Chapter 6

Environmental Justice

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Chapter 6 Environmental Justice

Environmental justice (EJ) is the fair treatment and meaningful involvement of all people, regardless of race, ethnicity, income, national origin, or educational level, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. The objective of an EJ analysis is to ensure that transportation decisions are non-discriminatory and address the concerns of low-income and minority populations by promoting full and fair participation in the project development process.

Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority and Low-Income Populations* requires federal agencies to make EJ part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects, including interrelated social and economic effects, of its programs, policies, and activities on minority populations and low-income populations (collectively EJ populations). Disproportionately high and adverse effects are those that would be:

- predominantly borne by an EJ population; or
- suffered by the EJ population and would be appreciably more severe or greater in magnitude than the adverse effect that would be suffered by the non-EJ population.

The guiding EJ principles that FTA and ATP follow are intended to achieve EJ through planning and public outreach to:

- avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects on EJ populations;
- ensure the full and fair participation by all potentially affected communities in the transportation decision-making process; and
- prevent the denial of, reduction in, or substantial delay in the receipt of benefits by EJ populations.

ATP evaluated the Project's potential to cause disproportionately high and adverse human health and environmental effects on EJ populations. This chapter summarizes the methodology used in the EJ analysis and the Project's benefits and adverse effects. This chapter also identifies potential disproportionately high and adverse effects on EJ populations and the measures that ATP would implement to mitigate those effects.

6.1 Methodology Overview

ATP prepared the EJ analysis in accordance with Executive Order 12898 and relevant guidance, including:

- U.S. Department of Transportation's updated EJ guidance in Order 5610.2(a), *U.S. Department of Transportation Actions to Address Environmental Justice in Minority*

Populations and Low-Income Populations (U.S. Department of Transportation 2021); and

- FTA Circular 4703.1, *Environmental Justice Policy Guidance for Federal Transit Administration Recipients* (FTA 2012).

These guidance documents are consistent with NEPA published by the Council on Environmental Quality, which has oversight of the federal government's compliance with Executive Order 12898 and NEPA (Council on Environmental Quality 1997).

6.1.1 Delineation of Study Area

The Study Area for the EJ analysis encompasses the area most likely to experience impacts during Project construction and operation. It includes U.S. census block groups, the smallest geographical unit for which U.S. census data are available, within 0.5 mile of the Project alignment and light rail facilities. The distance most people are willing to walk to a light rail station, and where transit-oriented development is most likely to occur, is largely accepted as 0.5 mile. As a result, changes in land use and neighborhood and socioeconomic conditions are assessed within 0.5 mile of the proposed new infrastructure. As indicated in **Chapter 3** and **Chapter 4**, potential indirect Project effects on communities would occur within a 0.5-mile distance, with potential direct Project effects mostly occurring within the limits of Project construction. The limits of Project construction is the boundary within which construction, materials storage, grading, landscaping, stormwater infrastructure, contractor access, laydown/staging areas, and related activities would occur. The Study Area also encompasses the area most likely to experience potential cumulative effects, when considering the incremental effects of the Project combined with other past, present, and reasonably foreseeable future actions, as described in **Chapter 5**.

6.1.2 Steps in the Analysis

EJ analysis requires the following five steps to determine if the Project would have disproportionately high and adverse effects on EJ populations:

1. **Identify low-income and minority populations.** Use available screening tools, U.S. census data, local knowledge, and other reliable sources of income data and population characteristics to create a residential demographic profile of the Study Area.
2. **Conduct targeted outreach to EJ populations.** To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process, use specific techniques to engage EJ populations and solicit feedback to inform Steps 1, 3, 4, and 5.
3. **Identify Project effects and mitigation.** Determine the Project's potential to result in adverse and beneficial effects, considering direct, indirect, and cumulative effects, and the measures that would be implemented to mitigate the adverse effects.
4. **Evaluate the potential for disproportionately high and adverse effects.** Evaluate whether adverse effects would be borne predominantly by low-income and minority populations or whether adverse effects would be more severe or greater in magnitude for EJ populations compared to non-EJ populations.

5. **Consider further mitigation measures.** Evaluate whether there are any practical measures or alternatives that would avoid, minimize, or mitigate the disproportionately high and adverse effects on EJ populations. Practical measures account for social, economic (including cost), and environmental effects of the mitigation measure.

When determining whether an adverse effect is disproportionately high and adverse, FTA considers the mitigation measures that would be implemented, offsetting benefits of the Project, and input from the affected EJ communities. The methodology used in these analysis steps is further described in the following sections.

