The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by TxDOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated 12-9-2019, and executed by FHWA and TxDOT.
This Draft EIS presents the purpose and need for this project and evaluates the potential environmental consequences of multiple reasonable alternatives for this project. The reasonable alternatives evaluated are Build Alternative 2, Modified Build Alternative 3, and the No Build Alternative. Potential environmental impacts of the alternatives are evaluated across multiple resource areas, including community impacts, visual/aesthetic impacts, cultural resources, protected lands, water resources, biological resources, air quality, hazardous materials, traffic noise, and induced growth. This Draft EIS identifies Modified Build Alternative 3 as the Preferred Alternative.

For additional information concerning this document, please contact:

Mr. Doug Booher
Director of Environmental Affairs
Texas Department of Transportation
125 East 11th Street
Austin, Texas 78701
Telephone: (512) 416-2734
Comments must be received within the 60-day window from the e-NEPA publication of the notice of availability in the Federal Register.

After circulation of the Draft EIS and consideration of comments received, TxDOT will issue a single Final Environmental Impact Statement and Record of Decision document pursuant to 23 USC §139(n)(2) unless TxDOT determines statutory criteria or practicability considerations preclude issuance of the combined document.

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by TxDOT pursuant to 23 USC 327 and a Memorandum of Understanding dated December 9, 2019, and executed by FHWA and TxDOT.
Draft Environmental Impact Statement
I-35 Capital Express Central Project
From US 290 East to US 290 West/SH 71
Travis County, Texas
CSJ: 0015-13-388
December 2022

Director, Environmental Affairs Division, Texas Department of Transportation

20 December 2022

Date of Approval, Texas Department of Transportation
Summary

This summary is meant to provide a brief overview of some of the information contained in this Draft Environmental Impact Statement (DEIS). It is not meant to replace or supersede any of the analysis, information, or conclusions stated within the body of the DEIS.

The Texas Department of Transportation (TxDOT) proposes to construct improvements to Interstate Highway 35 (I-35) from United States Highway 290 (US 290) East to US 290 West/State Highway (SH) 71, in Austin, Travis County, Texas (referred to herein as the I-35 Capital Express Central Project). The proposed project is approximately 8 miles in length and includes removing the existing I-35 decks, lowering the roadway, and adding two non-tolled high-occupancy vehicle (HOV) managed lanes in each direction. The project would also reconstruct east-west cross-street bridges, add pedestrian and bicycle paths, and make additional safety and mobility improvements within the project limits. The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by TxDOT pursuant to 23 U.S. Code (USC) 327 and a Memorandum of Understanding (MOU) dated December 9, 2019, and executed by the Federal Highway Administration (FHWA) and TxDOT. This section briefly summarizes information contained in the DEIS for the I-35 Capital Express Central Project. Specifically, this Summary Section provides an overview of the proposed project, a summary of the alternatives considered, and a summary of social and environmental impacts associated with the I-35 Capital Express Central Project.

I-35 within Travis County is located in a heavily urbanized area that is currently ranked the #3 most congested roadway in Texas, as measured by Texas Transportation Institute (TTI). Between 2013 and 2022, it has ranked either #1 or #2 as the most congested roadway in Texas. It has ranked #1 in truck delay since 2014 and also tops the chart in highest annual congestion costs, at more than $200 million (TTI 2021). The current proposed alternatives are the result of decades of feedback received from the public. Beginning as far back as the 1980s, TxDOT recognized the need to upgrade I-35 through the region to provide improved mobility. Previous evaluations and studies to improve I-35 through COA have included the 1989 TxDOT Austin Major Investment Study (TxDOT, 1998), the 2011 I-35 Corridor Advisory Committee Plan (TxDOT, 2011a), the 2014 I-35 Capital Area Improvement Program Corridor Implementation Plan (TxDOT, 2013), and the Planning and Environmental Linkages Study from 2014 (TxDOT, 2014). During this time, groups were formed that focused on particular problem areas along I-35 such as the Downtown Stakeholder Working Group and the Decks Neighborhood Workshops, which focused on I-35 through central COA including the upper decks that were seen to separate east and west Austin. More recently, in the mid-2000s, TxDOT held a series of open houses and design charrettes to further develop and refine concepts to improve I-35 while evaluating potential impacts.

The results of these previous efforts have informed and shaped the reasonable alternatives that were carried forward for further study in this DEIS. To facilitate the design and analysis of alternatives, in addition to the No Build Alternative, two build alternatives were identified for detailed evaluations, which are included in this DEIS. Both build alternatives would require the acquisition of new right-of-way (ROW) to accommodate the proposed project, and both would upgrade I-35 to current design standards resulting in enhanced safety throughout the corridor. Chapter 2 further describes the project background and includes history on prior studies.
S 1 Project Purpose and Need

The proposed project is needed because I-35, between US 290 East and US 290 West/SH 71, does not adequately accommodate current and future travel demand and does not meet current federal and state design standards, which has resulted in safety and operational deficiencies and can impact crash rates and peak period travel times for all users, including emergency response vehicles and transit (see Appendix H for crash data and traffic projections).

The purpose of the proposed project is to improve this critical local, regional, national, and international thoroughfare by enhancing safety within the corridor; addressing demand by prioritizing the movement of people, goods, and services through and across the corridor; improving operational efficiency; and creating a more dependable and consistent route for the traveling public, including people who walk and bicycle, emergency responders, and transit. Chapter 1 provides more information about the purpose and need of the proposed project.

S 2 Public and Agency Engagement

The scoping process was initiated in August 2020 with a federal Notice of Intent (NOI) to publish an EIS for the proposed project, with limits from US 290 East to SH 71/Ben White Boulevard. TxDOT invited cooperating and participating agencies and the public to two agency and public scoping meetings, one public meeting, and several community engagement meetings. In these meetings, the public and agencies were afforded the opportunity to help define the purpose and need for the project, the range of alternatives to be considered, and the methodology and level of detail for analyzing alternatives, including the selection of planning, engineering, and environmental criteria. TxDOT also provided the opportunity to comment on the Agency Coordination Plan and Public Involvement Plan. See Section 4.1.3 for a summary of the scoping meetings.

The first Agency/Public Scoping Meeting was held in November 2020. Comments and feedback from stakeholders included changing the purpose and need to include reducing vehicle miles traveled (VMT), improving safety, prioritizing community needs, including crash, bicycle, and pedestrian data; ensuring deck plazas are included in both reasonable alternatives; using alternate traffic demand model data; adding multimodal and people-carrying capacity; assessing climate change, equity, health issues, homelessness and community impacts; analyzing differences among alternatives in amount of ROW required, construction impacts, ramping scenarios, bicycle and pedestrian facilities, direct transit connections, grade separations, and context-sensitive design; rerouting trucks or all through traffic to SH 130; and burying or tunneling I-35. Appendix E contains a summary of comments from each scoping meeting.

TxDOT hosted a second Agency/Public Scoping meeting in March 2021 and presented the revised purpose and need and range of alternatives, as well as draft methodologies and level of detail for analyzing alternatives. Comments received included: analyzing additional alternatives such as the Reconnect Austin, Rethink35, and Downtown Austin Alliance (DAA) Urban Land Institute (ULI) proposals; support for the No Build; support for Build Alternatives 1, 2 and 3; measuring impact criteria specifically related to pedestrian and bicycle safety at intersections and crossings; and adding criteria to measure transit station/stop access to future Project Connect system and measure added east-west crossings. Based on stakeholder comments, the need for the project was
changed to include an expanded emphasis on crash and safety data. The purpose of the project was changed to include addressing demand by prioritizing the movement of persons, goods, and services through and across the corridor, and to include all modes of transportation to create a more dependable and consistent route. The alternatives evaluation criteria were also revised to include air quality impacts; person-carrying capacity along mainlanes; annual cost of travel; and accommodation of the Capital Metropolitan Transportation Authority (CapMetro) service plan at east-west crossings.

TxDOT initiated meetings with the public and targeted outreach to residents of neighborhoods surrounding the project. The public involvement process is ongoing and includes focused National Historic Preservation Act (NHPA) Section 106 public outreach. In addition to the scoping and public meetings, TxDOT also continues to host Volunteer Opportunity in Community Engagement (VOICE) meetings and pop-up events to discuss the project with community members; these also act as a sounding board on issues that are important to the community. TxDOT has also offered a self-guided virtual open house (VOH) to provide an opportunity for the public to review meeting materials and submit comments. TxDOT established a website for the I-35 Capital Express Central Project at www.My35CapEx.com. The website provides up-to-date program and project information, meeting materials, environmental documents, and contact information, among other elements. Visitors to the www.My35CapEx.com website also can sign up for email updates as well as the quarterly Mobility35 E-Newsletter.

The public involvement process included extensive efforts to engage with and reach out to underserved populations, including elderly, minority, geographically dispersed/transient populations, Limited English Proficiency (LEP), and physically and visually impaired. Specific efforts to engage with Environmental Justice (EJ) communities include providing public involvement notices and select vital project information in English and Spanish, and Spanish speakers have been available at all public fora. Public meeting notices will continue to be published in English and Spanish, and Spanish speakers will be available to engage with and interact with the community. TxDOT will continue to encourage the participation of minority, low-income, and underserved populations in the project decision-making process through various strategies. These efforts at public involvement are documented to demonstrate compliance with Title VI, EJ and LEP requirements and guidance to ensure full and fair participation by all potentially affected communities. TxDOT will continue to host public involvement activities to solicit public feedback, discuss findings, and provide project updates in accordance with Executive Order (EO) 13166 to ensure full and fair participation. See Chapter 4 and Appendix E of the DEIS for a summary of public involvement to date.

S 3 Summary of Alternatives Considered

The alternatives analysis developed for the DEIS allowed for a full comparison and evaluation of alternatives through an iterative process and collaboration with the public. The process began with three build alternatives developed by TxDOT after decades of study and feedback received from the public. These were presented at scoping meetings held in November 2020 and March 2021, featuring differing elevations of I-35 at key locations throughout the project. Following the preliminary alternatives analysis, which used screening criteria that incorporated public feedback, Build Alternatives 2 and 3 and the No Build Alternative were carried forward for
further analysis, while Build Alternative 1 was screened out. Further detail on the alternatives evaluation can be found in Chapter 2 and Appendix I.

In addition to TxDOT-provided alternatives, three separate concepts for the project were submitted by community groups Rethink35, Reconnect Austin, and DAA/ULI. In August 2021, TxDOT held a Public Meeting showing the two TxDOT Build Alternatives (2 and 3) as well as a study conducted by TTI that considered the feasibility of the three community concepts. The study concluded none of the community concepts would be feasible as standalone build alternatives, but that elements of the concepts could be incorporated into TxDOT build alternatives. At TTI’s recommendation, further study for incorporating features from these community concepts was performed only on Build Alternative 3, as it was the alternative that most closely captured community feedback due to its lowered lanes at Airport Boulevard and Riverside Drive, which aligned with the community request that the project be built no higher than the current grade. Additionally, shifted frontage roads from Dean Keeton Street to Holly Street, to create a boulevard section, were found to be feasible as well as operational improvements at Riverside Drive to accommodate Project Connect, both features that further differentiated the alternatives. In order to preserve the intent of TTI suggestions and to showcase two fully constructible, but different alternatives, Build Alternative 3 was redesigned (and renamed Modified Build Alternative 3) to incorporate the more innovative concepts from the community, and minimal changes were made to Build Alternative 2.

This process led to the detailed evaluation of two build alternatives and the No Build Alternative and recommendations for a single, Preferred Alternative that would best meet the purpose and need of the proposed project and would avoid or minimize the most environmental impacts. The alternatives considered and the evaluation process is documented in detail in Chapter 2. Section 2-1 discusses alternatives not carried forward, including Build Alternative 3, before modification. The reasonable alternatives carried forward for further evaluation include Build Alternative 2, Modified Build Alternative 3, and the No Build Alternative. Build Alternative 2 meets the purpose and need of the project while also performing well under several evaluation criteria. Modified Build Alternative 3 was refined to reflect elements of the community concepts but was derived from Build Alternative 3 and also meets the purpose and need of the project while performing well under several evaluation criteria. The No Build Alternative, or “Do Nothing Alternative,” is also carried forward and serves as a baseline for analysis. Table S 3-1 is a summary of the reasonable alternatives that were considered and carried forward for analysis in the DEIS.

<table>
<thead>
<tr>
<th>Alternatives Carried Forward for Analysis in DEIS</th>
<th>Meets Purpose and Need (Y/N)</th>
<th>Required ROW (acres)</th>
<th>Total Number of Potential Displacements*</th>
<th>Estimated Construction Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Build Alternative</td>
<td>N</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Build Alternative 2</td>
<td>Y</td>
<td>45.2 acres</td>
<td>291</td>
<td>$4.45 Billion</td>
</tr>
<tr>
<td>Modified Build Alternative 3</td>
<td>Y</td>
<td>41.7 acres</td>
<td>107</td>
<td>$4.50 Billion</td>
</tr>
</tbody>
</table>

*This number includes the total for commercial, residential, and displacements that were vacant as of 9/1/2022.
3.1 Build Alternatives

Build Alternative 2

Build Alternative 2 is approximately 8 miles in length along I-35. The northern limit is 1,500 feet north of US 290 East and the southern limit is 1,000 feet south of US 290 West/SH 71. Build Alternative 2 would provide two lowered HOV managed lanes and lowered mainlanes in each direction between Airport Boulevard and Cesar Chavez Street, and between Riverside Drive and Oltorf Street. Both HOV managed/transit lanes and mainlanes are lowered one level below frontage roads and cross streets (short, tunneled sections would be included at select locations to accommodate potential deck plazas and minimize ROW needs and displacement impacts). This alternative would also add direct connectors at I-35 and US 290 East to enhance mobility at this high-volume interchange and to facilitate the transition to one HOV managed lane in each direction north of US 290 East. No additional ROW would be required along US 290 East. Other improvements include elevated mainlanes and HOV managed lanes over Holly Street and drainage improvements. Build Alternative 2 requires approximately 45.2 acres of additional ROW resulting in 291 potential displacements. Temporary and permanent easements would be required in the amount of approximately 3 acres for construction staging, and approximately 25 acres of Lady Bird Lake and shoreline, which would be restricted from recreation during construction to allow for movement of construction equipment. Chapter 2 includes a detailed description of Build Alternative 2.

Modified Build Alternative 3

Modified Build Alternative 3 would also provide two lowered HOV managed lanes and lowered mainlanes in each direction between Airport Boulevard and Cesar Chavez Street, and between Riverside Drive and Oltorf Street. Both HOV managed/transit lanes and mainlanes are lowered one level below frontage roads and cross streets (short, tunneled sections would be included at select locations to accommodate potential deck plazas and minimize ROW needs and displacement impacts). This alternative would differ from Build Alternative 2 in that mainlanes and HOV managed lanes would be lowered at Holly Street with only the northbound (NB) bypass lanes elevated at this location. It would provide a single point urban interchange (SPUI) at Airport Boulevard (like Build Alternative 2) and would provide an additional SPUI at East Riverside Drive, as well as an additional pedestrian/bicycle-only bridge at Woodland Avenue, and would accommodate the CapMetro Blue Line at East Riverside Drive. For this alternative, frontage roads would be shifted to the east, between Dean Keeton Street and 15th Street, and then to the west, between 15th Street and Cesar Chavez Street, to create boulevard sections. Additionally, Modified Build Alternative 3 would provide drainage improvements. There would be no additional direct connectors at US 290 East/I-35. Modified Build Alternative 3 requires approximately 41.7 acres of additional ROW resulting in 107 potential displacements. Temporary and permanent easements would be required in the amount of approximately 3 acres for construction staging, and approximately 25 acres of Lady Bird Lake and shoreline, which would be restricted from recreation during construction to allow for movement of construction equipment. Chapter 2 includes a detailed description of Modified Build Alternative 3.

No Build Alternative

The No Build Alternative represents the proposed project not being constructed. No roadway improvements would be constructed to provide additional capacity to reduce congestion and improve mobility, improve east-
west connectivity in downtown Austin, and the current design deficiencies, including drainage issues in some areas, would not be corrected. Although the No Build Alternative does not meet the purpose and need, this alternative was carried forward through the environmental impact analysis as a basis for assessing the impacts of no action as a comparison to the build alternatives, as required by the National Environmental Policy Act (NEPA).

The No Build Alternative would not result in the acquisition of new ROW, and no existing land uses would be converted to transportation uses. There would be no direct impacts to the human environment including neighborhoods, community resources, minority and low-income populations, existing transportation facilities, archeological or historic resources, and Section 4(f) or 6(f) properties. The No Build Alternative would not change the existing visual environment. There would be no direct impacts to hazardous materials sites. The No Build Alternative would not impact current property or sales tax revenues and would not have the positive regional and statewide economic impact of creating additional jobs and income during construction. The community would also not experience the benefits of improved safety conditions resulting from the proposed project. Decreasing mobility due to traffic congestion may adversely impact existing and future businesses. Increased congestion on existing I-35 and other roadways in and near the proposed project area may result in additional air pollutant emissions. No short-term noise would be generated from construction-related activities; however, noise levels would be expected to increase with an associated increase in future traffic volumes.

The No Build Alternative would not result in direct impact on the natural environment, including water resources, floodplains, wetlands, and Waters of the U.S. (WOTUS), wildlife, vegetation, and threatened and endangered species. There would be no anticipated impacts to topography, soils, or geological resources, and no direct impacts to prime or unique farmland soils. Additional information on the impacts of the No Build Alternative is provided by resource throughout Chapter 3.

**Preferred Alternative**

Modified Build Alternative 3 is the Preferred Alternative as it meets the need of the proposed project to accommodate current and future travel demand, brings the highway to current federal and state design standards, and improves safety and operational deficiencies and reduces crash rates in comparison to the No Build Alternative. Modified Build Alternative 3 also meets the need to lower peak period travel times for all users, including emergency response vehicles and transit along I-35 within the project limits. Modified Build Alternative 3 meets the purpose of the proposed project to improve I-35 by enhancing safety; prioritizing the movement of people, goods, and services through and across the corridor; improving operational efficiency; and creating a more dependable and consistent route for the traveling public including people who walk and bicycle, emergency responders, and transit. Modified Build Alternative 3 would accommodate the CapMetro Blue Line at Riverside Drive. In addition to meeting the purpose and need, Modified Build Alternative 3 also has fewer social, economic, and environmental impacts than Build Alternative 2 when taking into consideration design and engineering, environmental resources, local enhancements, and project costs. **Section 2.4** has more detail on Modified Build Alternative 3 and project impacts.
Summary of Environmental Impacts

This DEIS addresses the environmental impacts associated with each of the identified reasonable alternatives and the No Build Alternative, including the following areas: ROW/displacements, land use, farmlands, utility relocation, bicycle and pedestrian facilities, community impacts, visual/aesthetic impacts, cultural resources, protected lands, water resources, biological resources, air quality, hazardous materials, traffic noise, induced growth, cumulative effects, construction phase impacts, and greenhouse gas (GHG) and climate change. This summary includes an overview of the major conclusions from the DEIS with respect to environmental impacts. Detailed information about the analysis of existing conditions; direct, indirect, and cumulative effects of the proposed project; and environmental permits, issues, and commitments is included in Chapters 2 through 5 and in the appended technical reports.

