Town Lake Metro Park and mitigation in accordance with Section 6(f) of the Land and Water Conservation Fund Act.</li> <li>Coordination with the Officials with Jurisdiction to confirm determinations of <i>de minimis</i> impacts and use of Section 4(f) parkland, and to develop mitigation measures.</li> </ul>



## 7.4 Design Option Recommendations

ATP evaluated the challenges, benefits, and adverse effects of each of the Design Options.

ATP evaluated:

- Technical feasibility:
  - Design and constructability;
  - Real estate and adjacent property availability; and
  - Contextual considerations of architecture and urban design;
- Operations, ridership, and user experience;
- Environmental (social and natural) considerations;
- Demographics; and
- Community feedback.

### 7.4.1 Wooldridge Square Station Design Option

ATP recommends moving forward with the Wooldridge Square Station Design Option, which would add a station at Wooldridge Square.

Based on feedback from the community requesting additional station access in the downtown area, the Wooldridge Square Station Design Option would add a center platform station near Wooldridge Square on Guadalupe Street between 11th and 9th Streets. While adding a new station near Wooldridge Square is technically challenging (but feasible) due to grade and drainage issues, an additional station would improve access in the downtown area where stations were spaced farther apart in the Build Alternative. The community was generally mixed or non-responsive on this specific location but acknowledged the longer distance between stations in downtown and supported more stations rather than fewer. The Build Alternative near Wooldridge Square and the Wooldridge Square Station Design Option are shown in **Figure 7-1** and **Figure 7-2**, respectively.

Figure 7-1: Build Alternative near Wooldridge Square



Figure 7-2: Wooldridge Square Station Design Option



### 7.4.2 Cesar Chavez Station Design Option

ATP recommends not moving forward with the Cesar Chavez Station Design Option at this time. If developer agreements progress, this Design Option may be considered in the future.

The Cesar Chavez Station Design Option would place the station diagonally within the block bounded by San Jacinto Street, Trinity Street, 3rd Street, and 2nd Street, and would require an independent developer partnership agreement. Adjusting the location of the Cesar Chavez Station is generally supported by the community, citing closer connection to the CapMetro Red Line and potential urban design opportunities with a partnering joint developer. However, some community feedback shared concerns and questions about access because of the public-private partnership. There would be some operational and construction benefits related to

utilities and traffic effects. The Cesar Chavez Station portion of the Build Alternative and the Cesar Chavez Station Design Option are shown in **Figure 7-3** and **Figure 7-4**, respectively.

**Figure 7-3: Cesar Chavez Station Build Alternative**



**Figure 7-4: Cesar Chavez Station Design Option**



**7.4.3 Lady Bird Lake Bridge Extension Design Option**

ATP recommends moving forward with the Lady Bird Lake Bridge Extension Design Option, which would extend Lady Bird Lake Bridge and elevate the Waterfront Station.

The Lady Bird Lake Bridge Extension Design Option would replace the at-grade Waterfront Station in the Build Alternative with an elevated station. Under this Design Option, the guideway would remain elevated from the Lady Bird Lake Bridge north of the station and continue elevated southward over East Bouldin Creek to connect to South Congress Avenue at street level. Additionally, the elevated section would continue eastward along East Riverside Drive to Travis Heights Boulevard. East Riverside Drive between the Waterfront area to Blunn Creek is anticipated to remain center-running with column placement for the elevated guideway within the median / center-turn lane area. The elevated structure could also include a shared use path to provide connectivity from South Congress Avenue to the Ann and Roy Butler Hike and Bike Trail along Lady Bird Lake.

This Design Option has benefits related to light rail reliability, traffic operations, adjacent property access, real estate effects, and utility effects, and creates an opportunity for an urban plaza that provides community benefit. It also reduces effects on floodplains and trees. However, there could be visual and noise impacts on nearby residents; there are opportunities to minimize effects through design and mitigation. See **Chapter 4** for potential mitigation to offset these impacts. Community feedback suggests a neutral disposition to this Design Option, citing cost and traffic as important considerations. The Lady Bird Lake Bridge portion of the Build Alternative and the Lady Bird Lake Bridge Extension Design Option are shown in **Figure 7-5** and **Figure 7-6**, respectively.

Figure 7-5: Lady Bird Lake Bridge Build Alternative



Figure 7-6: Lady Bird Lake Bridge Extension Design Option



7.4.4 Travis Heights Station Design Option

ATP recommends moving forward with the Travis Heights Station Design Option, which would remove the station from the design.

Removal of the Travis Heights Station would decrease the overall design footprint width between Travis Heights Boulevard and I-35 and would allow for adjustments to guideway horizontal/vertical geometry by eliminating platform tangent requirements. This Design Option would mitigate several design, construction, and environmental challenges, and would avoid the use of parkland, with minimal effect on system ridership. Community feedback shows an equal amount of support and opposition related to station accessibility, effect on ridership, and access to other modes of transportation and neighborhood resources. The Travis Heights Station portion of the Build Alternative and the Travis Heights Station Design Option are shown in **Figure 7-7** and **Figure 7-8**, respectively.

Figure 7-7: Travis Heights Station Build Alternative



Figure 7-8: Travis Heights Station Design Option



#### 7.4.5 Center-Running Bike/Pedestrian and Shade Tree Facilities on East Riverside Design Option

ATP recommends moving forward with the Center-Running Bike/Pedestrian and Shade Tree Facilities on East Riverside Design Option.