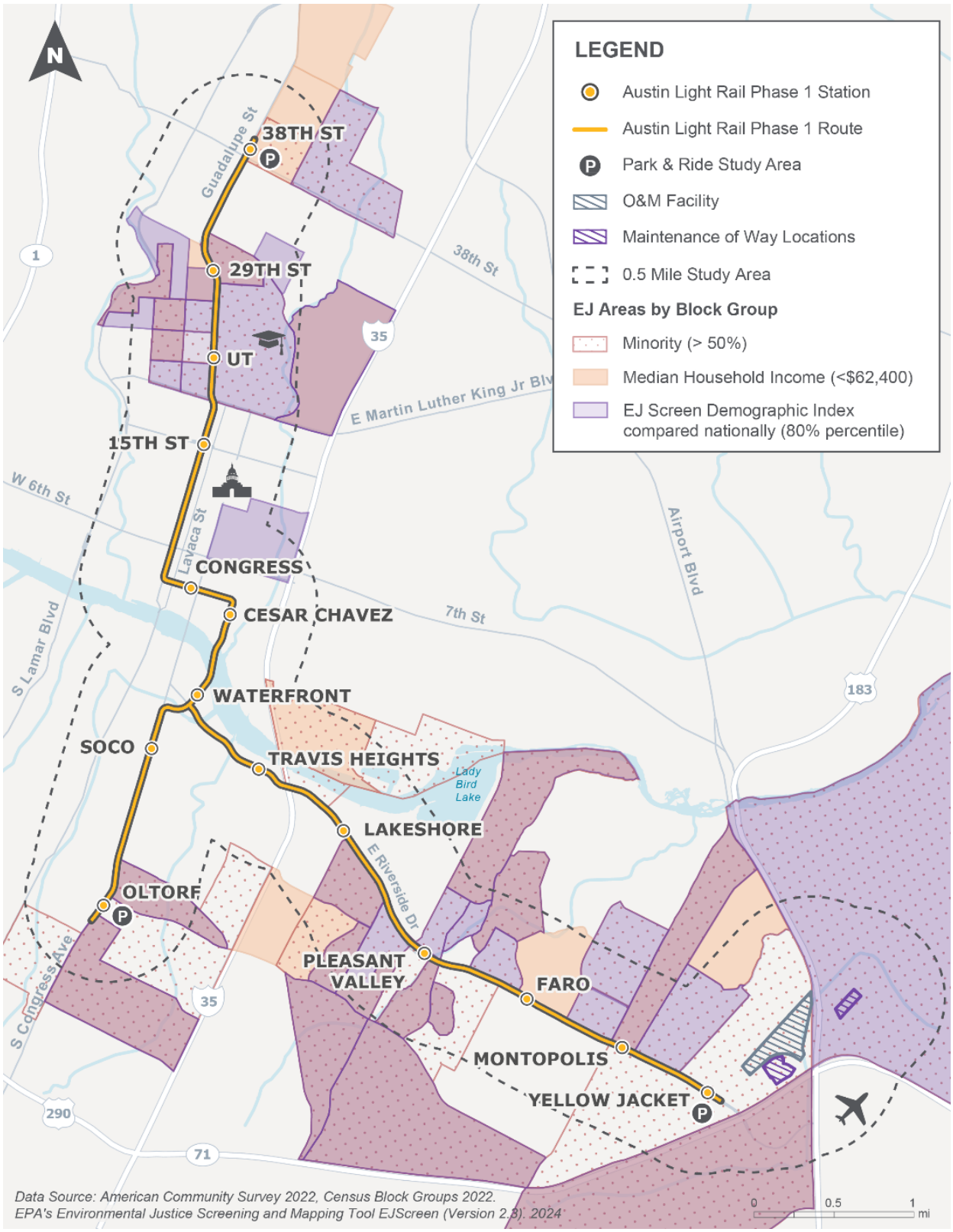
6.2 Identification of Low-Income and Minority Populations

ATP identified census block groups that intersect the Study Area that meet the following definitions for low income and minority:

- **Low-income populations.** According to FTA Circular 4703.1, low-income population means any readily identifiable group of low-income persons who live in geographic proximity and, if circumstances warrant, geographically dispersed/transient persons who would be similarly affected by a project (FTA 2012). While low-income is defined as a person whose median household income is at or below the U.S. Department of Health and Human Services poverty guideline, ATP has defined "low-income" as individuals whose income is equal to or less than 200 percent of the federal poverty level to account for the higher cost of living in the Austin area. The 2024 U.S. Department of Health and Human Services poverty guideline for a family of four is $31,200. Therefore, ATP identified a census block group as low-income if the median household income of the block group was below $62,400.
- **Minority populations.** According to FTA Circular 4703.1, minority populations include persons who are American Indian and Alaska Native, Asian, Black or African American, Hispanic or Latino, and Native Hawaiian and other Pacific Islander. This EJ analysis also considers minority to include persons identified as being either "some other race" or "two or more races" in the census data. ATP identified a census block group as a minority block group if 50 percent or more of the residents identified as minority.

The low-income and minority census block groups that intersect the Study Area are shown in **Figure 6-1**. Low-income block groups are clustered near, and north of, the UT campus and the proposed 29th Street Station, along East Riverside Drive east of I-35, and near the proposed Oltorf Station. Minority populations are located throughout the Study Area, with higher concentrations north of West MLK Boulevard and around the UT campus, along East Riverside Drive east of I-35, and near the proposed Oltorf Station.

Figure 6-1: Low-Income and Minority Populations in the Study Area



ATP identified an additional low-income and minority census block group in Downtown Austin using EPA's EJScreen (version 2.3). EJScreen is an EJ mapping and screening tool that provides a nationally consistent dataset and approach for combining environmental and demographic socioeconomic indicators (EPA 2024b). EJScreen includes a demographic index that averages the low-income and minority populations in each census block group in the U.S., applying definitions for low-income and minority that are consistent with the above definitions. EPA recommends identifying areas that are at or above the 80th percentile nationally as a preliminary step to considering whether EJ analysis or outreach may be appropriate. The census block groups where the average of low-income individuals and minorities is relatively high compared to the rest of the nation is shown in **Figure 6-1**. An additional EJ area in Downtown Austin has been included in the analysis based on the EJ Screen tool.

The data collection effort and description of the tools used in the EJ analysis are presented in more detail in **Appendix E-11, Environmental Justice Technical Report**.

6.3 Targeted Outreach to EJ Populations

6.3.1 Pre-scoping Outreach Activities

ATP established community engagement and inclusion commitments targeted to low-income, minority, and transit-dependent populations at the outset of Project development. ATP convened focus groups composed of low-income, minority, and transit-dependent community members in December 2022 and January 2023 to identify community values. The Project's goals and objectives were refined based on those community values, and light rail scenarios were evaluated using criteria informed by those community values. ATP presented five light rail scenarios with different endpoints at a public meeting in March 2023 to collect feedback on the light rail options (see **Appendix A, Alternatives Development and Analysis**). Between March and May 2023, ATP engaged the community in dialogue about the five scenarios at several events, including one in-person open house, a virtual open house, 45 bus and train station outreach events, and a variety of virtual community updates and community conversations.

As described in the *Austin Light Rail: Community Engagement Report,*[1] demographic information was requested from respondents, but it was not required. ATP received feedback from self-identified minority participants (744 comments, approximately 13 percent based on 5,600 total comments) and low-income participants (547 comments, approximately 10 percent based on 5,600 total comments). Most comments stressed the importance of a system that serves the most people; provides connections for bicyclists, pedestrians, and bus transit; and extends to the airport (ATP 2023b).