S 4.1 ROW/Displacements

Build Alternative 2 would require the acquisition of approximately 45.2 acres of additional ROW, resulting in 291 displacements to 131 businesses, 145 residences, 15 vacant properties, and 172 displacements located in EJ Census geographies. Build Alternative 2 would displace ten community facilities: the David Powell Health Center, Hancock Walk-In Care, Escuelita del Alma, Pathways Youth and Family Services, Texas State Independent Living Council, Austin VA Vets Center, Green Doors, Copernicus STEM Academy Delwood Campus, and Extend-A-Care.

Modified Build Alternative 3 would require the acquisition of approximately 41.7 acres of additional ROW, resulting in 107 displacements to 69 commercial properties, 26 residential properties, 12 vacant properties, and 90 displacements located in EJ Census geographies. Modified Build Alternative 3 would displace 3 community facilities: the CommUnityCare David Powell Health Center, CommUnityCare Hancock Walk-In Care, and Escuelita del Alma. ROW and displacements are discussed in Section 3.1, and Section 3.6 includes further details on the displacements associated with the reasonable alternatives.

S 4.1.2 Land Use

The proposed project crosses through urban and developing areas including residential, commercial, industrial, public use/institutional, parks/open space, vacant, and undevelopable land uses. New ROW would be required for both build alternatives. All land uses that would be directly impacted by the project (except those areas that would be subject to temporary construction staging easements) would be permanently converted to transportation use. Section 3.2 discusses existing conditions and direct impacts to land use. Section 3.9 discusses land use associated with temporary construction staging easements, and Section 3.15 is an analysis of potential project-related induced development.

S 4.1.3 Utility Relocation

It is reasonably foreseeable that utilities would have to be relocated as a result of Build Alternative 2 or Modified Build Alternative 3. For each of these alternatives, the impacts resulting from removal of any utilities from within existing highway ROW (e.g., construction noise, potential disturbance to archeological resources, and potential...
Impacts to species habitat) have been considered as part of the overall project footprint impacts within this DEIS. Utilities are discussed in Section 3.4.

**S 4.1.4 Bicycle and Pedestrian Facilities**

Both build alternatives propose the construction of additional shared use paths (SUP) and sidewalks, which would improve current pedestrian and bicycle access along and across the I-35 corridor (east/west). The proposed project would improve bicycle and pedestrian safety and would be designed to meet Americans with Disabilities Act (ADA) accessibility standards. The proposed project would expand connectivity within the project corridor and provide additional connectivity to current transit options across the project corridor. Additionally, TxDOT would accommodate or replace existing trails that are impacted by the proposed project, as well as allow for planned future trails as shown on the City of Austin (COA) Bike Plan.

**S 4.1.5 Community Resources**

Assessment of potential impacts to community resources included the evaluation of impacts related to displacement of residences, businesses, and community facilities, changes in community cohesion, changes in access and travel patterns, and impacts to EJ populations. I-35 was constructed in the 1950s and has created a physical, as well as visual barrier, separating east and west Austin for several decades. Both reasonable alternatives would improve community cohesion and connectivity, reduce the visual and physical barrier created by the original construction of I-35 and help reconnect east and west Austin by lowering the mainlanes in some areas and improving bridges and vehicular and bicycle and pedestrian connection. By reducing congestion and improving the I-35 corridor through central Austin, the proposed project may further increase the desirability of the central downtown area. Both Build Alternatives would impact neighborhoods and community facilities and would require new ROW, which would displace businesses, community facilities, and residences. Modified Build Alternative 3 has been refined to minimize displacements, particularly in minority and low-income Census geographies. As shown in Table S-2, Build Alternative 2 would displace ten community facilities, 131 businesses, 16 of which serve a specific community, two single-family residences, and 143 multifamily units. Modified Build Alternative 3 would displace three community facilities, 69 businesses, eight of which serve a specific community, two single-family residences, and 24 multifamily units. Section 3.6 includes a displacements analysis.

Access and travel patterns would be expected to change with both Build Alternatives. The proposed project would reduce traffic congestion and add SUP connection both along and across I-35. Several enhanced bridges would be constructed and would allow pedestrians and bicyclists to feel safer when using SUP facilities. Enhanced bridges would include a 20-foot buffer space and a 10-foot SUP on the outside of the travel lanes. Both Build Alternatives would include bypass lanes and other traffic improvements to keep traffic flowing. The proposed project would maintain access to all modes of transit.
Table S-2: Summary of Displacements Associated with the Reasonable Alternatives

<table>
<thead>
<tr>
<th>Additional ROW</th>
<th>Community Facilities Displacements*</th>
<th>Commercial Displacements **</th>
<th>Facilities Serving a Specific Community</th>
<th>Single-Family Displacements</th>
<th>Multifamily Displacements (Units)</th>
<th>EJ*** Displacements</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Build</td>
<td>0 acres</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Build Alternative 2</td>
<td>45.2 acres</td>
<td>8</td>
<td>131</td>
<td>16</td>
<td>2</td>
<td>143</td>
</tr>
<tr>
<td>Modified Build Alternative 3</td>
<td>41.7 acres</td>
<td>3</td>
<td>69</td>
<td>8</td>
<td>2</td>
<td>24</td>
</tr>
</tbody>
</table>

* Build Alternative 2 displaced community facilities: David Powell Health Center, Hancock Walk-In Care, Escuelita del Alma, Austin VA Vets Center, Pathway Youth and Family Services, Texas State Independent Living Council, Copernicus STEM Academy, and Extend-A-Care.

* Modified Build Alternative 3 displaced community facilities: David Powell Health Center, Hancock Walk-In Care, and Escuelita del Alma.

** Commercial parcel displacements would also include community facility displacements. Community facilities may be located within buildings or complexes which would be displaced, but also include other businesses.

*** EJ displacements conservatively include those within a Census block with 50% or greater minority population, a Census block group where the median household income (MHI) is below the U.S. Department of Health and Human Services (HHS) poverty level, or a Census tract where the percentage of those in poverty is significantly greater than the poverty level within Travis County, with the understanding that not all such displaced persons or businesses may actually be EJ persons or businesses.

EO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, requires each federal agency to “make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations” (59 Fed. Reg. 7,629 (Feb. 11, 1994)). EO 12898 also directs agencies to develop a strategy for implementing EJ. Census blocks where the percentage of minority persons was 50 percent or greater, Census block groups where the median household income (MHI) is below the 2022 poverty guideline, or Census tracts where the percentage of people in poverty was meaningfully greater than the percentage of people in poverty for Travis County overall were all considered to contain an EJ population. This conservatively assumes that all persons or businesses within EJ Census geographies would be minority or low-income. Under U.S. Department of Transportation (USDOT) guidance, a “disproportionately high and adverse effect” on EJ populations exists if there is an “adverse effect that is predominantly borne by a minority population and/or a low-income population,” (USDOT Order No. 5610.2C [May 16, 2021] at Section 1.g. of the Appendix). Because a majority of the displacements for this project would necessarily occur in census blocks that meet EJ thresholds, and applying a conservative assumption that all displacees would in fact be low-income or minority persons, TxDOT conservatively assumes that the displacements would be “predominantly borne by a minority population and/or a low-income population,” and according to USDOT guidance, there would therefore be a “disproportionately high and adverse effect” on EJ populations for both Build Alternative 2 and Modified Build Alternative 3. However, through design modifications to reduce ROW acquisitions and displacements of single-family, multifamily, and businesses serving EJ populations, Modified Build Alternative 3 would substantially reduce displacement to EJ populations and displacements overall. For both Build Alternatives, TxDOT is looking at potential advanced relocation...
assistance to address community facility displacements and would work with providers, where appropriate, to
ensure a continuation of services for healthcare, daycare, or basic needs (BN) for those experiencing
homelessness. Additionally, the proposed project would include many benefits, including reducing the visual
barrier of I-35, reconnecting east and west Austin, and providing wider and safer enhanced bridges and SUP
connections.

Impacts to EJ populations from other project-related impacts including community cohesion, air quality, noise,
or hazardous materials would not be expected to be disproportionate or high. Construction phase impacts (i.e.,
noise and light) and other potential impacts to the human environment are continually being analyzed as part of
the NEPA process, including those with the potential to affect EJ populations. Construction phase impacts are
dictated by design, schedule, and project sequencing; therefore, both EJ and non-EJ communities would
experience temporary construction impacts similarly. EJ communities would not be expected to experience
construction impacts more severely than non-EJ populations for general construction-related impacts. Methods
to minimize construction related impacts would be employed, such as construction phasing and public
involvement activities, including maintaining a project construction website, performing business outreach, and
providing detour notifications where appropriate. Impacts to EJ populations are discussed further in Chapter 3.

S 4.1.6 Visual and Aesthetic Resources

I-35 is a well-established interstate highway, and the project corridor is located within a developed/urban area
of Austin. Aerial imagery and virtual field visits were used to assess visual and aesthetics impacts within the
project area. The general landscape can be characterized as urban land uses consisting of mixed small, medium,
and large retail, commercial, office, hotel, residential, highway ROW, and other transportation facilities. The
proposed project would generally follow the alignment of the existing I-35 highway. The existing viewshed
includes the I-35 upper decks and elevated mainlanes through downtown, which also dominate the existing
visual and aesthetic environment, acting as a physical, visual, and psychological barrier that inhibits the east-
west connection of Austin across the I-35 corridor. Because of their elevation, the upper decks provide viewpoints
of the historic Texas State Capitol Building as well as downtown east and west Austin. The primary changes to
the visual environment in the project corridor consist of the removal of the upper decks, addition of HOV managed
lanes, modified frontage roads, bicycle and pedestrian facilities, and bypass lanes. Both Build Alternative 2 and
Modified Build Alternative 3 would remove Capitol View Corridor (CVC) vantage points that are located on the
upper decks and elevated sections of the existing I-35 facility. The removal of the upper decks and the elevated
sections of I-35 through downtown Austin would remove a physical, visual, audio, and psychological barrier
represented by the existing structure and help make the overall views across Austin more accessible to all.
Section 3.7 provides a detailed discussion on impacts to visual and aesthetic resources.

TxDOT initiated a series of meetings with the public and targeted outreach to residents of neighborhoods
surrounding the proposed project and members of the public who have taken part in public involvement events.
In these meetings TxDOT discussed the potential to incorporate aesthetic concepts, such as textured form liners,
retaining wall art, and other options proposed by the public and neighborhood stakeholders.
S 4.1.7 Cultural Resources

Archeological Resources and Cemeteries

The proposed project includes state and federal funds managed through TxDOT; therefore, the proposed project is subject to regulations defined in Section 106 of the NHPA of 1966, as amended. Project archeologists evaluated the potential for the build alternatives to effect archeological resources within the area of potential effect (APE). Neither build alternative would impact archeological resources due to the extent of disturbances from previous development. Section 3.8.1 discusses archeological resources.

Historic Properties

In compliance with Section 106 of the NHPA, project historians surveyed the APE for historic resources that are eligible for the National Register of Historic Places (NRHP). Both build alternatives would displace four historic properties, including the Elgin Butler Brick Company (EBBC) Main Office (Austin Chronicle) at 4001 North I-35, the Dura Tune Service Station at 3810 North I-35, the Haster House at 3009 North I-35, and the Roberts House at 3509 North I-35. Build Alternative 2 would displace two additional historic resources: residence at 4505 North I-35 and residence at 4503 North I-35 in the Delwood II Historic District. The project would also impact portions of the Ann and Roy Butler (Butler) Hike and Bike Trail, Edward Rendon Sr. Metro Park at Festival Beach (Edward Rendon), and Waller Beach at Town Lake Metro Park (Waller Beach), all part of the Town Lake Park System, eligible for listing in the NRHP. TxDOT is coordinating the determination of adverse impacts to historic resources and all required mitigation with the Texas Historical Commission (THC) and other consulting parties. Section 3.8.2 is a summary of historic resources in the APE, and Appendix L contains all historic resources reports produced for the project.

S 4.1.8 Protected Lands

Section 4(f)

Section 4(f) of the USDOT Act of 1966 prohibits the Secretary of Transportation from approving any program or project that requires the use of any publicly owned land from a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance as determined by federal, state, or local officials having jurisdiction thereof, or any land from an historic site of national, state, or local significance as so determined by such officials unless there is no feasible and prudent alternative to the use of such land, and the project includes all possible planning to minimize harm to the resource. An Individual Section 4(f) Evaluation has been prepared documenting potential impacts to resources protected under Section 4(f) of the Department of Transportation Act of 1966 for each reasonable alternative identified in Section 2.2. This evaluation will be coordinated with COA, the Trail Foundation, the THC, and the U.S. Department of the Interior (USDOI) (officials with jurisdiction) for a final determination of adverse impacts to, and mitigation for, Section 4(f) properties (Appendix M). De minimis determinations, programmatic evaluations, and exceptions are authorized under FHWA’s rules implementing Section 4(f).
The project would impact six public parks and four to six historic sites. Impacts to Section 4(f) parks, recreation areas, and historic properties are similar under both design alternatives. Both build alternatives would implement temporary construction staging areas at all six parks and require ROW from three of the six parks. Build Alternative 2 would displace six historic resources—Dura Tune Service Station, EBB Main Office, the Haster House, two residences in the Delwood II Historic District, and the Roberts House—and would implement a temporary construction staging area within the historic Town Lake Park System, which would not be an adverse effect. Modified Build Alternative 3 would displace four historic resources, since the two residences in the Delwood II Historic District would not be impacted. For the No Build Alternative, there would be no impacts to Section 4(f) resources. Following the public hearing and comment period, final mitigation measures for Section 4(f) resources will be reported in the Final Environmental Impact Statement (FEIS) and individual Section 4(f) evaluation. Section 3.9 details the identified Section 4(f) properties and the analysis of potential project impacts.

Section 6(f) Resources

Section 6(f) of the Land and Water Conservation Fund (LWCF) Act prohibits the conversion of property acquired or developed with grants under the LWCF Act, as allocated by the Texas Parks and Wildlife Department (TPWD), to a non-recreational site without the approval of the USDOI National Park Service (NPS).

Two parks in the project area are Section 6(f)-protected resources and would be similarly impacted by both build alternatives: Edward Rendon Park and Waller Beach Park. At Edward Rendon Park, the project would require approximately 0.70 acre for construction access for a duration less than six months. TxDOT is requesting TPWD and NPS approval that the temporary use of Edward Rendon Park for less than six months would qualify as a temporary non-conforming use that does not rise to the level of a conversion under Section 4(f).

At Waller Beach, TxDOT is proposing a conversion of approximately 1.20 acres of land needed for construction staging and water access for the duration of construction, or approximately six years. The approximately six-year use of Waller Beach would qualify as a conversion for which TxDOT and COA would have to obtain a replacement property to be approved by TPWD and NPS. Section 6(f) directs USDOI to ensure that replacement lands of equal value, location, and usefulness are provided as conditions to such conversion. Coordination is ongoing with TPWD for Edward Rendon Park and Waller Beach Park. Section 3.9 discusses Section 6(f) properties and the analysis of potential project impacts.

Chapter 26 Resources

In addition to Section 4(f), the use of public land designated and used as a park, recreation area, scientific area, wildlife refuge, or historic site, requires compliance with Chapter 26 of the Texas Parks and Wildlife Code. As with Section 4(f), Chapter 26 requires a finding that there is no feasible and prudent alternative to the use or taking of the protected land, and the project includes all reasonable planning to minimize harm. The analysis done for potential impacts to protected lands complies with both Section 4(f) and Chapter 26 rules. Chapter 26 requires that a public hearing be held prior to the approval of the use of land from these publicly-owned park or historic site properties. Public input would be considered prior to any approval of the use of land. The six parks and recreational areas and one publicly-owned historic property protected by Section 4(f) and 6(f) within the proposed project are also subject to Chapter 26. These are described in Section 3.9. TxDOT will conduct a public
hearing for the DEIS, which will follow the requirements of Chapter 26 for the properties impacted by the Preferred Alternative.

**Least Overall Harm Analysis**

Build Alternative 2 and Modified Build Alternative 3 would use Section 4(f) properties and there is no feasible and prudent alternative that would avoid use of the Section 4(f) properties. FHWA's rules at 23 Code of Federal Regulations [CFR] §774.3(c) provide that if there is no feasible and prudent avoidance alternative, the agency may approve, from among the alternatives that use Section 4(f) property, only the alternative that causes the least overall harm in light of the statute's preservation purpose, which is determined by balancing different factors, including the ability to mitigate adverse impacts to the Section 4(f) property. The analysis in Section 3.9 and Appendix M compares least overall harm evaluation factors between Build Alternative 2 and Modified Build Alternative 3.

Because Modified Alternative 3 would use two fewer historic properties than Build Alternative 2, and because it is preferable due to lower overall project costs as well as minimized impacts to resources not protected by Section 4(f) after reasonable mitigation, Modified Build Alternative 3 is identified as the least overall harm alternative.

**S 4.1.9 Noise**

A traffic noise analysis was conducted in accordance with TxDOT's (FHWA-approved) Procedures for Analysis and Abatement of Roadway Traffic Noise and Construction Noise (TxDOT, 2019d). The proposed project would result in traffic noise impacts for both build alternatives. Some receivers would experience reduced predicted noise levels due to proposed changes in horizontal and/or vertical alignment of the alternatives. An evaluation of the potential for feasible and reasonable traffic noise barriers, and the most commonly used abatement measure, was conducted. Section 3.14 contains a summary of the noise analysis.

Existing and predicted traffic noise levels were modeled at receiver locations that represent the land use activity areas adjacent to the proposed project that might be impacted by traffic noise and that could potentially benefit from feasible and reasonable noise abatement. Build Alternative 2 would impact 53 out of the 95 representative receivers analyzed and Modified Build Alternative 3 would impact 51 out of the 90 representative receivers analyzed. A barrier analysis determined that eight noise barriers would benefit 168 noise receivers for Build Alternative 2, and nine noise barriers would benefit 204 noise receivers for Modified Build Alternative 3. TxDOT would conduct meetings with the property owners and residents associated with a proposed noise barrier to determine whether they want traffic noise barriers. The final decision to construct the proposed traffic noise barrier would not be made until completion of the preliminary designs, utility evaluation, and polling of property owners and residents associated with a proposed noise barrier.

**S 4.1.10 Water Resources**

Both reasonable alternatives would involve regulated activity in jurisdictional and navigable waters and therefore would require authorization under Section 404 of the Clean Water Act (CWA) and a permit from U.S. Army Corps
of Engineers (USACE) under Section 10 of the Rivers and Harbors Act (RHA). A pre-construction notification (PCN) for Nationwide Permit (NWP) 58 for Utility Line Activities for Water and Other Substances would be submitted to the USACE for the proposed drainage outfall structures at the Colorado River. Compensatory mitigation for the loss of streambed in the Colorado River is anticipated to be required for the proposed build alternatives. Compensatory mitigation would be completed in accordance with the Section 404 permitting process with the USACE.