The Center-Running Bike/Pedestrian and Shade Tree Facilities on East Riverside Design Option extends from Lakeshore Drive to the Yellow Jacket Station and includes additional

protected bicycle/pedestrian facilities, additional tree and shade cover, and transit furniture (e.g., benches) zones adjacent to the center-running guideway between westbound and eastbound East Riverside Drive lanes. The track and roadway lane configuration are similar to the Build Alternative, while the elements on the outside of the roadway curbs have been reconfigured into an 8-foot shared use path in constrained areas.

This Design Option would take advantage of the ROW width on East Riverside Drive to improve the tree canopy and shade along more continuous bicycle and pedestrian facilities by aligning these elements with the center-running guideway. This could provide a better customer experience as reflected in the general support from the community. Continuing design will address mitigation for potential traffic/multimodal effects and address additional safety measures. This option could require residential and commercial displacements in an EJ community. Design revisions could reduce the effect on residential and commercial displacements. A cross-section view of the East Riverside portion of the Build Alternative and of the Center-Running Bike/Pedestrian and Shade Tree Facilities on East Riverside Design Option are shown in **Figure 7-9** and **Figure 7-10**, respectively.

Figure 7-9: Cross Section View of Build Alternative on East Riverside Drive

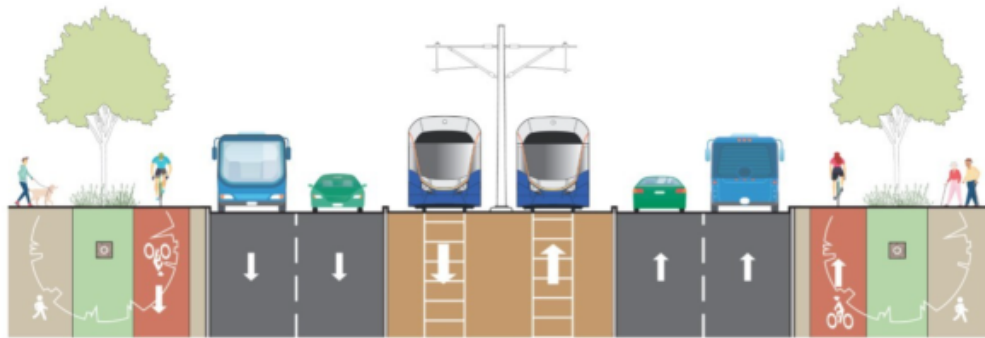




Figure 7-10: Cross Section View of Center-Running Bike/Pedestrian and Shade Tree Facilities on East Riverside Design Option



#### 7.4.6 Grove Station Design Option and Variation to the Grove Station Design Option

ATP recommends advancing a station on Grove Boulevard between the Montopolis and Pleasant Valley Stations. This reflects an adjustment from an initial station location at Faro Drive. This Design Option is recommended because it would directly serve existing riders in the Montopolis area while also supporting future service to planned affordable housing developments by locating a station closer to Grove Boulevard.

As presented during scoping, the Grove Station Design Option would add a station east of Grove Boulevard and would remove the Faro and Montopolis Stations that are proposed under the Build Alternative. While the Grove Station is a good site for potential ETOD, is closer to Austin Community College, and would alleviate real estate challenges at Montopolis, combining Montopolis and Faro into a single station at Grove would require residents in existing neighborhoods to walk farther distances to access the station and is therefore not recommended.

During scoping, the Grove Station Design Option generated mixed feedback from the community, with many suggesting that Grove Boulevard would be a good site because of the proximity to existing and planned facilities, while others were not supportive of reducing the overall number of stations, acknowledging that the Montopolis Station (and this portion of the Project corridor) would serve communities that are reliant on public transit.

In response to this feedback, ATP reviewed the station configuration on East Riverside Drive to optimize station locations to serve both existing neighborhoods and planned developments. The result is the Variation to the Grove Station Design Option, which would keep Montopolis Station at its original location and move Faro Station 800 feet to the east of the original Faro Station location, nearer to Grove Boulevard. Therefore, the Faro Station is now referred to as the Grove Station. This variation also complements the center-running bicycle, pedestrian, and shade tree facilities being considered along East Riverside Drive.

The Variation to the Grove Station Design Option is recommended because it would directly serve existing riders in the Montopolis area while also supporting future service to planned affordable housing developments by locating a station closer to Grove Boulevard.

A portion of the Build Alternative along East Riverside Drive and the Grove Station Design Option are shown in **Figure 7-11** and **Figure 7-12**, respectively. The Variation to the Grove Station Design Option is shown in **Figure 7-13**.

Figure 7-11: Build Alternative



Figure 7-12: Grove Station Design Option



Figure 7-13: Variation to the Grove Station Design Option



## 7.5 Preferred Alternative

Figure 7-14 shows the Preferred Alternative, which includes the Build Alternative and recommended Design Options, as follows:

- Add Wooldridge Square Station;
- Incorporate Lady Bird Lake Bridge extension and elevate Waterfront Station;
- Remove Travis Heights Station;
- Incorporate center-running bike/pedestrian and shade tree facilities along East Riverside Drive; and
- Shift Faro Station to Grove Boulevard (Variation to the Grove Station Design Option).

Following consideration of the DEIS public review and comments, the FEIS and Record of Decision will reflect the selected Project.

Figure 7-14: Preferred Alternative