Following the public feedback, ATP recommended a preferred scenario that was adopted by the ATP Board of Directors, Austin City Council, and CapMetro Board of Directors, and is the Build

[1] The *Austin Light Rail: Community Engagement Report* can be found at https://www.atptx.org/wp-content/uploads/2023/09/AustinLightRail_CE_Report-Spring2023_FINAL-ENG.pdf.

Alternative evaluated in this DEIS (ATP 2023a). Subsequently, ATP developed Design Options to reflect the public feedback received during the pre-DEIS outreach activities (see **Chapter 7**).

6.3.2 NEPA Scoping

ATP employed multiple strategies to engage a diverse group of participants in the NEPA scoping process. These strategies included outreach in historically underinvested geographical areas; engagement with venues, events, and organizations in EJ and limited English proficiency areas; attendance at community events; distribution of event and Project information through chambers of commerce, schools, neighborhood and community groups, faith-based and community-service organizations, and low-income assistance programs; coordination with essential services for information sharing and distribution through existing networks; dissemination of information at apartment complexes in EJ and limited English proficiency areas; distribution of Project information via print and broadcast channels, including in Spanish, Korean, and Vietnamese translations and other languages upon request; and Spanish interpretation services at all six public meetings.

More than 480 people attended six public meetings in early 2024. Additionally, 268 people submitted completed scoping surveys at the in-person meetings, 94 people provided completed surveys at outreach events, and 396 individuals submitted completed surveys online. In total, ATP received 758 completed surveys with 3,850 comments (each survey had multiple questions and could result in multiple comments per survey). During public meetings, 135 people signed up to receive additional information from ATP via emails and/or e-newsletter distribution. In addition to the public meetings and surveys received during the scoping period, the community shared input about the Project online and via email.

ATP received a total of 3,863 comments during the scoping period. Most of those (3,850) were in response to the scoping survey. To gather demographic information, ATP asked four demographic questions that allowed survey respondents to share their race and ethnicity, gender, and age, as well as whether they are differently abled. Survey questions also asked whether respondents use public transportation, their zip code, and their income and dependent status. All questions were optional. Some respondents opted to supply information for all questions, while some answered only a few questions and others did not answer any questions. Of those who answered the optional questions, 37 percent self-identified as minority and approximately 33 percent self-identified as low-income. A summary of community feedback and how it was incorporated into the decision-making process is provided in **Chapter 7**. A full summary of the scoping process is provided in **Appendix B, Scoping Summary Report**.

6.4 Identification of Project Effects and Mitigation Measures

This section summarizes the beneficial and adverse effects of the Project, considering the potential for direct, indirect, and cumulative effects, and the mitigation measures that ATP would implement to mitigate these effects, as described in **Chapters 3, 4, and 5**. This section also presents the results of ATP's environmental findings for the OMF site and summarizes ATP's siting and equity analysis for the OMF. The OMF would be located in Montopolis, an EJ area

and disadvantaged community identified by the CEJST (Council on Environmental Quality 2022).

6.4.1 Project Benefits

Project benefits include improved multi-modal mobility to employment centers and regional destinations and between affordable housing and jobs in the Study Area; increased transit ridership and reduced numbers of private automobile trips in the region; reduced local pollution and greenhouse gases; safer streets; and short- and long-term job creation. In addition, efficient public transit is an affordable transportation option, which provides residents an opportunity to reduce household expenses related to car ownership. These Study Area benefits would not occur under the No Build Alternative. While all populations in the vicinity of the Project would realize these benefits, the benefits to EJ populations may be greater compared to the general population because a greater percentage of low-income and minority individuals rely on transit. Households in low-income areas typically own fewer vehicles, have longer commutes, and have high transportation costs in proportion to income. The Project's air quality benefits may also accrue to a greater degree in the EJ communities because the negative health effects of pollution fall hardest on vulnerable members of the community (U.S. Department of Transportation 2013).

6.4.2 Adverse Effects and Mitigation

Table 6-1 summarizes the potential adverse effects and mitigation identified in the chapters and appendices of this DEIS.

Table 6-1: Summary of Adverse Effects and Mitigation

Effect Category (DEIS Location)	Potential Adverse Effects	Proposed Mitigation
Traffic and Parking (Chapter 3)	• Adverse effects on traffic at 17 intersections in Downtown Austin and on East Riverside Drive • Loss of up to 607 on-street parking spaces	• Signal timing optimization, addition of turns lanes, and continued coordination with the City to optimize flow • Shared community parking at the proposed Oltorf park-and-ride
Acquisitions and Displacements (Chapter 4, Section 4.1)	• Permanent acquisition of approximately 85 acres, which includes the 62-acre OMF site • Potential displacement of up to 59 businesses and up to 4 residences	• Compliance with Uniform Act • Administration of a Business Assistance Program
Land Use and Zoning (Chapter 4, Section 4.2)	No adverse effects	NA

Effect Category (DEIS Location)	Potential Adverse Effects	Proposed Mitigation
Neighborhoods and Community Resources (Chapter 4, Section 4.3)	• Relocation of one community facility: Waller Creek Boathouse • Changes in vehicular and pedestrian access • Increase in travel time for vehicles crossing tracks that may affect emergency response	• Relocation of community facility in accordance with Uniform Act and Section 6(f) of the Land and Water Conservation Fund Act • Coordination with City fire and police on emergency response procedures
Socioeconomic Conditions (Chapter 4, Section 4.4)	• Indirect effects related to accelerating gentrification, which could cause additional displacements in station areas • Adverse cumulative effects related to rise in property values given historic trends and planned private development	• Administration of Business Assistance Program • Participation in the regional Workforce Development Program
Visual Quality (Chapter 4, Section 4.5)	• Views affected by elevated structures	• Design features, and architectural and landscaping treatments
Cultural Resources (Chapter 4, Section 4.6 and Appendix G)	No adverse effects	NA
Hazardous Materials (Chapter 4, Section 4.7)	No adverse effects	• Compliance with local, state, and federal regulations
Utilities (Chapter 4, Section 4.8)	No adverse effects	NA
Safety and Security (Chapter 4, Section 4.9)	No adverse effects	NA
Noise and Vibration (Chapter 4, Section 4.10)	• Moderate impacts at 22 buildings (514 dwelling units); severe impacts at 9 buildings (439 dwelling units) • Vibration impacts at a hotel and multi-family residence adjacent to OMF lead track.	• Mitigation analysis to determine cost-effectiveness of special trackwork, noise barriers, and building sound insulation