Drainage outfall structures would be constructed at Harpers Branch and at the north and south ends of the I-35 bridge structure at Lady Bird Lake. These structures would meet the terms and conditions of an NWP 58 for Utility Line Activities for Water and Other Substances. The permittee must submit a PCN to the USACE prior to commencing the activity if (1) a Section 10 permit is required or (2) the discharge would result in the loss of greater than 1/10-acre of WOTUS. The loss of WOTUS at the drainage outfall structures would not exceed 1/10-acre and no Section 10 permit is required. Therefore, it is unlikely that notification of the USACE would be required as long as the NWP 58 General Conditions and Regional Conditions for the State of Texas are met, including restoration of any temporary impacts below the ordinary high water mark (OHWM).

A Regional General Permit (RGP) 8 for Minor Structures would be submitted to the USACE for the construction of a proposed boat dock and ramp at Lady Bird Lake. A permanent boat dock and ramp would be considered a separate action from the proposed I-35 bridge structure by the USACE, and therefore, would be permitted using the RGP 8.

Activities required for crossings of WOTUS associated with the construction, expansion, modification, or improvement of linear transportation projects (e.g., roads, highways, railways, trails, airport runways, and taxiways) in WOTUS may be permitted under NWP 14 for Linear Transportation Projects. It is anticipated that the Preferred Alternative would meet the terms and conditions of NWP 14 for crossings at Tannehill Branch and Lady Bird Lake. The permittee must submit a PCN to the district engineer prior to commencing the activity if: the loss of WOTUS exceeds 1/10-acre; or there is a discharge in a special aquatic site, including wetlands. The loss of WOTUS at each crossing would not exceed 1/10-acre, and no fill would occur in a special aquatic site, including wetlands. Therefore, it is unlikely that notification of the USACE would be required if the NWP 14 General Conditions and Regional Conditions for the State of Texas are met, including restoration of any temporary impacts below the OHWM. Section 3.10 discusses water resources in the project area.

S 4.1.11 Floodplains

This project is federally-funded and therefore is subject to EO 11988, Floodplain Management. Portions of the project would occur within the floodplain; however, the project would not involve a significant encroachment in the floodplain. COA Watershed Protection Department is the Community Representative to the Federal Emergency Management Agency (FEMA) for the National Flood Insurance Program (NFIP). Both COA and FEMA, through its NFIP, have review and approval authority for floodplain mapping within COA’s jurisdiction. The Watershed Protection Department must review and concur with the engineering analysis prior to acceptance for review by FEMA. COA requires a Conditional Letter of Map Revision if changes to the post-development floodplain are required. The proposed project would propose changes to the post-development floodplain with changes to
the vehicular and pedestrian bridge improvements located within the Lady Bird Lake floodplain. **Section 3.10** has additional information on existing conditions and potential impacts to floodplains.

**S 4.1.12 Wetlands and Other Waters Of The United States**

The project area is an urbanized area within the Colorado River watershed. The project area gradually slopes towards Lady Bird Lake, an impoundment of the Colorado River that creates a long narrow lake. The watershed in the project area has been modified from its natural condition, with most of the drainage features and streams being re-routed into ditches and stormwater drainage systems.

The Colorado River is a traditional navigable water (TNW). Lady Bird Lake is an impoundment of the Colorado River and is therefore also a TNW. Tannehill Branch is a relatively permanent water (RPW) that has a continuous surface connection to the Colorado River. Harpers Branch is a short segment of stream that has a continuous surface connection to Lady Bird Lake. Waller Creek is an RPW that has a continuous surface connection to Lady Bird Lake. Boggy Creek is an RPW that has a continuous surface connection to the Colorado River. USACE will likely assert jurisdiction over these features.

Project construction activities, involving discharges of dredged or fill material into navigable waters, would require a permit from USACE under Section 10 of the RHA. The areal extent of aquatic resources within the proposed project area was estimated based on interpretation of remotely sensed data and limited field observations. The majority of the water bodies are streams or drainages, as opposed to wetlands. The design of the proposed project is currently in the schematic phase; therefore, the details of structures and facilities that may affect the identified water bodies in the project area are not certain. USACE makes the final determination on the location of waterbody and wetland boundaries and their jurisdictional status. During preliminary and final design, impacts to jurisdictional WOTUS, including wetlands, would be avoided or minimized to the extent practicable. Coordination with USACE is being conducted for Section 404 of the CWA and Section 10 of the RHA permit authorization for unavoidable impacts to jurisdictional waters. **Section 3.10** discusses existing conditions and potential impacts to surface water resources, including wetlands and other WOTUS.

**S 4.1.13 Vegetation and Wildlife**

The proposed project is located in a highly urbanized area of COA. Review of TPWD’s Ecological Mapping Systems of Texas (EMST) revealed that over 99 percent of the proposed project area is mapped as urban. Limited field investigations determined that the majority of the project areas are accurately mapped as urban, with only a small portion of riparian areas occurring along the Hike and Bike Trail at Lady Bird Lake and the proposed outfall structure location downstream of Longhorn Dam. Construction of either of the proposed project build alternatives would impact herbaceous, shrub, tree, and other plantings throughout the project area through site preparation activities. Clearing and grading would remove the existing vegetative cover and replace it with mostly impervious cover associated with travel lanes, entrance and exit ramps, and frontage roads.

A small portion of wooded areas associated with the parks would likely require some tree removal to allow for construction equipment and utility work within a drainage easement along the I-35 bridge over Lady Bird Lake. **Section 3.11** discusses existing conditions and potential impacts to vegetation and wildlife.
S 4.1.14 Threatened, Endangered, and Rare Species

There is potential habitat for one proposed threatened, three proposed endangered, and one candidate species within the project area: the Texas fawnsfoot (*Truncilla macrodon*), false spike (*Fusconaia mitchelli*), Texas fatmucket (*Lampsilis bracteata*), Texas pimpleback (*Cyclonaias petrina*), and monarch butterfly (*Danaus plexippus*), respectively. A due diligence presence/absence survey was performed in August 2022 for the freshwater mussels proposed for listing. No live native fresh water mussels of any kind were found during these surveys. Since the false spike, Texas fatmucket, Texas pimpleback and Texas fawnsfoot do not occur within the project area, no further action regarding these species is required. *Section 3.11* discusses existing conditions and potential impacts to threatened and endangered species.

S 4.1.15 Construction Phasing Impacts

Construction of the proposed project would be anticipated to cause temporary impacts to traffic and transportation facilities, noise and vibration, air quality, biological resources, hazardous materials, water resources and lighting. Construction would be phased and would last for approximately six years. *Section 3.17* discusses the proposed phasing of the construction and potential impacts during construction activities.

S 4.1.16 Hazardous Materials

An evaluation of hazardous materials issues for the proposed project was based on a review of environmental regulatory records and observations made during field investigations. A total of 1,207 federally- and state-listed sites were identified with potential hazardous materials issues for the proposed project. For any of the proposed project build alternatives, impacts associated with hazardous materials would most likely occur during construction and would be related to activities on or near existing hazardous materials sites in the vicinity of the proposed project. Based on an assessment conducted by the project study team, many of the sites were assigned a moderate or high estimated level of risk related to the likelihood for encountering hazardous materials issues during construction. Construction of the proposed project could include the demolition of building structures, some of which may contain asbestos materials. See *Section 3.13* in the DEIS for discussions of existing conditions and potential of hazardous materials.

S 4.1.17 Air Quality

The proposed project is located in an area designated by the U.S. Environmental Protection Agency (EPA) in attainment or unclassifiable for all national ambient air quality standards (NAAQS); therefore, transportation conformity rules do not apply.

A carbon monoxide traffic air quality analysis (CO TAQA) analysis was completed to assess whether the proposed project would adversely affect local air quality by contributing to CO levels that exceed the 1-hour or 8-hour CO NAAQS. The analysis results for each alternative indicate that CO concentrations would not be expected to exceed the national standard, even assuming worst-case conditions. CO levels would likely be lower than present levels in the design year due to updated technology and increased use of electric vehicles. The CO TAQA will be updated in the FEIS.
Although there is incomplete or unavailable information to evaluate project-specific Mobile Source Air Toxics (MSAT) health impacts, regardless of the build alternative chosen, emissions would likely be lower than present levels in the design year as a result of EPA regulations for vehicle engines and fuels. Based on regulations now in effect, overall MSAT emissions will decline significantly over the next several decades. FHWA estimates that even if VMT increases by 45 percent from 2010 to 2050 as forecast, a combined reduction of 91 percent in the total annual emissions for the priority MSAT is projected for the same time period. A quantitative MSAT analysis will be conducted for the Preferred Alternative and will be included in the FEIS. Section 3.12 contains the air quality analysis.

S 4.1.18 Greenhouse Gases and Climate Change

TxDOT’s Statewide On-Road Greenhouse Gas Emissions Analysis and Climate Change Assessment Technical Report (TxDOT, 2018a) is the State’s guide for on-road and fuel cycle GHG emissions and strategies for reducing emissions; climate change projections; and strategies for addressing the changing climate. For the proposed project, TxDOT also conducted a project-level GHG Analysis and Climate Change Assessment Technical Report (Appendix V). This technical report includes 1) an overview of GHG and climate change, 2) a project-level GHG analysis, 3) a project-level assessment of climate change, 4) a project-level resiliency risk assessment, 5) incomplete or unavailable information for specific climate change impacts, and 6) results and conclusions. A summary of key project-level or TxDOT program-level strategies for addressing the impacts of a changing climate is also disclosed. Section 3.24 discusses GHG and climate change.

S 4.1.19 Induced Growth

An induced growth analysis was developed using TxDOT’s January 2019 Indirect Impacts Analysis Guidance. Vacant land and developable areas were identified to determine where induced growth could occur within the 38,162-acre Area of Influence (AOI) and where development would be limited because of little to no vacant or developable land remaining in this heavily urbanized corridor. Approximately 5.0 percent of the AOI is characterized as developable and redevelopable. According to COA’s database of emerging projects and planned developments, the developable and redevelopable areas of the AOI are experiencing rapid change, largely due to increased demand driven by the existing population and employment growth trends in Austin and Travis County.

To better understand if the proposed project would induce growth or lead to changes in the land use, TxDOT assembled a Delphi panel comprising professionals in urban planning, real estate, urban development, academia, the private sector, and non-governmental organizations. The Delphi panel evaluated if and how the proposed project would influence land use changes within the AOI. According to the panel, development and redevelopment within the AOI are directly influenced by the existing population and employment growth trends; future development within the AOI would be primarily driven by projected rapid population and employment growth trends and not the proposed I-35 Capital Express Central improvements. The Delphi panel noted that existing land-use and zoning regulations would have the greatest influence on both development and

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1 The Delphi method is a systematic and qualitative method of forecasting by collecting opinions from a group of experts through several rounds of questions.
redevelopment. The panel also acknowledged that proposed improvements would improve connectivity and
mobility between east and west Austin for all modes of travel, which could contribute to the desirability of areas
available for redevelopment; however, these areas are already considered highly attractive for redevelopment in
the absence of the proposed improvements. Additionally, the panel stated that if the deck plazas are constructed
by others, they would improve connectivity and access to parcels and further support COA’s existing development
and redevelopment trends.

Although the project would enhance connectivity, access, and mobility across I-35, the improvements would not
introduce changes substantial enough to alter long-established growth trends within the AOI, particularly in
consideration of other factors—such as economic drivers, zoning, and housing market volatility—that more
strongly influence development in Austin. Growth trends established over the last several decades indicate these
areas will redevelop regardless of the proposed project. The project would not materially influence land-use
changes or affect the trajectory of redevelopment within the vacant (5.0 percent) areas of the AOI. Improvements
associated with the proposed project would not likely create new opportunities for growth within the AOI. COA is
already experiencing rapid population growth, largely due to migration, population growth, and increased
employment opportunities, the proposed project is not the key driving factor for development or redevelopment
within the AOI. As such, the proposed I-35 Capital Express Central Project would not likely induce development
or increase the rate or intensity of development in the AOI. For both build alternatives, no effects related to
induced growth are expected to occur. Section 3.15 discusses the analysis of induced growth impacts, and a
summary of the Delphi panel results. In summary, the proposed project would not likely result in induced growth
within the AOI based on (1) historic and projected population, employment, and development trends, (2) future
development predictions in local planning documents, (3) and feedback received from the Delphi panel.

S 4.1.20 Cumulative Effects

The Council on Environmental Quality (CEQ) defines cumulative effects as effects “on the environment which
result from the incremental effects of the action when added to the effects of other past, present, and reasonably
foreseeable actions regardless of what agency (federal or non-federal) or person undertakes such other actions.
Cumulative effects can result from individually minor, but collectively significant, actions taking place over a
period of time” (40 CFR §1508.7 1508.1(g)(3)). Section 3.16 discusses the project’s potential cumulative
effects.

Based on the results of the cumulative effects risk assessment, supported by the information included in Section
3.16 and associated technical reports, it was determined that the resources for which the proposed project may
potentially have cumulative effects include: threatened and endangered species, historic and cultural resources,
hazardous materials, and Section 4(f) resources. These resources were carried forward to assess cumulative
effects. Section 3.9 contains a summary of impacts to protected lands, including Section 4(f) resources. The
cumulative effects analysis for community resources (specifically neighborhoods/public facilities and EJ
populations) reviewed the health of these resources and relevant trends and identified a Resource Study Area
(RSA) boundary and appropriate temporal boundary for each resource in the analysis.

Considering past, present, and reasonably foreseeable future actions, the construction of the proposed project
was considered in conjunction with these other actions to consider the incremental cumulative effects. The
The proposed project follows urban development trends from large infrastructure projects that result in both beneficial and adverse impacts to community resources. Mitigation of direct adverse impacts from the proposed project substantially reduces the project’s incremental contribution to adverse cumulative effects to community resources. Urban development trends of population growth, development projects, and gentrification are not likely to be changed substantially by this project, as these changes have been occurring and would continue regardless of construction of the proposed improvements. However, the project would change the community due to the large number of displacements and the outward migration of residents when compared to other actions. The incremental impacts of the proposed project, when added to other actions, and after mitigation, would not play a substantial role in cumulative effects to overall traffic noise, air quality, historic resources, or ecological resources. TxDOT is coordinating with agencies for final determination of adverse impacts and potential mitigation for Section 4(f) protected historic resources and park and recreational properties. While both build alternatives would have a disproportionately high and adverse impact to EJ populations, Modified Build Alternative 3 would have significantly fewer overall impacts to the community compared to Build Alternative 2. If any potential mitigation measures for significant cumulative effects are identified during further analysis of the Preferred Alternative, they would be discussed in the FEIS.

**S 5 Issues Raised by Agencies and the Public**

The public and agencies have also made suggestions throughout the scoping process including that TxDOT consider past, present and potential future equity impacts through an equity impact assessment. In response, TxDOT is conducting additional studies on equity that go above and beyond the normal scope of a traditional Community Impacts Assessment (CIA). The additional studies focus on transportation equity and access and are included in Section 3.6.12 and Appendix K of the DEIS. Further discussion on additional public and agency comments and concerns is included in Chapter 4.

**S 6 Further Surveys and Permits Required**

**S 6.1 Biological Resources**

Should additional habitat be identified during subsequent field surveys of biological resources for the Preferred Alternative prior to construction, this discussion would be updated and revised as needed. Section 3.11 discusses vegetation, habitat, and species.

**S 6.2 Waters Resources**

The Preferred Alternative would involve regulated activity in jurisdictional waters and therefore would require authorization under Section 404 of the CWA. A PCN for NWP 58 for Utility Line Activities for Water and Other Substances would be submitted to the USACE for the proposed drainage outfall structure at the Colorado River. Compensatory mitigation for the loss of streambed in the Colorado River is anticipated to be required for the Preferred Alternative. Compensatory mitigation would be completed in accordance with the Section 404 permitting process with the USACE.
An RGP 8 for Minor Structures would be submitted to the USACE for the construction of a proposed boat dock and ramp at Lady Bird Lake. A permanent boat dock and ramp would be considered a separate action from the proposed I-35 bridge structure by the USACE and therefore would be permitted using the same RGP 8.

It is anticipated that the Preferred Alternative would meet the terms and conditions of NWP 14 for crossings at Tannehill Branch and Lady Bird Lake. The permittee must submit a PCN to the district engineer prior to commencing the activity if (1) the loss of WOTUS exceeds 0.1 acre; or (2) there is a discharge in a special aquatic site, including wetlands; or (3) a PCN is otherwise triggered under the NWP General Conditions. Section 3.10 discusses water resources and proposed impacts.

S 6.3 Protected Lands

TxDOT is coordinating with COA Parks and Recreation Department (PARD) and TPWD (officials with jurisdiction) for a final determination of adverse impacts to and mitigation for Section 4(f)-protected parks and recreational properties. TxDOT is coordinating with the THC and consulting parties for a final determination of adverse impacts and potential mitigation for Section 4(f)-protected historic properties. The development of mitigation requirements is ongoing and will be finalized after the agency coordination and public outreach have been conducted. Following the public hearing and comment period, final mitigation measures for Section 4(f) resources will be reported in the FEIS and individual Section 4(f) evaluation. Section 3.9 discusses protected lands.

TxDOT is coordinating with TPWD and NPS for the two Section 6(f)-protected resources that the Preferred Alternative would impact. TxDOT is requesting TPWD and NPS approval that the less than six months temporary use of Edward Rendon Park would qualify as a temporary non-conforming use that does not rise to the level of a conversion under Section 4(f). The approximately six-year use of Waller Beach would qualify as a conversion for which TxDOT and COA would have to obtain a replacement property to be approved by TPWD and NPS. Development of mitigation requirements is ongoing, once determined and agreed upon during agency coordination and public comments, the mitigation requirements Section 3.9 discusses protected lands.

TxDOT will consider any public comment on this DEIS prior to preparing a combined FEIS and Record of Decision (ROD). This DEIS indicates a Preferred Alternative, but TxDOT's selection of an alternative will be made in the ROD.
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<td>CO₂</td>
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<td>CO₂E</td>
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<td>CSC</td>
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<tr>
<td>Acronym/Abbreviation</td>
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<tr>
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<td>Average or equivalent sound level</td>
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<td>State Loop 1, referred to as MoPac</td>
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<td>mph</td>
<td>Miles per Hour</td>
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<td>Nitrous Oxide</td>
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<td>National Association for the Advancement of Colored People</td>
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<td>Ordinary High Water Mark</td>
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<td>PA-TU</td>
<td>Programmatic Agreement for Transportation Undertakings</td>
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<td>Planning and Environmental Linkages Study</td>
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<td>People Organizing to Demand Environmental and Economic Justice</td>
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<td>parts per million</td>
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<td>Rivers and Harbors Act</td>
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<td>Robert Mueller Municipal Airport/RMMA neighborhood</td>
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<td>Record of Decision</td>
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<td>Right-of-Way</td>
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<td>Relatively Permanent Water</td>
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<td>Regional Transportation Plan</td>
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<td>Southbound</td>
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<td>SF&lt;sub&gt;6&lt;/sub&gt;</td>
<td>Sulfur Hexafluoride</td>
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<td>SGCN</td>
<td>Species of Greatest Conservation Need</td>
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<td>Segment of Independent Utility</td>
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<td>Single Point Urban Interchange</td>
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<td>Shared Use Path</td>
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<td>Stormwater Pollution Prevention Plan</td>
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<td>Texas Administrative Code</td>
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<td>TBM</td>
<td>Tunnel Boring Machine</td>
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<td>Acronym/Abbreviation</td>
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<tr>
<td>----------------------</td>
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<td>Texas Historical Commission</td>
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<td>TNM</td>
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<td>Traditional Navigable Water</td>
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<td>Transit-Oriented Development</td>
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<td>The Other Ones Foundation</td>
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<td>Transportation System Management</td>
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<td>Texas Department of Transportation Environmental Affairs Division</td>
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<td>United States Department of the Interior</td>
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<td>United States Department of Transportation</td>
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<td>United States Fish and Wildlife Service</td>
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<td>UT</td>
<td>University of Texas at Austin</td>
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<td>UTP</td>
<td>Unified Transportation Plan</td>
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<td>VCP</td>
<td>Voluntary Cleanup Program</td>
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<td>VMT</td>
<td>Vehicle Miles Traveled</td>
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<td>Volunteer Opportunities in Community Engagement</td>
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<td>Vehicles per Day</td>
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<td>WB</td>
<td>Westbound</td>
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<td>WOTUS</td>
<td>Waters of the United States</td>
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1.0 Purpose of and Need for Action

Interstate Highway 35 (I-35) has been the north-south transportation backbone of personal, business, and freight transportation in Texas since 1962. It connects Central Texas to the rest of the United States, Mexico, and Canada, serving as a major thoroughfare for inter- and intrastate traffic. I-35 is critical to local, state, and national security, economic vitality, and overall mobility. Many Texans are familiar with I-35 as a local route for their work commutes and other personal travel.