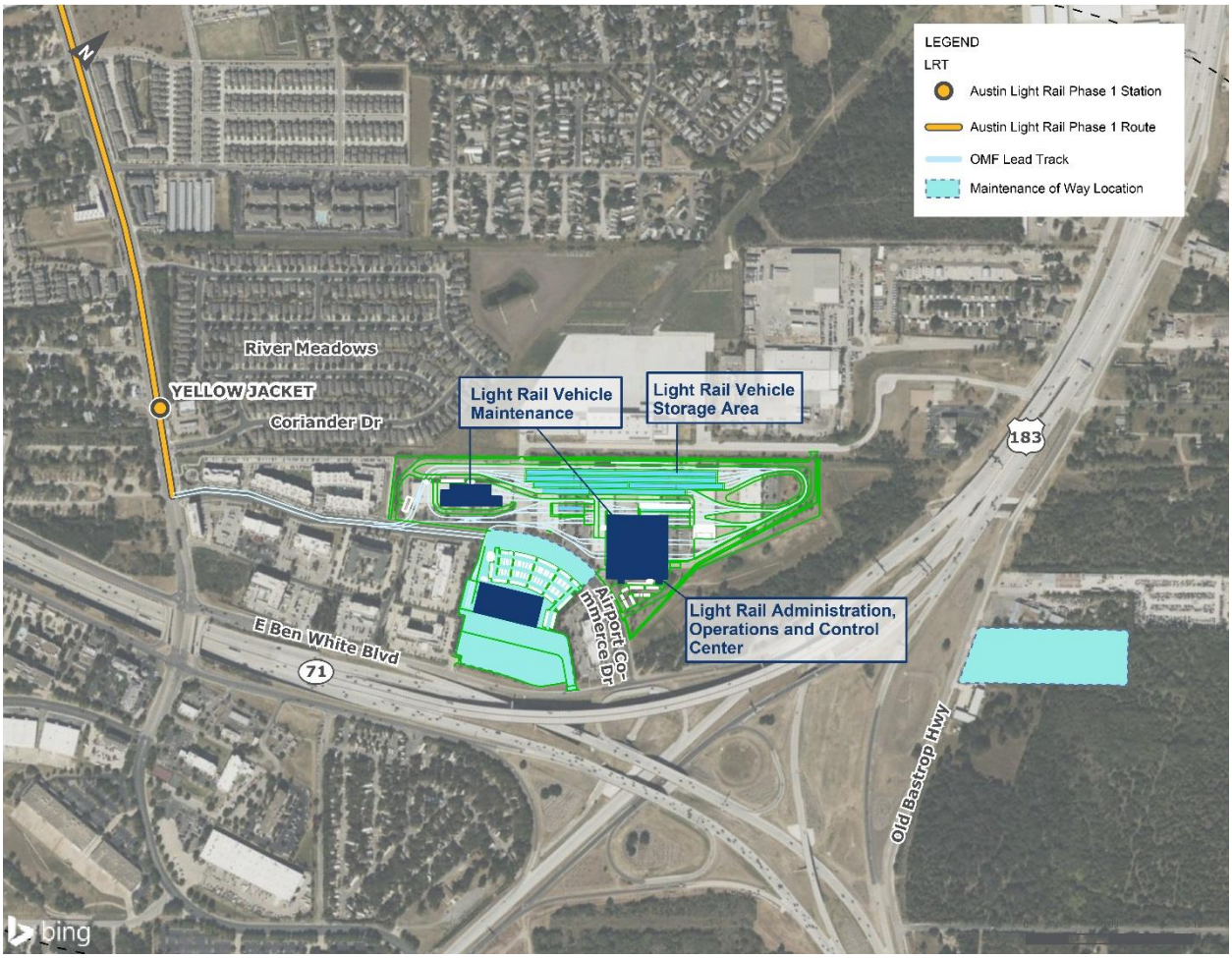
Effect Category (DEIS Location)	Potential Adverse Effects	Proposed Mitigation
Air Quality, Energy, Greenhouse Gases, and Climate Change (Chapter 4, Sections 4.11 and 4.12)	No adverse effects	NA
Electromagnetic Fields (Chapter 4, Section 4.12)	• Potential for EMI to affect sensitive equipment near the overhead catenary	• Coordination with property owners with sensitive equipment and installation of shielding if required
Soils and Geologic Resources (Chapter 4, Section 4.13)	No adverse effects	NA
Water Resources (Chapter 4, Section 4.14)	• 100-year floodplain effects in 16 acres and 500-year floodplain effects in 17 acres • Wetland effects of 4.2 acres (National Wetlands Inventory) and 0.05 acre (City-identified wetlands)	• Compliance with regulatory permit requirements and conservation measures
Threatened and Endangered Species (Chapter 4, Section 4.15)	• 245 protected trees and 211 heritage trees within the limits of Project construction that require protection or removal	• Coordination with City Arborist and development of tree mitigation plan to be approved by Austin City Council
Construction Effects (Chapters 3 and 4)	• Increased dust and air emissions from construction equipment and vehicles, visual intrusion, noise, and vibration near construction sites and truck haul routes • Traffic, transit, bike, and pedestrian detour routes and increased travel delays • Temporary loss of street parking and disruption of local businesses • Adverse cumulative effects related to overlapping construction periods with planned public and private development projects	• Development of Construction Management Plan • Development of Environmental Mitigation and Monitoring Plans and monitoring contractor compliance • Administration of the Business Assistance Program • Participation in the Construction Partnership Program

6.4.3 OMF Environmental Findings and Siting Analysis

The OMF would be located on a 62-acre site on the eastern border of Montopolis, abutting Airport Commerce Drive and the US 183/SH 71 interchange to the south and east. The site is zoned for commercial and industrial uses, and light industrial businesses currently operate on site. The activities at the OMF are a permitted use on the site.

Eight large hotels serving the Austin-Bergstrom International Airport are located to the south of Airport Commerce Drive, and a multi-family residence is located to the north and approximately 270 feet from the OMF tracks. The OMF lead track providing access to the OMF would be on Airport Commerce Drive and within 20 feet of this multi-family residence and the airport hotels. The low-density neighborhood of Riverside View Terrace is located to the north of the OMF, approximately 180 feet from the nearest track (see **Figure 6-2**).

Figure 6-2: OMF Conceptual Site Plan



6.4.3.1 Socioeconomic and Environmental Effects of the OMF

More than one third of the businesses that would be displaced by the Project are located on the OMF site and are mostly light industrial (manufacturing and warehouses) and offices. The OMF is within a City-regulated Airport Overlay that limits residential uses. ATP would acquire the

62 acres and provide relocation assistance to the 24 business tenants in accordance with the Uniform Act. While relocation of these businesses would not adversely affect the neighborhood character or community cohesion in the Montopolis community, the displacement would be considered an adverse effect due to the potential loss of jobs if relocation within the same area were not possible.

Based on the transportation and environmental assessments conducted for the Project, adverse effects on neighborhood conditions would not result from construction or operation of the OMF or MOW shops. The anticipated Project effects are described below.

Traffic and Parking

The OMF would not result in adverse traffic or parking effects. The facility would employ approximately 200 people, arriving and departing over the course of three shifts via the existing access on Airport Commerce Drive via the US 183/SH 71 Interchange or off of Old Bastrop Highway for access to the MOW shops. Existing businesses currently use the access routes, and peak-hour traffic generated by the OMF would not be appreciably different. OMF activities would not affect roadways in residential neighborhoods or increase congestion on the adjacent arterial roadways. Employee parking would be provided on the site, and on-street parking would not be affected.

Visual Quality

The OMF would not result in adverse visual effects. The buildings that compose the OMF would be similar in appearance to the industrial buildings currently on the site in terms of both height and mass. The design of the facility would include landscaping and architectural elements to minimize the view of the facility for the residents in the adjacent neighborhood (see **Figure 6-3**). Facility lighting would be designed in accordance with the Texas Health and Safety and City lighting codes and designed to reduce glare, minimize light pollution, and preserve the natural light environment.

Community and Cultural Resources

The OMF would not result in adverse effects on community or cultural resources. There are no community facilities or historic properties listed in or eligible for listing in the National Register of Historic Places on the OMF site.

Air Quality

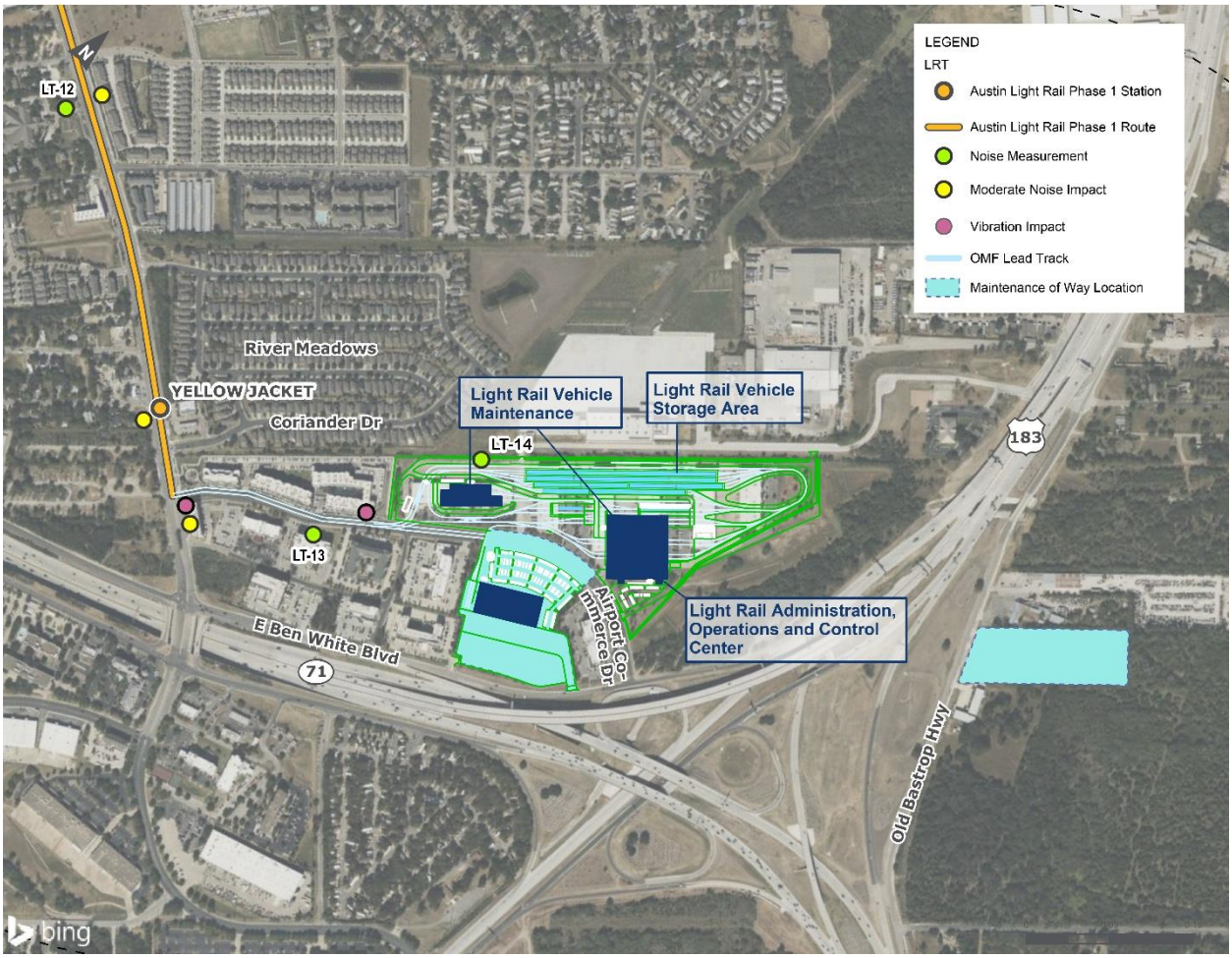
Operational air emissions at the OMF would be limited to mobile source emissions from maintenance and employee vehicle access to the site. Minor emissions associated with welding and painting would occur inside an enclosed maintenance facility and would be addressed by implementing standard minimization measures. Motor vehicles would use the existing access routes to the OMF and MOW shops, which would avoid the Study Area's residential neighborhoods. The electric light rail vehicles would not have motors and would not idle or produce air emissions at the site.