TxDOT proposes to construct improvements to I-35 from United States Highway 290 (US 290) East to US 290 West/SH 71, in Austin, Travis County, Texas (referred to as the I-35 Capital Express Central Project). The proposed project measures approximately 8 miles. The purpose and need for the I-35 Capital Express Central Project along with the Coordination Plan and Public Involvement Plan were presented to cooperating and participating agencies and the public at two scoping meetings. The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by TxDOT pursuant to 23 U.S.C. §327 and a Memorandum of Understanding (MOU) dated December 9, 2019, and executed by the Federal Highway Administration (FHWA) and TxDOT.

As lead agency, TxDOT prepared the Coordination Plan for the project, which established a schedule and process for coordinating public and agency participation and comment during the environmental review process. Cooperating agencies are federal agencies that have either jurisdiction by law regarding aspect(s) of the proposed project or special expertise pertaining to the proposed project. Cooperating agencies participate in the scoping process, and on request of the lead agency, develop information and prepare environmental analyses including portions of the Environmental Impact Statement (EIS), make staff available to enhance the lead agency’s interdisciplinary capability, comment on Draft Environmental Impact Statement (DEIS), and serve other roles described in rules promulgated by the Council on Environmental Quality (CEQ) at 40 Code of Federal Regulations [CFR] §1501.8. TxDOT invited the following agencies and Native American tribes to be cooperating agencies:

- U.S. Army Corps of Engineers (USACE)
- U.S. Department of Agriculture, Natural Resources Conservation Service
- U.S. Department of Housing and Urban Development (HUD)
- U.S. Environmental Protection Agency (EPA)
- U.S. Fish and Wildlife Service (USFWS)
- National Park Service
- Caddo Nation of Oklahoma
- Mescalero Apache Tribe
- Apache Tribe of Oklahoma
- Tonkawa Tribe of Indians of Oklahoma
1. Purpose of and Need for Action

Participating agencies are federal, state, tribal, regional, and local government agencies that may have an interest in the project. The roles and responsibilities of participating agencies include but are not limited to:

- Participating in the scoping process and identifying and providing early input on issues of concern regarding the project’s potential impacts to human or natural environment. The Agency Coordination Plan is available in Appendix I.

1.0 Participating Agencies

- Kiowa Indian Tribe of Oklahoma
- Comanche Nation of Oklahoma
- Alabama-Coushatta Tribe of Texas (federally-recognized tribe)
- Seminole Nation of Oklahoma
- Wichita and Affiliated Tribes
- Federal Transit Administration (FTA)
- Texas Commission on Environmental Quality (TCEQ)
- Texas Department of Housing and Community Affairs (TDHCA)
- State Historic Preservation Officer (SHPO)/Texas Historical Commission (THC)
- Texas Parks and Wildlife Department (TPWD)
- Lower Colorado River Authority (LCRA)
- Capital Area Metropolitan Planning Organization (CAMPO)
- Central Texas Regional Mobility Authority (CTRMA)
- Travis County
- Williamson County
- Hays County
- City of Austin (COA)
- Capital Metropolitan Transportation Authority (CapMetro)
- University of Texas at Austin (UT)

The following agencies formally declined the invitation to be a cooperating or participating agency:

- HUD
- USFWS
- LCRA

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2 Federal Transit Administration was invited to be a cooperating agency for the project but elected to be a participating agency.
Agency/Public Scoping Meeting #1 was held in November 2020. This meeting was an opportunity for cooperating and participating agencies and the public to review and provide feedback on the draft Coordination Plan and schedule, the draft purpose and need, and the draft range of alternatives for the project (see all scoping documents in Appendix I). Comments received included changing the purpose and need to include reducing vehicle miles traveled (VMT), improving safety, prioritizing community needs, including crash data, and including bicycle and pedestrian data; ensuring deck plazas or caps are included in both reasonable alternatives; using alternate traffic demand model data; adding multimodal and people-carrying capacity; assessing climate change, equity, health issues, homelessness and community impacts; analyzing differences among alternatives in amount of right-of-way (ROW) required, construction impacts, ramping scenarios, bicycle and pedestrian facilities, direct transit connections, grade separations, and context-sensitive design; rerouting trucks or all through traffic to State Highway (SH) 130; and burying or tunneling I-35.

Based on comments received from cooperating and participating agencies and the public in Scoping Meeting #1, the need for the project was changed to include an expanded emphasis on crash and safety data by adding that safety and operational deficiencies of I-35 within the project limits can impact crash rates and including supporting data in Section 1.2 of this DEIS. The purpose of the project was changed to include addressing demand by prioritizing the movement of persons, goods, and services through and across the corridor, and to include all modes of transportation to create a more dependable and consistent route.

In March 2021, Agency/Public Scoping Meeting #2 was held to present the revised purpose and need for the project, range of alternatives, and draft methodologies and level of detail for analyzing alternatives. Comments received included: analyzing additional alternatives such as the Reconnect Austin, Rethink35 and DAA (Downtown Austin Alliance) Urban Land Institute (ULI) proposals; support for the No Build; support for Build Alternatives 1, 2, and 3; measuring impact criteria specifically related to pedestrian and bicycle safety at intersections and crossings; and adding criteria to measure transit station/stop access to the future Project Connect system and measure added east-west crossings. Based on feedback from Scoping Meeting #2, the following measurements were added to the alternatives evaluation criteria: air quality impacts; person-carrying capacity along mainlanes; annual cost of travel; and accommodation of CapMetro’s service plan at east-west crossings.

1.1 Need

The proposed project is needed because I-35 between US 290 East and US 290 West/SH 71 does not adequately accommodate current and future travel demand and does not meet current federal and state design standards, which has resulted in safety and operational deficiencies and can impact crash rates and peak period travel times for all users, including emergency response vehicles and transit.

1.2 Supporting Facts and Data

1.2.1 Design Standards

Because I-35 within the project limits was designed under standards that are now outdated and has been retrofitted over time, it does not meet all current roadway design standards based on TxDOT’s Roadway Design
Manual (TxDOT, 2020b), TxDOT’s Hydraulic Design Manual (TxDOT, 2019c), American Association of State Highway and Transportation Officials’ (AASHTO) A Policy on Geometric Design of Highways and Streets (AASHTO 2018), and the Texas Manual of Uniform Traffic Control Devices (TxDOT 2011). There is a need to correct design deficiencies along I-35 within the project limits, including narrow lane widths, nonexistent or narrow shoulders, low vertical clearances, substandard horizontal and vertical geometry, and outdated drainage systems.

Existing ingress and egress along I-35 is hindered by closely spaced ramps, narrow lane widths, and narrow or nonexistent shoulders. When collisions occur at locations with narrow or non-existent shoulders, travelers may be delayed without the opportunity to bypass the collision, resulting in reduced traffic flow. There is a need to add auxiliary lanes, widen shoulders, and revise ramp geometry and spacing according to current design standards to improve traffic operations along the corridor.

Multiple bridges within the project limits do not meet the current standard height requirements: the mainlane underpasses through the upper deck area, between Airport Boulevard and Martin Luther King Jr. (MLK Jr.) Boulevard, have vertical clearances that vary from 13.25 to 15.25 feet; the underpasses through the downtown area have vertical clearances of less than 15 feet; the southbound (SB) mainlane underpass beneath Cesar Chavez Street has a vertical clearance of 14 feet, and the bridge has evidence of vehicle strikes. There is a need to increase the minimum vertical clearance to 16.5 feet for underpasses to improve overall safety and operations for this heavily traveled area.

Existing substandard horizontal and vertical geometry along the project limits does not meet TxDOT-recommended design speeds. Additionally, there is a need to upgrade the storm drainage system and evaluate the existing systems with respect to new rainfall data contained in the National Oceanic and Atmospheric Administration Atlas 14 (Perica et al. 2018), which will reduce areas of flooding and improve overall driver safety.

1.2.2 Crash Data/Safety

To analyze safety within the project limits, crash data from years 2017 through 2021 were obtained from TxDOT Design Division. A total of 5,190 crashes were reported during the five-year period, with 57 percent of the crashes occurring on the mainlanes, 38 percent on the frontage roads, and the remaining 5 percent on the ramps and connectors of the system. Figure 1.2-1 shows the crash rates within the project limits compared to the statewide average for urban interstate facilities in Texas. Over this five-year period, the project limits had an average crash rate of 169.07 crashes per 100 million VMT, and, for every year, crash rates were higher than the statewide average except in 2021. There is a need to prevent potential crashes along the corridor involving pedestrians and bicyclists (Appendix H contains historical crash data).
Sources TxDOT Statewide Traffic Crash Rates 2017, 2018, 2019, 2020, and 2021

Table 1.2-1 shows the total number of crashes along with crash severity data within the project limits using the KABCO injury scale (FHWA 2012), which categorizes injuries by level of severity. Years 2020 and 2021 had significantly fewer crashes compared to the previous three (3) years as the project limits, like the rest of the state, had significantly less traffic volume due to the COVID-19 pandemic. Of the 5,190 total crashes, there were 37 (0.7 percent) fatal crashes (K), 142 (2.7 percent) incapacitating injury crashes (A), 1,058 (20.4 percent) non-incapacitating injury crashes (B), 1,162 (22.4 percent) possible injury crashes (C), and 2,703 (52.1 percent) property damage only crashes (O). An additional 88 (1.7 percent) of the crashes were reported with no severity.

Table 1.2-1. Capital Express Central Crash Severity Summary

<table>
<thead>
<tr>
<th>Year</th>
<th>Fatal Crashes (K*)</th>
<th>Severe Incapacitating Crashes (A*)</th>
<th>Moderate Non-Incapacitating Crashes (B*)</th>
<th>Minor Possible Injury Crashes (C*)</th>
<th>Property Damage Only Crashes (O*)</th>
<th>Unknown Severity Crashes</th>
<th>Total Crashes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>3</td>
<td>29</td>
<td>217</td>
<td>245</td>
<td>657</td>
<td>18</td>
<td>1,169</td>
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<tr>
<td>2018</td>
<td>9</td>
<td>36</td>
<td>208</td>
<td>266</td>
<td>618</td>
<td>11</td>
<td>1,148</td>
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<td>2019</td>
<td>10</td>
<td>23</td>
<td>250</td>
<td>276</td>
<td>561</td>
<td>14</td>
<td>1,134</td>
</tr>
<tr>
<td>2020</td>
<td>2</td>
<td>24</td>
<td>195</td>
<td>156</td>
<td>415</td>
<td>17</td>
<td>809</td>
</tr>
<tr>
<td>2021</td>
<td>13</td>
<td>30</td>
<td>188</td>
<td>219</td>
<td>452</td>
<td>28</td>
<td>930</td>
</tr>
</tbody>
</table>
Table 1.2-1. Capital Express Central Crash Severity Summary

<table>
<thead>
<tr>
<th>Year</th>
<th>Fatal Crashes (K*)</th>
<th>Severe Incapacitating Crashes (A*)</th>
<th>Moderate Non-Incapacitating Crashes (B*)</th>
<th>Minor Possible Injury Crashes (C*)</th>
<th>Property Damage Only Crashes (O*)</th>
<th>Unknown Severity Crashes</th>
<th>Total Crashes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avg/Yr</td>
<td>7</td>
<td>28</td>
<td>212</td>
<td>232</td>
<td>541</td>
<td>18</td>
<td>1,038</td>
</tr>
<tr>
<td>Totals</td>
<td>37</td>
<td>142</td>
<td>1,058</td>
<td>1,162</td>
<td>2,703</td>
<td>88</td>
<td>5,190</td>
</tr>
<tr>
<td>%</td>
<td>0.7%</td>
<td>2.7%</td>
<td>20.4%</td>
<td>22.4%</td>
<td>52.1%</td>
<td>1.7%</td>
<td></td>
</tr>
</tbody>
</table>

Source: TxDOT 2022, FHWA 2012

*KABCO Injury Scale = “K” – Fatal injuries including deaths that occur within 30 days following an injury in a motor vehicle crash.

“A” – Severe injuries including skull fractures, internal injuries, broken or distorted limbs, unconsciousness, severe lacerations, severe burns, and unable to leave the scene without assistance. “B” – Moderate injuries including viable injuries such as a “lump” on the head, abrasions, and minor lacerations. “C” – Minor injuries including hysteria, nausea, momentary unconsciousness, and complaint of pain without visible signs of injury. “O” – Property damage only.

Table 1.2-2 shows crash type, including bicycle and pedestrian accidents. The data indicate that of the 5,190 total recorded crashes within the project limits, there were:

- 1,674 (32.2 percent) rear-end crashes
- 1,291 (24.9 percent) same direction crashes other (not sideswipes or rear ends)
- 785 (15.1 percent) angle/other crashes
- 653 (12.6 percent) single-vehicle fixed-object/overturn/turning
- 599 (11.5 percent) sideswipe crashes
- 97 (1.9 percent) single vehicle pedestrian/bicycle crashes
- 91 (1.8 percent) opposite direction crashes

Of the 97 crashes involving a pedestrian or cyclist, 38 (39 percent) of them occurred between 8th Street and Cesar Chavez Street. Twenty-five of these 38 crashes within this section of the project limits occurred at intersections.
Table 1.2-2. Capital Express Central Crash Type Summary

<table>
<thead>
<tr>
<th>Single Vehicle (Fixed Object/Overtum/Turning)</th>
<th>Single Vehicle (Pedestrian/Bicycle)</th>
<th>2+ Same Direction (Sideswipe)</th>
<th>2+ Same Direction (Rear End)</th>
<th>2+ Same Direction (Other)</th>
<th>2+ Opposite Direction</th>
<th>2+ Angle/Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>124</td>
<td>12</td>
<td>133</td>
<td>374</td>
<td>341</td>
<td>17</td>
<td>168</td>
<td>1,169</td>
</tr>
<tr>
<td>2018</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>142</td>
<td>19</td>
<td>116</td>
<td>387</td>
<td>315</td>
<td>25</td>
<td>144</td>
<td>1,148</td>
</tr>
<tr>
<td>2019</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>113</td>
<td>36</td>
<td>127</td>
<td>413</td>
<td>269</td>
<td>23</td>
<td>153</td>
<td>1,134</td>
</tr>
<tr>
<td>2020</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>120</td>
<td>11</td>
<td>109</td>
<td>235</td>
<td>166</td>
<td>13</td>
<td>155</td>
<td>809</td>
</tr>
<tr>
<td>2021</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>154</td>
<td>19</td>
<td>114</td>
<td>265</td>
<td>200</td>
<td>13</td>
<td>165</td>
<td>930</td>
</tr>
<tr>
<td>Average per Year</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>131</td>
<td>19</td>
<td>120</td>
<td>335</td>
<td>258</td>
<td>18</td>
<td>157</td>
<td>1,038</td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>653</td>
<td>97</td>
<td>599</td>
<td>1,674</td>
<td>1,291</td>
<td>91</td>
<td>785</td>
<td>5,190</td>
</tr>
<tr>
<td>%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.6%</td>
<td>1.9%</td>
<td>11.5%</td>
<td>32.2%</td>
<td>24.9%</td>
<td>1.8%</td>
<td>15.1%</td>
<td></td>
</tr>
</tbody>
</table>

Source: TxDOT 2022a

Additionally, two fatal crashes in which the contributing factor was “pedestrian failed to yield right-of-way to vehicle” occurred on the 4th Street Lance Armstrong Bikeway—both between 4:00 a.m. and 6:00 a.m. Five injury crashes with the same contributing factor (three Injury B and two Injury C), occurred within 350 feet of the 7th Street interchange. All of these five crashes occurred during the morning and afternoon peak hours. Even though there are crosswalks at the intersections of the I-35 frontage roads and 6th, 7th, and 8th Streets, these crashes resulted because pedestrians crossed the frontage roads/side streets midblock. See Appendix H for crash data and traffic and safety analysis and Section 3.5 for details on Bicycle and Pedestrian Facilities.

1.2.3 Travel Demand

1.2.3.1 Traffic Congestion and Operational Deficiencies

I-35 within Travis County is currently ranked the #1 most congested roadway in Texas, as measured by Texas Transportation Institute (TTI), and is among the roadways with the highest annual congestion costs (wasted time...
1 and fuel), at more than $200M (TTI 2020). Due to existing north-south travel demand and the limited number of alternative parallel controlled-access routes through Austin, I-35 is presently subject to severe traffic congestion for substantial periods of time each day. As population and employment growth continue, current congestion levels along I-35 are anticipated to worsen. The annual average daily traffic (AADT) for the portion of I-35 between US 290 East and US 290 West/SH 71 was 207,215 vehicles per day (vpd) in 2019 (TxDOT 2019a). By 2045, traffic is expected to reach 303,700 vpd, an increase of approximately 47 percent over 2019, according to traffic projections based on TxDOT-approved 2030 and 2050 AADT forecasts.

Population increases have occurred over the last several decades within COA, Austin-Round Rock Metropolitan Statistical Area (Austin-Round Rock MSA), and Travis County, with all three areas more than doubling in population between 1980 and 2020 (Table 1.2-3). Moreover, 10-year growth rates for COA and Travis County were significantly higher than 10-year growth rates at the state level, except for COA’s 2000–2010 growth rate, which was slightly less than the state average. Population forecasts for the regions surrounding the study area (Table 1.2-4) predict continued substantial growth for COA and Travis County through 2045.

### Table 1.2-3. Population Growth 1980–2020

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>State of Texas</td>
<td>14,229,191</td>
<td>16,986,510</td>
<td>20,851,820</td>
<td>25,145,561</td>
<td>29,145,505</td>
</tr>
<tr>
<td>Austin-Round Rock MSA*</td>
<td>536,688</td>
<td>781,572</td>
<td>1,249,763</td>
<td>1,716,289</td>
<td>2,283,317</td>
</tr>
<tr>
<td>Travis County</td>
<td>419,573</td>
<td>576,407</td>
<td>812,280</td>
<td>1,024,266</td>
<td>1,290,188</td>
</tr>
<tr>
<td>City of Austin</td>
<td>345,890</td>
<td>465,622</td>
<td>656,562</td>
<td>790,390</td>
<td>961,855</td>
</tr>
</tbody>
</table>

Sources: Texas Demographic Center 2020; USCB 2000, 2010 and 2020 (Tables SF1, DP1, P1)

| *Austin – Round Rock MSA includes Bastrop, Caldwell, Hays, Travis and Williamson Counties. |

### Table 1.2-4. Population Forecasts

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>2020</th>
<th>Projected 2045</th>
<th>Projected Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>State of Texas</td>
<td>29,145,505</td>
<td>43,866,965</td>
<td>50.5%</td>
</tr>
<tr>
<td>Travis County</td>
<td>1,290,188</td>
<td>1,884,155</td>
<td>46.0%</td>
</tr>
<tr>
<td>City of Austin</td>
<td>961,855</td>
<td>1,367,879</td>
<td>42.2%</td>
</tr>
</tbody>
</table>

Sources: Texas Demographic Center 2020, USCB 2020 (Tables SF1, DP1)

Table 1.2-5 illustrates the forecast for employment in the CAMPO counties from 2015 to 2045. The Austin metropolitan area added 22,700 net new jobs, or 2.1 percent, in the 12 months ending in March 2019, according to releases of preliminary payroll jobs numbers by the Texas Workforce Commission and the U.S. Bureau of Labor Statistics (Kerr, 2019). Austin’s 2.1 percent growth makes it the 16th highest growth rate nationally among the 50 largest metro areas during the March 2018–2019 year. According to the CAMPO Baseline 2045 Demographic Forecast (CAMPO, 2020a), the CAMPO region anticipates an additional 1.3 million in population and over one million new jobs by 2045 (over the baseline year of 2015). Employment in the Austin-
Round Rock MSA increased nearly 31 percent between 2007 and 2017. The region’s most highly concentrated industries primarily include technology and administration (Texas Comptroller, 2018). All population and employment resources analyzed identified the continued growth of the Austin metropolitan area now and in the future.

Table 1.2-5. CAMPO Employment Forecast

<table>
<thead>
<tr>
<th>Region/Year</th>
<th>2015</th>
<th>2045</th>
<th>Projected Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Travis County</td>
<td>600,322</td>
<td>1,199,239</td>
<td>99.7%</td>
</tr>
<tr>
<td>CAMPO* Region</td>
<td>995,216</td>
<td>2,367,070</td>
<td>137.8%</td>
</tr>
</tbody>
</table>

Source: CAMPO 2020a

*The CAMPO Region includes Bastrop, Burnet, Caldwell, Hays, Travis and Williamson Counties.

There is a need to improve the project corridor based on the projected population growth, employment, and travel demand increases. In addition, the projected population increases in the region will further the need for improvements to the bicycle and pedestrian accommodations throughout the corridor.

1.2.3.2 Travel Time

I-35 is the only interstate highway connecting Mexico, the United States, and Canada through the central part of the United States and is one of two north-south interstate highways traversing Texas. According to the American Highway Users Alliance 2015 study “Unclogging America’s Arteries 2015: Prescriptions for Healthier Highways” (American Highway Users Alliance 2015), the portion of I-35 in downtown Austin ranks number 10 on the list of top bottleneck highways in the country. The study estimates that the “[a]nnual total delays from this bottleneck amount to 3 million hours at a lost value of time of about $73 million a year.”

Travel times were collected for the project limits for the year 2019 using INRIX data provided by TxDOT and projected for the years 2025 and 2045 based on traffic microsimulation models for the corridor. Table 1.2-6 shows the existing (2019) a.m. and p.m. peak hour travel times, and 2025 and 2045 forecasts along I-35, between US 290 East and US 290 West/SH 71. Peak hours are defined as 7:30 a.m. to 8:30 a.m., and 4:30 p.m. to 5:30 p.m. (Peak hours are defined as the most congested hours within a given peak period.) As Table 1.2-6 shows, based on the current projections (2025 and 2045), PM peak travel times will significantly increase in the near future. Figure 1.2-2 provides a comparison of project corridor travel time for the No Build Alternative at the posted speed limit with actual (2019) travel times throughout a typical weekday.
Table 1.2-6. Current and Projected Travel Times on I-35 from US 290 East to US 290 West/SH 71

<table>
<thead>
<tr>
<th>Direction</th>
<th>2019</th>
<th>2025</th>
<th>2045</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AM Peak Hour (7:30 to 8:30) (mins)</td>
<td>PM Peak Hour (4:30 to 5:30) (mins)</td>
<td>AM Peak Hour (7:30 to 8:30) (mins)</td>
</tr>
<tr>
<td>NB</td>
<td>19.2</td>
<td>32.2</td>
<td>19.8</td>
</tr>
<tr>
<td>SB</td>
<td>16.6</td>
<td>36.6</td>
<td>16.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: INRIX 2019
2025 and 2045 – I-35 Capital Express Central Project Team Projections

According to Figure 1.2-2, a one-way trip traversing the project area should take approximately 8 minutes, northbound (NB) or SB. Currently, travel within the project limits on a typical weekday takes between approximately 20 minutes in the morning peak period (approximately 6 to 9 a.m.) traveling NB and about 17 minutes traveling SB. In the evening peak period (approximately 1 to 6 p.m.), the average trip rises to 32 minutes traveling NB and over 36 minutes traveling SB. Based on these current estimates, the average commuter’s daily round-trip within the project limits can take nearly an hour of time in traffic, more with crashes. The measured

Figure 1.2-2. Capital Express Central Existing (2019) Travel Times During a Typical Weekday
current travel times show that the facility has reduced mobility during a majority of the day—not just during the peak hours of 7:30 to 8:30 a.m. and 4:30 to 5:30 p.m.—demonstrating the need to address congestion.

1.2.3.3 Bicycle and Pedestrian Plans

According to COA’s Bicycle Master Plan (COA, 2014), updated in 2019, approximately three-quarters of the streets that cross this corridor have been identified as being in the Bicycle Priority Network. Per the Bicycle Plan, COA will use guidance from the National Association of City Transportation Officials (NACTO) Urban Bikeway Design Guideline for the selection of bicycle accommodations that meet an all ages and abilities level of comfort (NACTO 2014). The existing bicycle paths for most cross-streets is either a shared lane or a wide curb lane. There is a need to provide safer and more continuous accommodations for people who walk and bicycle. In addition to complying with TxDOT’s Bicycle Accommodation Design Guidance, TxDOT will also comply with federal guidelines, including AASHTO’s Guide for the Development of Bicycle Facilities (AASHTO 2012); Guide for the Planning, Design, and Operation of Pedestrian Facilities (AASHTO, 2021); and the United States Access Board’s Public Rights-of-Way Accessibility Guidelines (United States Access Board 2011).

1.3 Purpose

The purpose of the proposed project is to improve this critical local, regional, national, and international thoroughfare by enhancing safety within the corridor; addressing demand by prioritizing the movement of people, goods, and services through and across the corridor; improving operational efficiency; and creating a more dependable and consistent route for the traveling public, including bicyclists, pedestrians, emergency responders, and transit.
2.0 Alternatives Including the Proposed Action

This chapter describes the full range of alternatives that were considered for the I-35 Capital Express Central Project, how they were evaluated, which were considered reasonable, and how the Preferred Alternative was identified. The alternatives considered in this DEIS and decisions based on this DEIS will achieve the requirements of Sections 101 and 102(1) of the National Environmental Policy Act (NEPA), as interpreted by the CEQ's regulations, and other environmental laws and policies, by ensuring that decisions regarding this project will be based on a robust evaluation of reasonable alternatives and the potential environmental impacts of those alternatives.

The current proposed alternatives are the result of decades of work, studies, design refinements, community involvement, and feedback from the public that has been incorporated into current plans. Beginning as far back as the late 1980s, TxDOT recognized the need to upgrade I-35 through the region to provide improved mobility. Listed here are major events in the project’s evolution over the past decade illustrating how the project has progressed to where it is today.

- **TexDOT Austin Major Investment Study**

  In 1989, TxDOT began a feasibility study to determine a way to upgrade I-35 from US 183 to Ben White Boulevard (SH 71/US 290) (TxDOT, 1998). The study was then expanded to include the five-county area including Williamson, Travis, Hays, Caldwell, and Bastrop. It developed 11 concepts and recommended three for further study. Along with the study, TxDOT produced a set of renderings and traffic volumes for I-35 through downtown Austin titled *I-35 Design Concepts Through Austin* (TxDOT, 1994). The renderings included an elevated section with a collector-distributor system between 11th and 4th Streets; a three-level section with upper- and lower-levels and high-occupancy vehicle (HOV) lanes from Airport Boulevard to Manor Road; and an at-grade section with HOV lanes between Airport Boulevard and 4th Street (see Appendix U). The Austin Transportation Study (now known as CAMPO) Plan adopted the MIS in 1994. Funding issues and a lack of political and public support prevented further advancement of these concepts at the time; however, portions of these concepts have been incorporated into later studies.

- **The I-35 Corridor Advisory Committee My35 Plan**

  The Texas Transportation Commission established the I-35 Corridor Advisory Committee (CAC) in 2009 to engage Texans and develop a plan to address transportation challenges along the I-35 corridor from the Oklahoma/Texas border to the Texas/Mexico border. CAC members included business professionals, environmental planners, rail advocates, professors, local officials, and residents that lived and did business in the I-35 corridor. To engage and better understand the needs of the public, the Texas Transportation Commission enlisted assistance from four I-35 Corridor Segment Committees (CSCs) located along the I-35 corridor to develop recommendations to improve mobility on I-35. In 2011, the CAC considered the recommendations of the CSCs and developed the I-35 Corridor Advisory Committee Plan (My35 Plan) (TxDOT, 2011a) to address mobility challenges along I-35. The plan identified and prioritized projects and made general recommendations for the I-35 corridor in Texas, including:

  - Freight and passenger rail projects to alleviate freight demands on roadways;
2.0 Alternatives Including the Proposed Action

- Roadway design to separate cars and trucks to increase safety;
- Managed lanes to ease congestion; and
- Integrated, real-time traffic information systems that alert drivers to delays and provide alternate routes.

In the Capital Area, the plan recommended redesignating and renaming parts of I-35 to divert interstate traffic away from metropolitan areas and onto SH 130 (discussed further in Section 2.2).

The CAC planning effort was a needs-based planning effort and was financially unconstrained. Recommendations also did not include any dedicated funding sources for improvements. Thus, recommendations made by the CAC could only be pursued by specific agencies: TxDOT, Regional Mobility Authorities (RMAs), cities, and counties. My35 Plan recommendations have been considered as part of this current effort.

**Mobility35 Program/2014 I-35 Capital Area Improvement Program Corridor Implementation Plan**

TxDOT, in coordination with COA, FHWA, CAMPO, and other local stakeholders, initiated the ongoing Mobility35 program (also known as the I-35 Capital Area Improvement Program [CAIP] for Hays, Travis, and Williamson Counties) in 2011 (TxDOT, 2013). Mobility35 focused on feasible and effective short- and mid-term strategies that can be implemented to improve mobility and connectivity along and across the I-35 corridor. The program attempted to maintain consideration of long-term corridor needs while developing the short- and mid-term potential strategies. Using past I-35 studies as background, partner agencies (including CTRMA and CapMetro) and stakeholders worked together to develop mobility solutions with the goal of being implementable and cost-effective while seeking to not require wholesale reconstruction of the corridor or substantial additional ROW. Efforts for the Mobility35 program were separated into five phases: Phase 1-Conceptual Planning; Phase 2-Implementation Plan; Phase 3-Schematic and Environmental Coordination; Phase 4-Construction Plans, ROW, and Utility Coordination; and Phase 5-Letting and Construction. The I-35 CAIP Corridor Implementation Plan for Travis County, which identified various improvements for I-35 identified as a Future Transportation Corridor (FTC), was originally released in 2013 and updated in 2014. Because the Implementation Plan is a living document, several iterations were developed. The I-35 FTC Planning and Environmental Linkages Study (PEL) (TxDOT, 2014) was conducted under the Mobility35 program and fell between Phase 2 and Phase 3 of the program.

The I-35 CAIP divided the I-35 corridor through Travis County into eight segments. It suggests separate improvements for each segment. Each improvement, including the FTC, was developed to help improve mobility and relieve congestion. General guiding considerations for the Mobility35 Program include:

- Increase capacity;
- Better manage traffic;
- Enhance safety;
- Optimize existing facility;
- Minimize need for additional ROW;
- Improve east/west connectivity;
Improving compatibility with neighborhoods; and

Enhance bicycle, pedestrian, and transit options.

Adding mainlane capacity was a primary goal of this Mobility35 effort in the form of a proposed additional freeway lane in each direction of I-35. Although this lane would require widening the footprint of the interstate mainlanes, it would not require substantial additional ROW, which was a guiding consideration for Mobility35 and a primary goal of any improvements that were recommended as part of the I-35 PEL Study. Based on previous community input on the desire to minimize the acquisition of substantial amounts of ROW, The PEL investigations were initiated with the limitation of the addition of only one lane in each direction.

Planning and Environmental Linkages Study

In addition to developing and studying potential lane type alternatives on I-35, the goal of the PEL, published in 2014, was to develop a purpose and need and determine segments of independent utility (SIUs) for future NEPA studies within Williamson, Travis, and Hays Counties. The study was conducted in accordance with the regulations provided in 23 CFR §450 and the FHWA developed PEL Questionnaire. The questionnaire is consistent with FHWA policies on the PEL process to help maximize the utility of the results from subarea or corridor plans to inform NEPA. Agency and stakeholder meetings were held throughout the study, where representatives from TxDOT, FHWA, COA, and CAMPO collaborated on the PEL effort. TxDOT also coordinated with CapMetro to discuss its interests in the I-35 corridor and to get input on potential transit access points. Three rounds of public meetings were held to provide information to the public about the study’s progress and to solicit input about the proposed purpose and need, the potential range of alternatives, recommended lane type alternatives, and SIUs utility for I-35.

Based on agency, stakeholder, and public comment, the PEL identified the need for improvements to the I-35 corridor to address current congestion levels that cause inefficient operations; increased travel times as population and employment grew; and congestion-related delays that prevent efficient use of I-35 by transit, emergency responders, and other motorists. Because of this need, the PEL recommended the purpose of the future project be to improve operational efficiency and manage congestion; provide more reliable travel times; and create a more dependable and consistent route for transit, emergency responders, and other motorists. The PEL studied several alternatives, including a rail lane, general purpose lanes, freight-only lanes, managed express toll lanes, managed transit-only lanes, non-tolled HOV managed lanes, and tolled managed through lanes. Because of the limitation of one lane in each direction, the PEL determined that a single general-purpose lane would not meet the identified purpose and need because of the level of existing traffic. Additionally, the PEL determined that managed lane options (which included an HOV + Transit option) would increase average speeds through the corridor while providing an improved level of service (LOS) compared to the other alternatives. Ultimately, the PEL recommended that the managed express/toll lane and managed express/toll lane with transit alternatives should be included in the CAMPO 2040 Regional Transportation Plan (RTP) and were the best alternatives to move forward for further NEPA analysis, along with the No Build.

Lastly, the I-35 PEL Study identified three preliminary SIUs that represent a planning-level assessment of where the limits (logical termini) of independent transportation projects could be located to address specific
transportation issues (TxDOT, 2014). The SIUs were established consistent with the FHWA regulations at 23 CFR §771.111(f) and are based upon operational and traffic analyses conducted during the PEL Study which showed that transportation improvements within the limits of each segment could operate independently and address relevant transportation issues even if the other segments were not built and operate as a system if they were all built. The preliminary SIUs include generalized transition areas at the logical termini that would be defined further in subsequent, project-specific NEPA studies (TxDOT, 2014). The termini were selected to separate traffic streams and mitigate merge/weave conflicts when allowing for access to/from the I-35 mainlanes to the managed lanes and vice-versa. In addition, the termini were selected such that each SIU, performing as a standalone project, attracted meaningful amounts of traffic and in at least one direction for one or both peak periods, such that active traffic management would be necessary to maintain adequate LOS. This behavior was interpreted as indicating that each of the segments provided utility to a significant proportion of at least some of the travel markets in the corridor. Based on updated traffic, data, and design refinements, the current Capital Express projects refined the SIUs to the those brought forward into NEPA.

- Downtown Stakeholder Working Group

In 2014, as part of public and agency involvement for the Mobility35 Program, the Downtown Stakeholder Working Group was formed. The group was composed of local governmental entities and community stakeholders, and was formed to evaluate concepts for I-35 in downtown Austin between MLK Jr. Boulevard and Holly Street that added one managed lane in each direction of I-35, and considered both elevating and lowering mainlanes through the downtown area (TxDOT 2014). Representatives from multiple neighborhoods, UT, and Catellus (the master developer for the Mueller neighborhood) participated in the workshops. The workshops focused on the desire to remove the decks, concern about super streets concepts, neighborhood cut-through traffic, access to local businesses and neighborhoods, traffic noise, and exit configuration.

The group considered two concepts for downtown: one that would add one managed lane in each direction of I-35 and elevate the SB mainlanes over Cesar Chavez Street, while retaining the current elevated configuration through downtown; and another that would also add one managed lane in each direction of I-35 while lowering the mainlanes of the roadway below ground from approximately 12th Street to south of Cesar Chavez Street. Both reasonable alternatives studied in this DEIS incorporate elements of these concepts such as lowering the mainlanes below ground through downtown. The concepts, as a whole, were not carried forward for further study; however, concepts and design improvements stemming from this process were carried forward into later studies for additional evaluation.

- Decks Neighborhood Workshops

Between May 2014 and May 2015, TxDOT hosted five Decks Neighborhood Workshops to discuss the I-35 “decks area,” defined as the area from Airport Boulevard to MLK Jr. Boulevard, and to discuss the addition of one managed lane in each direction. Representatives from multiple neighborhoods, UT, and Catellus participated in the workshops, which focused on a desire to remove the decks, concern about super streets concepts, neighborhood cut-through traffic, access to local businesses and neighborhoods, traffic noise, and exit configuration.
Following the recommendations presented in the PEL to move forward with adding tolled managed lanes in each direction, TxDOT hosted open house meetings and virtual open houses (VOHs) for the three projects in the study area, which extended from Farm-to-Market (FM) 1431 to SH 45SE. The projects at that time were called North16 (from FM 1431 to US 183), Central7 (from US 183 to Riverside Drive), and South10 (from Lady Bird Lake to SH 45SE). These alternatives centered around adding one tolled lane in each direction along I-35. A public open house for the I-35 Central7 Project proposed two design options within downtown Austin: (1) elevate the SB mainlanes and managed lanes over Cesar Chavez Street, while retaining the current elevated configuration through downtown, and (2) lower the mainlanes and managed lanes below ground from approximately 12th Street to south of Cesar Chavez Street. TxDOT received more than 2,500 comments in person and online about the Central7 Project. Comment themes included connectivity and ease of movement along and across I-35, preference for the lowered option, concern about traffic noise, support for managed tolled lanes, and support for integrating the CapMetro rail/transit line into project design.