Figure 6-3: View from Riverside Meadows: Existing and Proposed

Noise

Noise-generating activities at the OMF site would include vehicles moving at slow speeds within the OMF site, vehicle washing and drying, limited testing of train bells and horns, a traction power substation, and vehicles accessing the facility on the lead track to the mainline tracks. Maintenance activities would be performed in the enclosed maintenance facility. Noise impacts are not predicted to result from maintenance activities at the OMF. The Project exposure noise level at Coriander Drive is predicted to be well below the FTA criteria for moderate impact. ATP's noise monitoring at the OMF site indicates that ambient noise levels are relatively low at 57 dBA. Project noise exposure would be 45 dBA at the nearest residence and would not produce a noticeable change in noise levels in the residential neighborhood. The OMF lead track on Airport Commerce Drive would result in a moderate noise impact at a hotel on East Riverside Drive due to the crossover tracks. ATP anticipates that this impact would be effectively mitigated through the design and installation of special noise dampening tracks.

Figure 6-4: Potential Noise and Vibration Impacts Near the OMF



Vibration

Light rail vehicles accessing the OMF on the lead track to the OMF have the potential to result in vibration impacts at two sensitive receptors, the multi-family residence to the west of the OMF and a hotel on East Riverside Drive. ATP anticipates that these vibration impacts would be effectively mitigated through the design and installation of special vibration dampening tracks.

Water Resources

Adverse effects on water resources would not occur. Water resources are present on the southeast portion of the site but would be avoided.

Threatened and Endangered Species

Adverse effects on threatened and endangered species would not occur. There are no heritage trees or threatened and endangered species habitat on the site. Mature trees would be avoided, protected, or removed in accordance with the tree mitigation plan.

Electromagnetic Fields

Overhead catenary wires produce EMFs, which can cause EMI if within approximately 100 feet of the operation of sensitive equipment. ATP has not identified facilities likely to have sensitive equipment within this distance to the OMF site.

Construction Effects

In comparison to the construction of stations and tracks, which would occur closer to densely populated areas, construction of the OMF would be less intrusive for nearby residents. Direct construction worker and truck access to the site and its large size provide opportunities to avoid or minimize most nuisance effects. The construction noise analysis identified the potential for noise impacts within 120 feet of daytime construction activities, extending to 380 feet for nighttime construction activities. The potential for nighttime construction noise impacting residents would be mitigated through the development of a Noise Mitigation and Monitoring Plan, which would include limiting noisy construction activities at night.

The construction vibration analysis identified a vibration annoyance distance of 290 feet for impact pile driving. A Vibration Mitigation and Monitoring Plan would be developed to reduce annoyance effects. Mitigation may include use of less vibratory equipment (e.g., use of drilled piles or sonic pile driver), when possible; isolating the equipment using vibration isolation pads or mounts; adding damping materials to absorb vibration; and making saw cuts and other measures. If nighttime construction is necessary, lighting would be only as bright as necessary to comply with Occupational Safety and Health Administration requirements, and lights would be effectively shielded away from residential areas.

6.4.3.2 Siting and Equity Analysis

ATP conducted an extensive siting analysis for the OMF between July 2022 and June 2023 during the planning phase of the Project, described in **Appendix A, Alternatives Development and Analysis**. The OMF site must be sized and located to provide necessary functions for the operation and maintenance of the light rail system. These functions include storage of up to 40 light rail vehicles; facilities for inspection and maintenance of the vehicles; MOW shops for

maintenance of light rail materials and equipment; administrative spaces and facilities for light rail operations and maintenance staff; and light rail operations control center facilities.

The functions of the OMF and MOW shops require a relatively flat site of at least 40 acres. Sites of suitable size and topography were identified and evaluated prior to the selection of the end points for the Phase 1 alignment. Of 21 sites evaluated, nine OMF sites were advanced for further consideration based on compatibility with surrounding land use, avoidance of residential property taking, minimization of business displacement, and other criteria.

In accordance with Title VI of the Civil Rights Act, ATP performed an equity analysis of the nine sites to ensure that the OMF site selection would not displace persons on the basis of race, color, or national origin, nor result in cumulative adverse impacts due to the presence of other facilities with similar impacts in the area. The Title VI Equity Analysis for the OMF is available for review on the Project website at www.atptx.org. Based on the equity analysis and site screening analysis, ATP selected two sites for the OMF, one at the North Lamar Transit Center and the other at Airport Commerce Drive.

During an extensive outreach process, ATP communicated to the public that the OMF site location would be dependent on the alignment scenario selected—it would be located at the North Lamar Transit Center if the alignment were to extend that far north, and at the Airport Commerce Drive site if the alignment were to extend to Yellow Jacket or the airport. Proximity to the light rail alignment is a key element in determining the viability of a site because locations not in close proximity would increase capital and operating costs and could adversely impact areas that do not benefit from direct light rail access.

ATP analyzed two additional sites for the Phase 1 alignment, one at Oltorf Street and one near Willow Creek Drive. Neither of these sites is large enough to accommodate MOW shops. At approximately half the size of the Airport Commerce Drive site, the OMF activities would be closer to residential properties in dense neighborhoods that surround the sites on all sides. Disadvantaged communities identified in federal databases are located adjacent to both sites. ATP eliminated these sites from consideration because they would not offer any advantage over the Airport Commerce Drive site and would have greater potential to adversely affect the nearby communities.