In January 2020, prior to initiation of this DEIS, TxDOT hosted the I-35 Capital Express Central Design Charrette to solicit input from stakeholders regarding previous concepts that were developed and to seek additional input to be considered during the development of further build alternatives, including the addition of two managed lanes in each direction. More than 30 concepts were proposed over the course of the charrette. Design charrette participants included TxDOT, Mobility35 General Engineering Consultant staff, representatives from COA Transportation Department, CTRMA, CapMetro, CAMPO, FHWA, UT Austin, and the DAA. Elements of the charrette, including the access-controlled frontage road system, resulted from this collaboration were incorporated into all Build Alternative designs.

As work progressed, TxDOT identified a need for more than one managed lane in each direction along I-35 between US 290 East and US 290 West/SH 71. Two lanes in each direction would allow for better operational performance, reliability, and safety. The additional capacity would provide for better incident management capabilities resulting from the second lane that could be used to maneuver around incidents and/or obstacles and provide better emergency response access. The additional lanes would also improve operations at ingress and egress locations. For these reasons, two managed lanes in each direction are currently being considered in the EIS process.

The results of these previous efforts have informed the reasonable alternatives that were carried forward for further study in this DEIS. The current scoping process was initiated in August 2020 with a federal Notice of Intent (NOI) to publish an EIS for the proposed project, with limits from US 290 East to SH 71/Ben White Boulevard. Once the EIS was initiated, TxDOT invited cooperating and participating agencies and the public, through the formal scoping process, to two agency and public scoping meetings, one public meeting, and several community engagement meetings, where they were afforded the opportunity to help define the purpose and need for the project, the range of alternatives to be considered, and the methodology and level of detail for analyzing alternatives, including the selection of planning, engineering, and environmental criteria. TxDOT also provided the opportunity to comment on the Agency Coordination Plan and Public Involvement Plan. Scoping and
public meeting materials, as well as all documents shared at each meeting, can be reviewed online at https://my35capex.com/resources/environmental-study/. Scoping documents are also included in Appendix I. A list of cooperating and participating agencies is included in Chapter 1 of this DEIS. Following the scoping meetings, TxDOT produced the Range of Alternatives Report, which analyzed the three reasonable alternatives that were developed from previous studies and concepts (Appendix I). This process is further described in Sections 2.1 and 2.2.

2.1 Alternatives Eliminated from Detailed Study in the EIS

Alternatives considered and eliminated from further study in the DEIS are described in this section. Here, we discuss the full range of alternatives in more detail and why these were eliminated. Table 2.1-1 shows the alternatives that were eliminated from further study and the reason why each was eliminated (alternatives are described in detail after Table 2.1-1). Of the concepts and alternatives that were eliminated, Build Alternatives 1 and 3 (described below), which were proposed by TxDOT, as well as certain elements of the Community Concepts (also described below) were carried forward into the Alternatives Evaluation Report (Appendix I) and shared with the public and agencies at the public meeting in August 2021. However, these were eliminated from being carried forward for further study in the DEIS, as further described.

Table 2.1-1. Alternatives Eliminated from Further Study in DEIS

<table>
<thead>
<tr>
<th>Study or Concept</th>
<th>Evaluated in Preliminary Alternatives Analysis?</th>
<th>Reason Eliminated for Further Study in DEIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Redesignation of SH 130</td>
<td>N</td>
<td>This option is not economically feasible and not within TxDOT’s authority to restrict trucks from highways.</td>
</tr>
<tr>
<td>Reconnect Austin</td>
<td>Y (elements of alternative were included – see Section 2.2.2)</td>
<td>Redeveloping land is outside TxDOT’s authority and outside of the purpose and need for this project. In addition, the concept’s model of reduced entrance/exit ramps through downtown pushes traffic onto city streets, significantly increasing traffic volume in east Austin and south of Lady Bird Lake, which would not meet the purpose and need for the project. However, some of the concept’s features were integrated into the project.</td>
</tr>
<tr>
<td>Rethink35</td>
<td>Y (elements of alternative were included – see Section 2.2.2)</td>
<td>Replacing the highway with a boulevard would have negative traffic impacts to surrounding streets and would not meet the transportation needs of an interstate highway, nor the purpose and need for the project. However, some of the concept’s features were integrated into the project.</td>
</tr>
<tr>
<td>DAA/ULI</td>
<td>Y (elements of alternative were included – see Section 2.2.2)</td>
<td>Elements of this concept were carried forward into the build alternatives being evaluated; however, a lack of funding prevented it from moving forward as a stand-alone alternative.</td>
</tr>
</tbody>
</table>
Table 2.1-1. Alternatives Eliminated from Further Study in DEIS

<table>
<thead>
<tr>
<th>Study or Concept</th>
<th>Evaluated in Preliminary Alternatives Analysis?</th>
<th>Reason Eliminated for Further Study in DEIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Build Alternative 1</td>
<td>Y</td>
<td>Constructability, safety, and cost.</td>
</tr>
<tr>
<td>Build Alternative 3</td>
<td>Y</td>
<td>This alternative was considered too similar to Build Alternative 2.</td>
</tr>
<tr>
<td>Transit-Only Alternative</td>
<td>N</td>
<td>Does not meet the project’s purpose and need.</td>
</tr>
<tr>
<td>Transportation System Management (TSM)</td>
<td>N</td>
<td>Does not meet the project’s purpose and need.</td>
</tr>
<tr>
<td>Transportation Demand Management (TDM)</td>
<td>N</td>
<td>Does not meet the project’s purpose and need.</td>
</tr>
</tbody>
</table>

2.1.1 Redesignation of SH 130

Rerouting traffic, including trucks, from I-35 to SH 130, tolling I-35, eliminating tolls on SH 130, and redesignating SH 130 as I-35, were concepts heard from the public but were not further developed by any entity. Research on these concepts has found that redesignating SH 130 as I-35 would not significantly reduce congestion on I-35 and would add substantial costs to the project to remove the tolls off SH 130. Of the traffic on I-35 in Central Austin, 82 percent is local (local traffic refers to vehicles that originate and/or end within the project area). Since major developments (origins/destinations) are located along I-35 corridor, traffic would continue to use the current I-35 corridor to access its origins/destinations regardless of its designation as I-35 or SH 130. TxDOT Austin District conducted the Interstate 35 (I-35) Through-Trip Study using 2019 traffic data to better understand the movement of passenger vehicles and freight along the I-35 corridor.

- Based on the data collected, freight trucks traveling through Austin (without stopping locally) comprise only 7 percent of all traffic on I-35 through Central Austin. According to TTI, rerouting these trucks would have limited impact on I-35 congestion.
- Local truck traffic serves freight-related industries along the I-35 corridor. These industries constitute one-third of employment and gross domestic product in Travis, Williamson and Hays Counties combined.
- The majority of light duty trucks (<10,000 lbs.) are making short-distance local trips along I-35.
- SH 130 provides a less congested alternative to I-35 with 19 to 26 percent of trucks on I-35 diverting to use this route.
In summary, incentives for trucks to use SH 130 would have little impact on those that make deliveries along I-35 or use the east-west network within the project area. While TxDOT can restrict trucks from using certain lanes on a highway, it cannot ban trucks entirely, nor can it require trucks to use SH 130 (Texas Transportation Code Sections 545.0651 and 545.0653). Moreover, removing the tolls on SH 130 would cost an additional $3 billion, including additional funds for maintenance in the future. Funding for the I-35 Capital Express Central Project cannot be used for outstanding debt. SH 130 is part of the Central Texas Turnpike System, which is made up of SH 130 segments: SH 45 North, Loop 1 (MoPac), and SH 45SE. The outstanding debt of $3 billion is assigned to the whole system (TxDOT n.d.). This concept was never a fully developed alternative and was eliminated from further study.

2.1 Community Concepts

Over the last decade, the Capital Express Central Project has been a topic of discussion between TxDOT, COA, state leaders, and various stakeholder interests and neighborhood groups. Some of these interest groups formed nonprofit entities that have put forth concepts for how I-35 can be reconstructed to address community goals and objectives. Collectively, these have been referred to as community concepts. Most recently, discussion has centered on concepts proffered by three organizations: Reconnect Austin, Rethink35, and the DAA who commissioned the ULI to study the issues. Each group is unique in structure and origin, and their visions span a range from recommendations to goals to plans. These are summarized below.

2.1.2.1 TTI Evaluation of Community Concepts

In 2021, TxDOT Austin District requested that TTI conduct an independent evaluation of the concepts proposed by Reconnect Austin, Rethink35, and DAA/ULI for the reconstruction and redevelopment of I-35 (Appendix T) (TTI 2021). Specifically, TTI was tasked with analyzing each of the proposed community concepts and TxDOT-proposed build alternatives that have been developed as part of the environmental review process. The purpose of the analysis was to provide an objective evaluation of the following:

- Feasibility of community concepts as stand-alone alternatives.
- Elements of the community concepts that are currently incorporated or could be reasonably incorporated into TxDOT-proposed build alternatives.
- Elements of the community concepts that require further study and analysis.

First, TTI considered the Reconnect Austin concept, which proposes to depress the highway and cover it with a six-lane boulevard throughout the entire section from MLK Jr. Boulevard to Holly Street. The goal of the concept is for the urban boulevard to replace the highway, reconnecting downtown with east Austin, and moving the boulevard into the middle of the ROW to provide reclaimed land on the edge of the existing TxDOT ROW. The proposal envisions that reclaimed land could allow construction of offices, shops, and housing, which, as taxable

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3 Pursuant to Texas Transportation Code Section 545.0653(b), TxDOT may restrict the types of vehicle use in certain lanes on a highway but does not have the authority to restrict certain types of vehicles (such as trucks) from utilizing a highway in its entirety. Additionally, TxDOT has no legal authority to require certain types of vehicles to use a tolled facility, such as SH 130, at their own expense.
land, would generate revenue. Removing high-speed roads from the surface, the proposal aims to decrease the
number of roadway injuries and fatalities, making walkable new districts safer for pedestrians and other
vulnerable road users.

The Reconnect Austin Alternative was eliminated for further study as a stand-alone alternative because the
funding contribution and redevelopment of the land between the boulevard and the existing ROW is premised
on the idea that the roadway ROW is narrower than the existing facility, and the land between the boulevard and
the existing ROW line would be sold by TxDOT. However, this goal of redeveloped land is outside TxDOT’s authority
as a transportation agency and outside of the purpose and need for this project. In addition, Reconnect Austin’s
model of reduced entrance/exit ramps through downtown pushes traffic onto city streets, significantly increasing
traffic volume in east Austin and south of Lady Bird Lake.

The second concept, Rethink35, proposes a conversion of the central section of I-35 to an urban boulevard. The
proposal is very conceptual with few details. There is no plan to lower high-speed roads underground, as in
Reconnect Austin. Rather, the idea is that traffic would slow as it approaches the boulevard section and speed
up again as it leaves to the north and south of downtown. Cross streets connecting east Austin to the downtown
area would provide east-west connectivity options. Rethink35 seeks to dramatically reshape not only the I-35
corridor, but travel patterns and modes across the region. Eliminating the high-capacity corridor through the
spine of central Austin and replacing it with a six-lane boulevard would provide new development space and
reduce north-south traffic volume and noise levels in the existing I-35 corridor. The purchase of access rights
and available land for development would be similar to those from Reconnect Austin.

This alternative was eliminated for further study as a stand-alone alternative due to the negative traffic impacts
to surrounding streets and the delays that would be caused by replacing the highway with a boulevard. The
concept would not meet the transportation needs of an interstate highway. The travel demand model results
show that the Rethink35 concept would likely reduce traffic on I-35 and improve the environment directly around
the envisioned project but congestion problems would be pushed to city streets. Further, this conceptual design
would not adequately accommodate the needs of commuters from the suburbs to the major regional
employment centers.

The third and final community concept TTI studied is the DAA/ULI concept, which is a vision for revamping I-35
that does not include a detailed plan or technical designs but does propose a number of foundational design
elements including a narrower ROW than what TxDOT proposes; depressed mainlanes; three caps and eight
stitches (pedestrian bridges) along the entire project length; and frontage roads overhanging the mainlanes that
are designed as low speed urban boulevards with both travel and parking lanes, and traffic calming devices like
speed cushions. The DAA/ULI concept employs design concepts known as caps and stitches that are possible
because of the design’s lowered mainlanes. In the case of I-35, a cap would be a large structural cover that runs
north to south over the I-35 ROW but is not continuous as proposed in the Reconnect Austin concept; instead,
caps are considered at multiple locations. The caps are connected by stitches, which are wide bridges that would
cross the I-35 highway ROW and connect east Austin to downtown. Stitches over I-35 would include travel lanes,
widened sidewalks, bicycle lanes, and other open space. The DAA/ULI concept is not as dramatically different
from TxDOT build alternatives as are Rethink35 and Reconnect Austin. It envisions a narrower I-35 corridor than TxDOT build alternatives, one with frontage roads that cantilever over the freeway mainlanes.

This could allow space for non-TxDOT agencies to fund and build caps over the I-35 ROW space spanning the mainlanes. The cantilevered frontage roads would have 30 mile per hour (mph) speed limits to reduce negative traffic effects of vehicles and could provide space for wide sidewalks, shade trees, and other pedestrian-scale amenities. With this collaboration from other funding partners, the DAA/ULI concept could be achieved. However, as Figure 2.1.1 shows, the cantilevered frontage roads over the mainlanes concept does not allow for entry and exit ramps to move traffic between downtown and the freeway mainlanes. About two city blocks of space are required to construct a ramp from the lowered freeway to the at-grade FR, and the cap development could not exist on top of these ramps. The DAA/ULI concept is feasible for short distances where entry and exit ramps are not needed but a continuous cap would not be possible if the design intention is to move traffic from at-grade streets to the lowered freeway mainlanes.

This alternative was eliminated for further study as a stand-alone alternative mainly due to the significant funding gaps, along with possible funding sources. The DAA/ULI report calculates operations and maintenance costs at $313 million over 30 years. The DAA/ULI report suggests that $171 million of this funding can be realized through a tax increment finance district with additional funding from federal sources. Additionally, the DAA/ULI concept for caps or stitches conflicts with the need for access ramps between the lowered mainlanes and the surface streets.

Despite the three community concepts being unfeasible as stand-alone alternatives, some of the proposed goals have been accommodated within TxDOT build alternatives through partnerships with the appropriate agencies. Section 2.2.2 discusses all modifications made to Build Alternatives based on public input, including the community concepts. Moreover, the TTI report recommended studying relocation of frontage roads, or frontage road shifts, to create a boulevard-like section within the project limits, which TxDOT has designed in Modified Build Alternative 3.

2.1.3 Build Alternative 1

TxDOT also considered proposed Build Alternative 1, as presented at the August 2021 Public Meeting (https://my35capex.com/events/683/), which includes two tunneled HOV managed lanes in each direction, lowered mainlanes in each direction, and direct connectors at I-35 and US 290 East. Tunneled lanes are defined...
as being two levels below the frontage roads and cross streets, and one level below mainlanes; and lowered lanes are defined as one level below frontage roads and cross streets and the same level as mainlanes.

Build Alternative 1 was included in the Alternatives Evaluation Report since it was considered a feasible, stand-alone alternative; however, it is not being taken forward for further study in the DEIS because of its constructability, safety, and cost. Tunnellel sections have more emergency egress requirements, provide limited access to cross-streets and fewer egress options, have more complex drainage and utility requirements, more complex construction phasing, and are more expensive to construct, operate and maintain than non-tunneled options. These are discussed in detail in the Alternatives Evaluation Report (Appendix I).

2.1.4 Build Alternative 3

Build Alternative 3 would provide two lowered mainlanes in each direction between Airport Boulevard and Cesar Chavez Street, and between Riverside Drive and Oltorf Street, and additional flyovers at I-35 and US 290 East. The HOV managed lanes would be elevated over the Airport Boulevard and Woodland intersections. Schematics were presented at the August 2021 Public Meeting (https://my35capex.com/events/683/). Both managed/tunnel lanes and mainlanes are lowered one level below frontage roads and cross-streets (short, tunneled sections may be included at select locations to accommodate potential deck plazas that would be funded by others, and to minimize ROW needs and displacement impacts). Build Alternative 3 was included in the Alternatives Evaluation Report (Appendix I) since it was considered a feasible, standalone alternative; however, it is not being taken forward for further study in the DEIS because it was significantly modified based on public input received from the public meeting. Modified Build Alternative 3, described below in Section 2.2.4, retains many aspects of the original alternative, but has been renamed to reflect the extensive design modifications that were made.

2.1.5 Transit-Only Alternative

TxDOT has examined transit opportunities for the I-35 corridor that would optimize transit operations by including direct transit access and designating one of the managed lanes for transit only. TxDOT is collaborating with CapMetro to study feasibility of direct transit access provided funding is identified by others. Transit would have access to the managed lanes in the proposed build alternatives, which could improve transit operations. A transit-only alternative is not a “prudent avoidance alternative” under 23 CFR 774.17 because increased use of transit on its own would not meet the mobility demands of the region, nor would it provide improved safety and operations for the corridor. The Purpose and Need for this project are of a magnitude that could not be satisfied merely with increased transit ridership.

2.1.6 Transportation System Management

Transportation System Management (TSM) is the inclusion of operational improvements that maintain and restore the performance of the existing transportation system before extra capacity is needed. Examples of TSM are work zone management, special event management, road weather management, Intelligent Transportation Systems (ITS) architecture, and traffic signal coordination, among others. TSM is being evaluated as part of project development for both build alternatives identified for further study in this DEIS. However, implementation of TSM as a stand-alone alternative would not meet the purpose and need of the project because it would not
bring the existing facility up to current design and safety standards, improve mobility for people and goods throughout and across the corridor, or allow for the accommodation of current and future travel demand.

2.1.7 Transportation Demand Management

Transportation Demand Management (TDM) is the inclusion of transportation elements that promote faster and more efficient ways of travel, such as ridesharing, off-peak travel, public transit, walking and biking, and multimodal transportation options. TDM is being evaluated as part of project development for both build alternatives identified for further study in this DEIS. However, implementation of TDM as a stand-alone alternative would not meet the purpose and need of the project because this would not bring the existing facility up to current design and safety standards, improve mobility for people and goods throughout and across the corridor, or allow for the accommodation of current and future travel demand.

2.2 Descriptions of Reasonable Alternatives and the No Build Alternative

The reasonable alternatives carried forward for further evaluation include Build Alternative 2 and Modified Build Alternative 3. Build Alternative 2 meets the purpose and need of the project while also performing well under several evaluation criteria. Modified Build Alternative 3 was altered to reflect community concepts, but was derived from Build Alternative 3, and also meets the purpose and need of the project while performing well under several evaluation criteria. Incorporating certain features from the community concepts was performed only on Modified Build Alternative 3, as it was the alternative that most closely captured community feedback due to its lowered lanes at Airport Boulevard and Riverside Drive, which aligned with the community request that the project be built no higher than the current grade. Additionally, shifted frontage roads from Dean Keeton Street to Holly Street were found to be feasible as well as operational improvements at Riverside Drive to accommodate Project Connect.

Both build alternatives would add two HOV managed lanes in each direction, remove the upper decks on I-35 between Airport Boulevard and MLK Jr. Boulevard, and lower I-35 through downtown between MLK Jr. Boulevard and Holly Street. Because Texas is currently in a non-tolled environment under the 2023 Unified Transportation Plan (UTP) (TxDOT, 2022a), the current project is considering HOV/two or more (2+) occupants for the managed lanes, which meets the eligibility requirement for this project. HOV lanes provide a more equitable transportation option than managed express/toll lanes, which require dynamic pricing to be effective. For managed express/toll lanes to provide mobility during congested time periods, high prices are usually required. These increased transportation costs impact low-income households more significantly than households at higher income levels.

Both build alternatives would also include reconstructing the bridge across Lady Bird Lake; improving bicycle and pedestrian paths; accommodating current and future CapMetro routes; and on-site and off-site drainage facilities. TxDOT is including several elements of the community concepts described in Section 2.1 in both build alternatives. Additionally, both build alternatives are being evaluated for their ability to accommodate locally-funded enhancements, which could include deck plazas (also referred to as caps). Locally-funded enhancements are being developed and steered by the Our Future 35: Cap and Stitch Program (Our Future 35), an independent project to be funded by others. Our Future 35 leverages the opportunity presented by the Capital Express Central Project to provide benefits to the Austin community through a series of public spaces (deck plazas) and widened
crossings (stitches) using TxDOT’s highway lanes through downtown Austin (proposed to be below street level). See schematics in Appendix B for potential locations of deck plazas and stitches. Funding for deck plazas and stitches is outside of the jurisdiction of TxDOT. TxDOT’s allocated construction funding does not include the additional cost for civil and structural support, and fire life safety elements required for deck plazas and stitches over live traffic. Structural support includes wider and deeper foundations to support the increased loading. Civil support includes irrigation, utility conduits, and other infrastructure governed by the sponsor’s decision on what to include on the deck plazas. Fire-life safety elements include jet fans, emergency egress, hazardous material disposal, and fire suppression, among other tunnel requirements. TxDOT is providing the opportunity for public and private entities to fund these improvements, but if funding is not secured by the time of construction contract award, construction of these elements would not be included in the project.

In May 2022, Our Future 35’s multi-disciplinary design and engineering team kicked off Phase 1 of design by developing a community-supported design and programming concept for deck plazas and stitches over I-35. In July 2022, the team completed the Engineering Feasibility Study, which evaluated whether the program was structurally feasible within the interstate’s infrastructure. The results concluded that many open spaces and park features are possible on new freeway caps, and one- or two-story buildings are feasible under particular circumstances. The Technical Advisory Committee (TAC), comprised of representatives from several city departments, convened for a kickoff meeting in August 2022. The TAC will engage on an as-needed basis to provide technical guidance on various program elements.

Development includes partnership with the Austin Economic Development Corporation (AEDC). The Equitable Development Strategy will ensure that new freeway deck plazas and stitches benefit the surrounding neighborhoods and do not aggravate neighborhood pressures. Anticipated to be completed in 2023, the strategy’s focus areas include affordable housing, anti-displacement, community development needs, small business support and incubation, and workforce development. Our Future 35, the TAC, and the Community Steering Committee will co-develop the public engagement process.

In March 2022, through sponsorship from Congressman Lloyd Doggett, the City was awarded $1.5 million in community project funding as part of the FY22 Omnibus Appropriations Act to support Our Future 35 project planning and development activities. Our Future 35 is also developing a funding strategy for constructing the new deck plazas and stitches and ongoing maintenance and operational needs. Coordination with private, local, state, and federal partners continues to be a key focus area for identifying potential funding strategies. Draft funding scenarios and recommendations are anticipated to be ready by spring 2023.

In October 2022, Our Future 35 submitted a grant application for $1.12 million from the U.S. Department of Transportation (USDOT) Reconnecting Communities Planning Grant funds. If awarded, the funds will be used for the Connecting Austin Equitably Mobility Study to identify equitable multimodal transportation improvements and community connections. USDOT will announce the grant awards in early 2023. Following the grant application submittal, COA leadership conducted an advocacy trip to Washington, DC, to discuss funding opportunities for Our Future 35 with legislators, the USDOT, and the Build America Bureau.

A community-selected concept is anticipated to be confirmed in 2023. The program will complete engineering and design plans by 2025 to align with TxDOT’s I-35 Capital Express Central project timeline. In summary, the
structural, civil and fire life safety elements necessary for deck plazas and stitches would not be possible for inclusion in the proposed I-35 Capital Express Central project unless funding is provided by public/private entities by the time of construction contract award.

2.2.1 Description of Existing I-35

The existing facility within the project limits is an access-controlled urban interstate. Beginning at the southern limit, US 290 West/SH 71, the roadway typically has three to four, 12-foot-wide mainlanes (concrete barrier-separated) with 4- to 12-foot-wide inside shoulders, 10- or 12-foot-wide outside shoulders, and two to three, 11- or 12-foot-wide frontage road lanes with curb and gutter in each direction. At Lady Bird Lake, the Ann and Roy Butler (Butler) Hike and Bike Trail crosses underneath the I-35 corridor and connects to the NB I-35 frontage road on the northeast quadrant of I-35 and Lady Bird Lake for users crossing the lake. From Lady Bird Lake to 15th Street, I-35 generally includes three 12-foot-wide mainlanes in each direction with auxiliary lanes between some of the ramps. North of 15th Street, the roadway has four mainlanes in each direction and includes the upper/lower deck split just north of MLK Jr. Boulevard with a continuation of the upper decks to north of Airport Boulevard. From Airport Boulevard to US 290 East, I-35 includes four barrier-separated mainlanes in each direction. The roadway here typically has 2- to 6-foot-wide inside shoulders, 10-foot-wide outside shoulders, and two to four 11- or 12-foot-wide frontage road lanes with curb and gutter in each direction. Sidewalks exist in most, but not all, locations throughout the project area and shared use paths (SUP) cross the corridor at some locations within the downtown area of the project, defined as the area between MLK Jr. Boulevard and Holly Street. Drainage along the roadway (mainlanes and frontage roads) is provided by storm sewer networks and some open ditches. The existing ROW width is typically 200 to 350 feet but is wider at the interchanges. Existing permanent drainage easements are located at creek crossings. The posted speed limit along I-35 in the proposed project area is 60 mph on the mainlanes and 35 to 50 mph on the frontage roads.

2.2.2 Modifications Made from Public Input

After the EIS was initiated for the project, TxDOT held two virtual agency and public scoping meetings followed by an in-person (with a virtual option) public meeting. The first scoping meeting held in November 2020 (Scoping Meeting 1) presented the project to invited agencies and notified members of the public. Scoping meeting materials can be reviewed at https://my35capex.com/resources/past-public-events/. Comment themes for each scoping meeting and the public meeting are also attached in Appendix E.

The project proposed adding two HOV managed lanes in each direction with additional flyovers at I-35 and US 290 East, and additional improvements including reconstructing ramps, bridges, and intersections; improving frontage roads; enhancing bicycle and pedestrian paths; and accommodating transit routes. The overall environmental process was described, and feedback was solicited. Comments included:

- Additional design alternatives with deck plazas, cross-street amenities, and/or urban boulevard concept;
- Alignment with local plans;
- Prioritization of safety, including safety for people who walk and bicycle, as well as vehicles;
- Exploration of financing options including fee-managed lanes;
1. Evaluation of impacts to community health and equity;
2. Analysis of climate change and greenhouse gases (GHG);
3. Support for and facilitation of enhanced transit operations and connections; and
4. Diverting trucks to SH 130 or other corridors.

Based on the feedback and comments received, the need for the project was changed to include expanded emphasis on crash and safety data; east-west travel and connectivity across the facility (and not just north-south); and transit access. The purpose of the project was changed to include addressing demand by prioritizing the movement of persons, goods, and services through and across the corridor, and to include all modes of transportation in relation to creating a more dependable and consistent route.

Scoping Meeting 2, held in March 2021, presented three TxDOT-proposed build alternatives that were developed after consideration of a wide range of alternatives, as described above, for the past several decades. These three build alternatives were identified by TxDOT to best meet the purpose and need for the proposed project, while also considering engineering, traffic, environmental and constructability criteria. Build Alternative 1 would construct lowered mainlanes and tunneled HOV managed lanes; Build Alternative 2 would construct lowered mainlanes and lowered HOV managed lanes (no tunnel section); and Build Alternative 3 would be the same as Build Alternative 2, but would also include HOV managed lanes elevated over Airport Boulevard and Woodland Avenue. The methodology and level of detail for analyzing alternatives were also presented at Scoping Meeting 2, and feedback solicited again. Comments from this scoping meeting included:

- Analyzing additional alternatives such as the Reconnect Austin, Rethink35, and DAA/ULI proposals;
- Measuring impact criteria specifically related to pedestrian bicycle safety at intersections and crossings;
- Adding criteria to measure transit station/stop access to future Project Connect system; and
- Measuring additional east-west crossings.

Based on this feedback, the following were added to the alternatives evaluation criteria: air quality impacts; person-carrying capacity along mainlanes; annual cost of travel; and accommodation of CapMetro’s service plan at east-west crossings. Based on additional comments, designs were further refined where each proposed east-west crossing within the project was enhanced to include wider bridge structures including a 20-foot buffer between people who walk and bicycle and traffic to make biking and walking across the corridor a safer and more user-friendly experience. In addition, multiple deck plaza areas to be designed as green spaces within the urban core of Austin are being considered, in coordination among COA, UT, and TxDOT, between Cesar Chavez Street and 12th Street, as well as an enhanced cap area south of Dean Keeton Street near UT.
In August 2021, a virtual and in-person public meeting was held for the project presenting the results of the alternatives analysis, findings from the independent study on the community concepts, and layouts of the proposed build alternatives. The alternatives presented at the public meeting included refinements based on feedback received from agencies and the public from the November 2020 and March 2021 scoping meetings as well as enhancements from the community concepts. These included:

- Adding more than 15 widened east-west crossings, including a new connection at 5th Street for all users, and new pedestrian crossings at the CapMetro Red Line/Future Gold Line south of Airport Boulevard, and between 51st Street and US 290 East;
- Using low-speed frontage roads;
- Lowered mainlane and HOV managed lanes; and
- Enhanced person-carrying capacity along the corridor by providing a reliable route for transit in HOV managed lanes.

Feedback received from the August 2021 Public Meeting included many of the same sentiments shared at the scoping meetings, but also included concerns about aesthetics, that Alternatives 2 and 3 were too similar, displacements, racial injustice, induced demand, and desires to bury the highway. Based on this feedback, Alternatives 2 and 3 were further modified to reflect community desires. Build Alternative 2 now reflects the following changes:
Accommodation of a deeper profile for potential deck plazas between 4th and 8th Streets; and

- Removal of cap opportunities between Cesar Chavez Street and 4th Street to avoid displacements.

Build Alternative 3 was redesigned as follows and is now referred to as Modified Build Alternative 3:

- Proposed flyovers at US 290 East were removed;
- All elevated HOV managed lanes were lowered at Airport Boulevard;
- HOV managed lane entrance/exit ramps were moved from south of Airport Boulevard to north of Airport Boulevard;
- Added new bicycle-pedestrian-only crossings at 3rd Street, 15th Street, and MLK Jr. Boulevard, and a bicycle-pedestrian and vehicular crossing at 41st Street;
- Mainlanes and HOV managed lanes were lowered at Holly Street with NB bypass lanes elevated;
- An innovative intersection—single-point urban intersection (SPUI)—was designed at East Riverside Drive;
- The Woodland Avenue crossing was redesigned to accommodate bicycle-pedestrian traffic only;
- Frontage roads were shifted through downtown to create a boulevard section between Cesar Chavez Street and Dean Keeton Street;
- A connection was provided at Palm Park to the east side of I-35.

For both Build Alternative 2 and Modified Build Alternative 3, the following design changes were made:

- Alley access was provided to the Crestwood neighborhood;
- A U-turn was added on the north side of Lady Bird Lake; and
- Ardenwood Road connection to frontage road was removed to accommodate the Red Line Bridge.

On January 25, 2022, these modifications were presented to the public at an in-person Volunteer Opportunities in Community Engagement (VOICE) meeting held at the Austin Public Library and at a virtual meeting held concurrently. The revised plans for Build Alternative 2 and Modified Build Alternative 3 were shared. The following sections describe the build alternatives that are analyzed in this DEIS.

### 2.2.3 Description of Build Alternative 2

Build Alternative 2 is approximately 8 miles along I-35. The northern limit is 1,500 feet north of US 290 East, and the southern limit is 1,000 feet south of US 290 West/SH 71. Build Alternative 2 would provide two lowered HOV managed lanes and lowered mainlanes in each direction between Airport Boulevard and Cesar Chavez Street, and between Riverside Drive and Oltorf Street. Both HOV managed/transit lanes and mainlanes are lowered one level below frontage roads and cross-streets (short, tunneled sections may be included at select locations to accommodate potential deck plazas). This alternative would also add direct connectors at I-35 and US 290 East to enhance mobility at this high-volume interchange and to facilitate the transition to one HOV managed lane in each direction north of US 290 East. The I-35 direct connectors would extend approximately
1,000 feet east of I-35 along US 290 East where they would tie into the US 290 East eastbound (EB) and westbound (WB) lanes. No additional ROW would be required along US 290 East. Other improvements include an SPUI at Airport Boulevard and elevated mainlanes and HOV managed lanes over Holly Street.

The typical section for Build Alternative 2 generally consists of four mainlanes, two managed, and three frontage road lanes in each direction. Excluding ramps, lane widths are typically 11 feet. Vertically, the mainlanes and HOV managed lanes are typically depressed while the frontage roads are held at grade. Ten-foot SUPs are typically provided along the outside of the frontage roads in both the NB and SB directions. Typical sections are provided in Appendix C.

Toll lanes were not considered because Texas is currently in a non-tolled environment under the 2023 UTP (TxDOT, 2022a). The current project incorporates HOV managed lanes. An HOV lane, sometimes called a carpool lane, is a type of managed lane reserved for the use of carpools, vanpools, and transit vehicles. HOV managed lanes save time for carpoolers and transit riders by enabling them to bypass traffic. For Build Alternative 2, the HOV designation would allow carpools of two or more occupants to access the HOV managed lanes.

TxDOT, in coordination with COA and UT, is designing the project to accommodate potential deck plazas, that would cover sections of the main and HOV managed lanes of I-35 and provide community enhancement opportunities in these areas. COA is evaluating deck plazas between 4th Street and 8th Street, and UT is evaluating locations between Dean Keeton Street and MLK Jr. Boulevard on the west side of I-35 (no additional ROW is required for this location). COA is also evaluating stitches, or areas where enhancements and amenities could be added along east-west bridges, at 11th Street, 12th Street, 15th Street, and 38th ½ Street. Potential deck plazas and/or stitches are not being proposed for construction by this project and would be funded by others.

For Build Alternative 2, 8- to 10-foot-wide SUPs would parallel the I-35 frontage roads on both the NB and SB sides from US 290 East to north of Woodward Street, with at-grade improved crossings provided at US 290 East, Airport Boulevard, 38th ½ Street, 32nd Street, Dean Keeton Street, Manor Road, MLK Jr. Boulevard, 15th Street, 12th Street, 11th Street, 8th Street, 7th Street, 6th Street, 5th Street, Cesar Chavez Street, Holly Street, Riverside Drive, Woodland Avenue, and SH 71. Four pedestrian/bicycle-only bridges would be located at 56th ½ Street, south of Airport Boulevard (at the CapMetro Red Line crossing), 4th Street, and Lady Bird Lake.

Bypass lanes would allow travelers to bypass signalized intersections. Bypass lanes provided in the SB direction for Build Alternative 2 are:

- Under 51st Street.
- Under Airport Boulevard.
- Under MLK Jr. Boulevard.
- Under 15th Street, 12th Street, and 11th Street. From just south of 11th Street, a driver could access a bypass lane to travel under 8th, 7th, 6th, 5th, and Cesar Chavez Streets before reconnecting with the frontage road south of Cesar Chavez Street.
Bypass lanes in the NB direction are:

- Under 51st Street.
- Under Airport Boulevard.
- Under MLK Jr. Boulevard.
- Under 11th and 12th Streets.
- Heading NB on the frontage roads, a driver could access the bypass lane just north of Lady Bird Lake and travel continuously over Holly Street and under Cesar Chavez Street.
- Under Riverside Drive and Woodland Avenue.

Entrances to the HOV managed lanes are located:

- From WB US 290 East to I-35 (SB);
- From SB frontage road at 40th Street (SB);
- From SB bypass lane at Woodland Avenue (SB);
- From NB bypass lane at MLK Jr. Boulevard (NB); and
- From NB frontage road at 32nd Street (NB).

Exit ramps from the HOV managed lanes are located:

- Airport Boulevard (NB);
- Woodland Avenue (NB);
- MLK Jr. Boulevard (SB); and
- 32nd Street (SB).

Build Alternative 2 would require improvements to the drainage system, including several new major drainage systems and outfall sites. These major drainage systems generally consist of large box culverts and pipes with segments installed by a mixture of open cut, bore, and tunnel. The proposed roadway improvements for both build alternatives would lower the roadway profile below existing grade for long segments north and south of Lady Bird Lake (for approximately 6.3 miles), which would sever multiple drainage systems connected to Harpers Branch, Lady Bird Lake, Colorado River, Waller Creek, and Boggy Creek. Thus, new storm drain systems would be required to drain both on-site and off-site runoff that would have been severed from its existing outfall. The new major drainage systems can generally be described as:

- New storm drains along both frontage roads and mainlanes extending roughly 5,000 feet from just north of Oltorf Street to tie into the existing Harpers Branch outfall near Lady Bird Lake. A new 14-foot diameter north-
south-east (NSE) tunnel would run along the east side of the I-35 ROW and would outfall into the north bank of Lady Bird Lake at I-35. It would drain a large portion of I-35 from around 11th Street up to MLK Jr. Boulevard and would drain much of east Austin.

- New storm drain tunnel system extending roughly 9,000 feet along east I-35 ROW from Lady Bird Lake to near 15th Street.
- New storm drain tunnel systems extending roughly 14,500 feet along west I-35 ROW from multiple Waller Creek outfalls near 3rd, 9th, and 15th Streets to near Hancock Center, north of 41st Street.
- New 10-foot diameter storm drain tunnel system extending roughly 9,000 feet along Cesar Chavez Street from I-35 to downstream of Longhorn Dam where it would outfall into the Colorado River.
- New storm drain/tunnel system extending roughly 4,000 feet from the Clarkson Branch of Boggy Creek to I-35 via 38th ½ Street and north to Hancock Center.
- A new storm drain extending roughly 2,000 feet from Boggy Creek to the west side of I-35 via a crossing located just north of Airport Boulevard.

Schematics of Build Alternative 2 are included in Appendix B.