Upon selection of the current Project alignment, the ATP Project team met with the community in Montopolis to solicit input on the proposed OMF at Airport Commerce Drive. The Project Connect Community Advisory Committee (CAC) hosted this meeting on April 15, 2023, and documented the community feedback in a memorandum. This meeting informed the EJ mitigation measures described below in Section 6.6.

6.5 Evaluation of Disproportionately High and Adverse Effects

ATP analyzed the location, number, and severity of the Project's adverse effects in EJ areas compared to non-EJ areas for each environmental category to determine the potential for disproportionately high and adverse effects on EJ populations. The results of this analysis are described below.

6.5.1 Potential for Disproportionately High and Adverse Effects

The Project's potential for disproportionately high and adverse effects in EJ communities was considered by Project and City leadership during the early planning phase of Austin's light rail system. Due to rising property values and gentrifying neighborhoods in the Study Area, the $300 million Anti-Displacement Fund and the City's affordable housing initiatives were established to address the scarcity of affordable housing and enable existing residents to remain in their communities and reap the benefits of the light rail investment. ATP and its partners established an active CAC that will recommend Community Initiated Solutions to the Austin City Council and monitor the funding decisions for the Anti-Displacement Program for the duration of the Project.

The effect on property values near high-capacity transit stations has been studied for different geographic areas and types of transit systems. While complex factors influence property values, including local real estate market conditions and neighborhood and building stock conditions, a positive correlation between transit and property value rise has been shown. A study prepared for FTA by the Center for Transit-Oriented Development found that increases in property values near transit were most dramatic for office and retail spaces, increasing from a few percent to more than 150 percent. For residential properties, single-family dwellings had a property value increase range from 2 to 32 percent, condominiums from 2 to 18 percent, and apartments from 0 to 45 percent (FTA 2008).

A separate study prepared by the American Public Transportation Association and the National Association of Realtors examined how well residential properties located near fixed-guideway transit maintained their value during the national recession from 2006 to 2011. Across five study regions, the drop in average residential sales prices near transit stations was smaller than in the region as a whole, and the station areas with higher levels of transit access saw the most price resilience within and across regions (American Public Transit Association 2013).

Gentrification can result in forced migration of low-income residents and businesses and can shift the racial-ethnic composition of neighborhoods. When this occurs, the cohesiveness and resilience of neighborhoods can be threatened. However, the extent to which the Project could accelerate the rate of gentrification in the Study Area is limited by the land use regulations that incentivize affordable housing as density increases. In March 2023, the Austin City Council approved the *ETOD Policy Plan*, which provides a comprehensive policy framework to guide future development around the Project's stations (City of Austin 2023d). The plan lays out the path to mitigate displacement pressures and ensure that historically marginalized communities benefit from transit connectivity while maintaining economic opportunities. The emerging land development regulations associated with the *ETOD Policy Plan* are described in **Appendix E-4, Socioeconomics Technical Report**.

In May 2024, the Austin City Council adopted an ETOD Overlay applicable to approximately 850 acres of multifamily and commercially zoned properties. The ETOD Overlay restricts new non-transit-supportive uses and creates a density bonus program that permits more height and provides flexible zoning options in exchange for affordable housing or transit-supportive infrastructure. The density bonus program requires replacement of existing affordable

multifamily units and priority businesses. These plans and policies would encourage high-density and affordable housing, which over the long-term is intended to reduce the cost of housing in Austin while sustainably supporting the robust population and employment growth projected for the region.

ATP's acquisition of property and direct displacement of businesses and residents for Austin Light Rail Phase 1 would predominantly occur in EJ communities because the route was planned to address the needs of the transit-dependent populations residing in the underserved communities along the alignment. Potential future displacements due to accelerated rates of gentrification would also predominantly occur in EJ communities because most of the proposed stations would be located in or near EJ areas. EJ populations would suffer the negative effects of relocations to a greater degree than non-EJ populations because the supply of suitable neighborhoods and affordable property is more limited for those with less financial means. For these reasons, the Project has the potential to result in disproportionately high and adverse effects on EJ populations. The potential for the Project's effects to be disproportionately high and adverse on EJ populations, however, is reduced by the anti-displacement measures currently in place in Austin.

6.5.2 No Potential for Disproportionately High and Adverse Effects

ATP found no potential for disproportionately high and adverse effects in most environmental categories. The sections below describe how the effects would occur in EJ and non-EJ areas to a similar degree. Effects would not be more severe for, or suffered to a greater extent by, EJ populations when compared to non-EJ populations.

6.5.2.1 Neighborhoods and Community Resources

The Project would not result in disproportionately high and adverse effects on neighborhood conditions or community resources in EJ communities. The scale of business and residential displacements that would occur in different neighborhoods along the Project alignment would not be large enough to alter the racial-ethnic composition of a neighborhood and would not affect neighborhood cohesion. Roadway modifications and access changes would affect EJ and non-EJ areas to a similar degree. The Project has been designed to integrate the light rail system into the roadway, bicycle lane, and sidewalk network in such a way that all modes would be accommodated safely and with optimal flow. Substantial changes to vehicle access would not occur, and the bicycle and pedestrian network would be improved. The one community facility that would be replaced, the Waller Creek Boathouse, is not located in an EJ area or used predominantly by EJ populations.

6.5.2.2 Visual Quality

The Project would not result in disproportionately high and adverse visual effects on EJ populations. Most of the visible Project elements would be compatible with the urban environment in which they would be located. The component of the Project that would result in an adverse visual effect—extension of the Lady Bird Lake Bridge under that Design Option—is not located in an EJ area. The OMF would replace light industrial buildings of similar height and bulk and is anticipated to have a neutral visual effect on nearby residents.

6.5.2.3 Noise and Vibration

The Project would not result in disproportionately high and adverse noise or vibration effects on EJ populations. Light rail systems generate noise from warning bells, substations, and wheel/rail interaction when trains cross over from one track to another. Light rail vehicles do not produce engine noise.

Most severe noise impacts are predicted to occur along 3rd Street between Guadalupe and Trinity Streets in Downtown Austin, which is not an EJ area. Moderate noise impacts are predicted to occur in EJ and non-EJ areas to a similar degree. 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. Except for two segments along the alignment, the increase in outdoor noise levels as a result of the Project would be 3 dB or less at the nearest sensitive land use. A 3-dB increase in noise in an outdoor setting is generally considered to be barely noticeable to the human ear.

Increases in noise levels due to the Project would be noticeable in the following locations where the ambient noise is relatively low (between 50 and 55 dB):

- At multi-family residences on the south shore of Lady Bird Lake due to the proximity of light rail operating on the new bridge (non-EJ area); and
- Along South Congress Avenue between Mary Street and Oltorf Street due to the proximity of tracks and a nearby crossover (EJ area).

ATP is evaluating noise mitigation measures in accordance with FTA criteria for all locations (whether or not a noise increase would be noticeable). Mitigation may include relocating crossover tracks to less sensitive areas, installing special trackwork to minimize the wheel/rail interaction at crossovers, and installing noise barriers or building sound insulation if they would be effective. ATP would evaluate and apply effective noise mitigation measures uniformly in EJ and non-EJ areas. The mitigation analysis sites are shown in **Figure 6-5**. Potentially adverse vibration impacts are anticipated to be effectively mitigated through the design of special vibration dampening tracks.

Figure 6-5: Operational Noise Mitigation Analysis Sites

6.5.2.4 Electromagnetic Fields

The Project would not result in disproportionately high and adverse effects on EJ populations as a result of new EMFs. The potential for EMI would occur throughout the Study Area and would be mitigated by ATP through coordination with property owners with sensitive equipment and installation of shielding if required.

6.5.2.5 Water Resources and Threatened and Endangered Species

The Project would not result in disproportionately high and adverse effects related to water resources or threatened and endangered species. The Project's effects on natural resources would occur primarily at the river crossings in non-EJ areas. Fewer than half of all heritage trees that would be protected or removed are located in EJ areas. A large percentage of trees slated for removal in EJ areas, including at the OMF site, are invasive species or non-native species.

6.5.2.6 Construction Effects

Project construction would not result in disproportionately high and adverse effects on EJ populations. Construction effects would occur throughout the Study Area and would not be predominantly borne by EJ populations or appreciably more intrusive in EJ communities compared to non-EJ communities. Construction effects would be temporary and would be phased to avoid prolonged exposure to nuisances such as dust, noise, and traffic detours and congestion. ATP would develop a comprehensive Construction Management Plan and construction specifications to address the planned timing of construction and the mitigation measures and best management practices to minimize effects to the greatest extent practical. Construction plans and specifications would require that the same high standards of mitigation and management be applied across all affected communities.

ATP has formed a multi-agency partnership with the region's transportation agencies to prepare for the transportation and public infrastructure construction that would occur over the next 10 years. The Construction Partnership Program would coordinate construction plans, streamline communications, and keep the traveling public informed and up-to-date on construction plans and detour routes.

6.6 Further Evaluation of Mitigation Measures

ATP would mitigate potential disproportionately high and adverse effects on EJ populations through continued support of the CAC's anti-displacement objectives and the implementation of Business Assistance and Workforce Development programs. ATP is working with regional partners on developing infrastructure and mobility career pathways to provide EJ populations with access to jobs and career growth opportunities on the Project and beyond. The OMF would create high-skilled, living wage jobs for more than 200 people in Austin. A local hiring program would be implemented to recruit, employ, and retain residents and workers along Austin Light Rail Phase 1. The program would also address upskilling construction trades and building the workforce in the construction industry.

ATP's Business Assistance and Workforce Development Plan is under development and will be informed by direct outreach and collaboration to identify the needs of the businesses adjacent to

construction sites across Austin Light Rail Phase 1, including in EJ areas. The purpose of the outreach will be to provide businesses with Project information, to identify measures to address the challenges anticipated during construction, and to develop business assistance program elements that are responsive to local needs.

In May 2023, the Project Connect CAC presented light rail implementation recommendations, which ATP is considering as design advances. ATP will continue to engage with the surrounding community. Of the CAC recommendations, the following measures are reflected in the Project design or identified as proposed mitigation:

- Where warranted, commit to environmental monitoring and sharing the data with the CAC and the public;
- Minimize impacts on adjacent residential uses;
- If there is to be any fuel storage, ensure that there is no underground fuel storage;
- Ensure that there is proper on-site stormwater mitigation;
- Use green building techniques and advanced environmental standards;
- Use a landscape buffer and setbacks from residential uses;
- Use shielded and directional light fixtures;
- Ensure that there is minimized idling of non-light-rail vehicles on the site;
- Explore the potential for education and workforce partnerships with local school districts and community colleges to create work opportunities for local residents during the construction and operation phases; and
- Proactively work to ensure the participation of Disadvantaged Business Enterprises in the Project, with an aim to support businesses of all types.

6.7 EJ Determination

When making an EJ determination, FTA considers the adverse impacts of a project, proposed mitigation, offsetting benefits, and the views of affected EJ communities. In 2023, ATP adopted the Project in large part because it would serve historically underinvested communities. The substantial investment in multi-modal transportation infrastructure in these communities is considered by FTA as an offsetting benefit to the Project's potential adverse effects. Given the findings presented in Section 6.5.1, the Project's potential disproportionately high and adverse effects include the commercial and residential displacements that would result from ATP's property acquisitions. An indirect effect of the Project is its potential contribution to the trend of gentrifying communities along the alignment because the high property values and scarcity of affordable housing in Austin result in greater challenges for EJ populations when compared to non-EJ populations. However, the potential for these effects has been reduced through the establishment of the $300 million anti-displacement fund, which is intended to mitigate unique challenges when a new mode of transportation is introduced in a gentrifying area. ATP's coordination with the CAC and the City's Anti-Displacement team would ensure that the voices of low-income and minority communities continue to be heard throughout the Project's design and construction. Planning for the light rail system also included recognition of the underserved communities in the Study Area, which lack adequate and affordable transportation access to Downtown Austin, continuous sidewalks, and protected bicycle lanes.

Notwithstanding the above, a final determination regarding disproportionately high and adverse effects of the Project on EJ populations will be incorporated into the combined FEIS and Record of Decision after consideration of public comments on this DEIS and review of mitigation and enhancement/offset measures identified and developed by ATP.