This alternative requires approximately 45.2 acres of additional ROW resulting in 291 potential displacements. Temporary and permanent easements would be required in the amount of approximately 3 acres for construction staging, and approximately 25 acres of Lady Bird Lake and shoreline, which would be restricted from recreation during construction to allow for movement of construction equipment.

2.2.3.1 Potential Mitigation

Mitigation measures for the build alternatives are included in Section 3.25.

2.2.3.2 Purpose and Need

Build Alternative 2 is expected to meet the project purpose and need by providing a highway that meets current design standards, relieving congestion during peak periods, enhancing safety, improving operational efficiency, and creating a more dependable and consistent route for the traveling public including bicyclists, pedestrians, emergency responders, and transit. The evaluation of Build Alternative 2 by criterion is included below in Table 2.2.1.

2.2.3.3 Logical Termini

Federal regulations require that federally-funded transportation projects have logical termini. [23 CFR §771.111(f)(1).] Simply stated, this means that a project must have rational beginning and end points. Those end points may not be created simply to avoid proper analysis of environmental impacts. The results of the I-35 PEL approved by FHWA identified three SUIs that allowed for further refinement in subsequent, project-specific NEPA studies (TxDOT, 2014). Based on updated traffic and data, the proposed Build Alternative 2 would begin at US 290 East on the north, and end at US 290 West/SH 71 on the south. Transition zones for Build Alternative 2 would be from US 290 East to Camino La Costa on the north end, and from US 290 West/SH 71 to Teri Road.
on the south end. These would be used for work within the ROW to connect to the I-35 Capital Express North and South Projects (see Section 2.2.3.4 for discussion of independent utility).

The limits of the project meet the logical termini requirements per FHWA guidelines by demonstrating major traffic generation to and from I-35. Both interchanges are points of major traffic generation. The US 290 East terminus represents a complex and critical hub north of Austin, as it is an east-west connecting segment for I-35 users who want to divert EB to US 290 to access parallel north-south regional alternative routes such as SH 130 and US 183. US 290 East carries a 2018 AADT of 76,999 vpd (TxDOT 2019.) I-35 users can also use this interchange to travel west on SH 69 (2018 AADT of 48,309 vpd) and farther west to Ranch-to-Market (RM) 2222 (2018 AADT of 34,181 vpd) (TxDOT 2019).

The US 290 West/SH 71 terminus is a heavily traveled interchange that provides I-35 users an opportunity to travel east-west. This interchange connects I-35 users east to Austin-Bergstrom International Airport (AUS) via SH 71. This EB route is a primary alternative route for connecting to other parallel north-south regional routes including US 183 and SH 130 (around downtown Austin) as well as connecting users farther east to Bastrop County. SH 71 EB carries a 2018 AADT of 138,279 vpd. Additionally, this interchange connects I-35 users to US 290 West and SH 71 WB, which provides access for alternative routes connecting to other parallel north-south regional routes including MoPac and North Capital of Texas Highway (Loop 360) (around downtown Austin). US 290 West/SH 71 WB carries a 2018 AADT of 190,514 vpd. This WB regional route connects users to Burnet County, Hays County, Blanco County and beyond.

2.2.3.4 Independent Utility

Federal regulations require that a project have independent utility and be a reasonable expenditure even if no other transportation improvements are made in the area [23 CFR §771.111(f)(2)]. This means a project must be able to provide benefit by itself, and that the project not compel further expenditures to make the project useful. Stated another way, a project must be able to satisfy its purpose and need with no other projects being built. Build Alternative 2 could be constructed without the implementation of other traffic improvements because the project provides congestion relief between two major traffic generation points, as described above, by adding two managed HOV lanes in each direction, which satisfies the project’s purpose and need, and this would be true even if no other roads were built nearby. Because the project stands alone, it cannot and does not irretrievably commit federal funds for other future transportation projects.

The SIUs were established consistent with the FHWA regulations at 23 CFR §771.111(f)(3) and are based upon operational and traffic analyses conducted during the PEL Study, which showed that transportation improvements within the limits of each of the segments could both operate independently as standalone projects and address relevant transportation issues even if the other segments were not built and operate as a system if they were all built. The preliminary SIUs include generalized transition areas at the logical termini that would be defined further in subsequent, project-specific NEPA studies (TxDOT, 2014). The termini were selected to separate traffic streams and mitigate merge/weave conflicts when allowing for access to/from the I-35 mainlanes to the managed lanes and vice-versa. In addition, the termini were selected such that each SIU, performing as a standalone project, attracted meaningful amounts of traffic and in at least one direction for one or both peak periods, such that active traffic management would be necessary to maintain adequate LOS. This
behavior was interpreted as indicating that each of the segments provided utility to a significant proportion of at least some of the travel markets in the corridor. Based on updated traffic, data, and design refinements, the current Capital Express projects refined the SIUs to the those brought forward into NEPA.

2.2.3.5 Other Reasonably Foreseeable Transportation Improvements

Federal law prohibits a project from restricting consideration of alternatives for other reasonably foreseeable transportation improvements [23 CFR § 771.111(f)(3)]. This means that a project must not dictate or restrict any future roadway alternatives. The proposed project would not restrict the consideration of alternatives for these or any other foreseeable transportation improvements as it is designed to function with or without any other roadway projects.

2.2.3.6 Planning Consistency

The project is listed in the 2023 UTP (TxDOT, 2022a), CAMPO 2045 RTP (CAMPO, 2020b), and CAMPO’s Transportation Improvement Program (TIP) 2021–2024 (CAMPO, 2020c). The CAMPO 2045 RTP shows planned road projects within its six-county boundary. Multiple projects, shown as committed, design, local, and preferred, are adjacent to the project limits. The goal for these projects is to enhance connectivity between I-35 and residential population centers. Additionally, the planned road projects would enhance alternative routes throughout the region. In the UTP, the project is described as “managed lanes and operational improvements through downtown Austin,” with limits from US 290 East to US 290 West/SH 71, for FY 2022–2025. In the RTP and TIP, the project is described as “add NB and SB non-tolled managed lanes, reconstruct ramps, improve FR, freight movements, and add auxiliary lanes” from US 290 East to US 290 West/SH 71. The project described herein is consistent with these documents. The Capital Express Central Project would not restrict or dictate any road projects within the 2023 UTP, CAMPO 2045 RTP, nor would it restrict or dictate other reasonably foreseeable transportation improvements related to the Mobility35 program, such as intersection improvements, turn-lane additions, road widenings, or increased bus/rail services. Future potential improvement projects could generally be accommodated within the I-35 Capital Express Central Project and would not be precluded by the proposed project.

2.2.4 Description of Modified Build Alternative 3

Modified Build Alternative 3 would also provide two lowered HOV managed lanes and lowered mainlanes in each direction between Airport Boulevard and Cesar Chavez Street, and between Riverside Drive and Oltorf Street. Both HOV managed/transit lanes and mainlanes are lowered one level below frontage roads and cross streets (short, tunneled sections may be included at select locations in order to accommodate potential deck plazas). This alternative would differ from Build Alternative 2 in that mainlanes and HOV managed lanes would be lowered at Holly Street with only the NB bypass lanes elevated at this location. It would provide an SPUI at Airport Boulevard (like Build Alternative 2) and would provide an additional SPUI at East Riverside Drive, as well as a pedestrian/bicycle-only bridge at Woodland Avenue. For this alternative, frontage roads would be shifted to the east between Dean Keeton Street and 15th Street, and then to the west between 15th Street and Cesar Chavez Street, to create boulevard sections. There would be no additional direct connectors at US 290 East/I-35. This
alternative would convert 8th Street from one-way WB to one-way EB, and 7th Street from one-way EB to two-way.

The typical section for Modified Build Alternative 3 generally consists of four mainlanes, two managed, and three frontage roads lanes in each direction. Excluding ramps, lane widths are typically 11 feet. Vertically, the mainlanes and HOV managed lanes are typically depressed, while the frontage roads are held at grade. Frontage roads are situated along the outside of the corridor except between Dean Keeton Street and Cesar Chavez Street where they combine to form a boulevard section above the mainlanes. Ten-foot SUP are typically provided along the outside of the frontage roads in both the NB and SB directions. Typical sections are provided in Appendix C.

Modified Build Alternative 3 requires approximately 41.7 acres of additional ROW resulting in 107 potential displacements. Temporary and permanent easements would be required in the amount of approximately 3 acres for construction staging, and approximately 25 acres of Lady Bird Lake and shoreline, which would be restricted from recreation during construction to allow for movement of construction equipment.

For Modified Build Alternative 3, COA is evaluating deck plazas between Cesar Chavez Street and 8th Street, and UT is evaluating locations between Dean Keeton Street and 15th Street on the west side of I-35 (no additional ROW is required for this location). Stitches are being evaluated at the CapMetro Red Line crossing south of Airport Boulevard, Wilshire Boulevard, 38th ½ Street, 32nd Street, 12th Street, 11th Street, Holly Street, and Woodland Avenue. Potential deck plazas and/or stitches are not being proposed for construction by this project, and would be funded by others.

For Modified Build Alternative 3, 8- to 10-foot-wide SUPs would parallel the I-35 frontage roads on both the NB and SB sides from US 290 East to just north of Woodward Street, with at-grade improved crossings provided at: US 290 East, Airport Boulevard, Wilshire/41st Street, 38th ½ Street, 32nd Street, Dean Keeton Street, Manor Road, MLK Jr. Boulevard, 12th Street, 11th Street, 7th Street, 6th Street, 5th Street, Cesar Chavez Street, Holly Street, Riverside Drive, and SH 71. Eight pedestrian/bicycle-only bridges would be located north of 55th Street, south of Airport Boulevard (at the CapMetro Red Line crossing), next to MLK Jr. Boulevard, north of 15th Street, 4th Street, 3rd Street, Lady Bird Lake, and Woodland Avenue.

Bypass lanes would allow travelers to bypass signalized intersections. Bypass lanes provided in the SB direction for Modified Build Alternative 3 include:

- Under 51st Street;
- Under Airport Boulevard;
- Under Wilshire/41st Street;
- Under MLK Jr. Boulevard;
- Under 15th Street, 12th Street, and 11th Street;
- Under Cesar Chavez and Holly Streets; and
- Under Riverside Drive.
Bypass lanes NB direction:

- Under Airport Boulevard;
- Under Wilshire/41st Street;
- Under 11th Street and 12th Street;
- Over Holly Street and under Cesar Chavez Street; and
- Under Riverside Drive.

The entrances for the HOV managed lanes would be:

- North of Airport Boulevard (SB);
- Woodland Avenue (SB);
- Near Sunnyvale Street (NB);
- MLK Jr. Boulevard (NB); and
- 32nd Street (NB).

The HOV managed lane exits would be:

- North of Airport Boulevard (NB);
- Woodland Avenue (NB);
- Near Sunnyvale Street (NB);
- MLK Jr. Boulevard (NB); and
- 32nd Street (NB).

Modified Build Alternative 3 would require improvements to the drainage system, like Build Alternative 2, including several new major drainage systems and outfall sites. These major drainage systems generally consist of large box culverts and pipes with segments installed by a mixture of open cut, bore, and tunnel. The proposed roadway improvements for both build alternatives would lower the roadway profile below existing grade for long segments (approximately 6.5 miles) north and south of Lady Bird Lake, which would sever multiple drainage systems connected to Harpers Branch, Lady Bird Lake, Colorado River, Waller Creek, and Boggy Creek. Thus, new storm drain systems would be required to drain both on-site and off-site runoff that would have been severed from its existing outfall. The new major drainage systems can generally be described as:

- New storm drains along both frontage roads and mainlanes extending roughly 5,000 feet from just north of Oltorf Street to tie into the existing Harpers Branch outfall near Lady Bird Lake.
- A new 14-foot diameter north-south-east (NSE) tunnel runs along the east side of the I-35 ROW and outfalls into the north bank of Lady Bird Lake at I-35. It drains a large portion of I-35 from around 11th Street up to MLK Jr. Boulevard and drains much of east Austin.
2.0 Alternatives Including the Proposed Action

- New 10-foot diameter storm drain tunnel system extending roughly 9,000 feet along Cesar Chavez Street from I-35 to downstream of Longhorn Dam where it would outfall into the Colorado River.
- New storm drain tunnel systems extending roughly 14,500 feet along west I-35 ROW from multiple Waller Creek outfalls near 3rd, 9th, and 15th Streets to near Hancock Center, north of 41st Street.
- New storm drain tunnel system extending roughly 4,000 feet, from the Clarkson Branch of Boggy Creek to I-35 via 38th ½ Street and north to Hancock Center.
- A new storm drain extending roughly 2,000 feet, from Boggy Creek to the west side of I-35 via a crossing located just north of Airport Boulevard.

Schematics of Modified Build Alternative 3 are included in Appendix B.

2.2.4.1 Potential Mitigation

Mitigation measures for the build alternatives are included in Section 3.25.

2.2.4.2 Purpose and Need

Modified Build Alternative 3 is expected to meet the project purpose and need by providing a highway that meets current design standards, relieving congestion during peak periods, enhancing safety, improving operational efficiency, and creating a more dependable and consistent route for the traveling public including bicyclists, pedestrians, emergency responders, and transit. The evaluation of Modified Build Alternative 3 by criterion is included in Table 2.2-1.

2.2.4.3 Logical Termini

Federal regulations require that federally-funded transportation projects have logical termini [23 CFR §771.111(f)(1)]. Simply stated, this means that a project must have rational beginning and end points. Those end points may not be created simply to avoid proper analysis of environmental impacts. The results of the I-35 PEL approved by FHWA identified three SUIs that allowed for further refinement in subsequent, project-specific NEPA studies (TxDOT, 2014). Based on updated traffic and data, the proposed Modified Build Alternative 3 would begin at US 290 East on the north, and end at US 290 West/SH 71 on the south. Transition zones for Modified Build Alternative 3 would be from US 290 East to Camino La Costa on the north end, and from US 290 West/SH 71 to Teri Road on the south end. These would be used for work within the ROW to connect to the I-35 Capital Express North and South Projects.

The limits of the project meet the logical termini requirements per FHWA guidelines by demonstrating major traffic generation to and from I-35. Both interchanges are points of major traffic generation. The US 290 East terminus represents a complex and critical hub for north Austin, as it is an east-west connecting segment for I-35 users who want to divert EB to US 290 to access parallel north-south regional alternative routes such as SH 130 and US 183. US 290 East carries a 2018 AADT of 76,999 vpd. I-35 users can also use this interchange to travel west on SH 69 (2018 AADT of 48,309 vpd) and farther west to RM 2222 (2018 AADT of 34,181 vpd).
The US 290 West/SH 71 terminus is a heavily traveled interchange that provides I-35 users an opportunity to travel east-west. This interchange connects I-35 users east to AUS via SH 71. This EB route is a primary alternative route for connecting to other parallel north-south regional routes including US 183 and SH 130 (around downtown Austin) as well as connecting users farther east to Bastrop County. SH 71 EB carries a 2018 AADT of 138,279 vpd. Additionally, this interchange connects I-35 users to US 290 West and SH 71 WB, which provides access for alternative routes connecting to other parallel north-south regional routes including MoPac and Loop 360 (around downtown Austin). US 290 West/SH71 WB carries a 2018 AADT of 190,514 vpd. This WB regional route connects users to Burnet County, Hays County, and beyond Blanco County.

2.2.4.4 Independent Utility

Federal regulations require that a project have independent utility and be a reasonable expenditure even if no other transportation improvements are made in the area [23 CFR §771.111(f)(2)]. This means a project must be able to provide benefit by itself, and that the project does not compel further expenditures to make the project useful. Stated another way, a project must be able to satisfy its purpose and need with no other projects being built. Modified Build Alternative 3 could be constructed without the implementation of other traffic improvements because the project provides congestion relief between two major traffic generation points, as described above, by adding two HOV managed lanes in each direction, which satisfies the project’s purpose and need, and this would be true even if no other roads were built nearby. Because the project stands alone, it cannot and does not irretrievably commit federal funds for other future transportation projects.

The SIUs were established consistent with the FHWA regulations at 23 CFR §771.111(f) and are based upon operational and traffic analyses conducted during the PEL Study, which showed that transportation improvements within the limits of each of the segments could both operate independently as standalone projects and address relevant transportation issues even if the other segments were not built and operate as a system if they were all built. The preliminary SIUs include generalized transition areas at the logical termini that would be defined further in subsequent, project-specific NEPA studies (TxDOT, 2014). The termini were selected to separate traffic streams and mitigate merge/weave conflicts when allowing for access to/from the I-35 mainlanes to the managed lanes and vice-versa. In addition, the termini were selected such that each SIU, performing as a standalone project, attracted meaningful amounts of traffic and in at least one direction for one or both peak periods, such that active traffic management would be necessary to maintain adequate LOS. This behavior was interpreted as indicating that each of the segments provided utility to a significant proportion of at least some of the travel markets in the corridor. Based on updated traffic, data, and design refinements, the current Capital Express projects refined the SIUs to those brought forward into NEPA analysis.

2.2.4.5 Other Reasonably Foreseeable Transportation Improvements

Federal law prohibits a project from restricting consideration of alternatives for other reasonably foreseeable transportation improvements [23 CFR §771.111(f)(3)]. This means that a project must not dictate or restrict any future roadway alternatives. The proposed project would not restrict the consideration of alternatives for any other foreseeable transportation improvements as it is designed to function with or without any other roadway projects.
2.2.4.6 Planning Consistency

The project is listed in the 2023 UTP (TxDOT, 2022a), CAMPO 2045 RTP (CAMPO, 2020b), and CAMPO’s TIP 2021–2024 (CAMPO, 2020c). The CAMPO 2045 RTP shows planned road projects within its six-county boundary. Multiple projects, shown as committed, design, local, and preferred, are adjacent to the project limits. The goal for these projects is to enhance connectivity between I-35 and residential population centers. Additionally, the planned road projects would enhance alternative routes throughout the region. In the UTP, the project is described as “managed lanes and operational improvements through downtown Austin,” with limits from US 290 East to US 290 West/SH 71, for FY 2022–2025. In the RTP and TIP, the project is described as “add NB and SB non-tolled managed lanes, reconstruct ramps, improve FR, freight movements, and add auxiliary lanes” from US 290 East to US 290 West/SH 71. The project described herein is consistent with these documents. The Capital Express Central Project would not restrict or dictate any road projects within the 2023 UTP, CAMPO 2045 RTP, nor would it restrict or dictate other reasonably foreseeable transportation improvements related to the Mobility35 program, such as intersection improvements, turn-lane additions, road widenings, or increased bus/rail services. Future potential improvement projects could generally be accommodated within the I-35 Capital Express Central Project and would not be precluded by the proposed project.

2.2.5 Description of No Build Alternative

The No Build Alternative is still an option and is being carried forward as a baseline for comparison. At the end of this EIS process, if TxDOT Environmental Affairs Division (TxDOT ENV) decides that the No Build Alternative is the Preferred Alternative, I-35 would continue to exist as it does today and would continue to have standard, routine maintenance (existing I-35 is described above in Section 2.2.1). By 2045, I-35 traffic within the project limits is expected to reach 303,700 vpd, an increase of approximately 47 percent since 2019—according to traffic projections based on TxDOT-approved 2030 and 2050 AADT forecasts—and safety and mobility would continue to decline as population increases. In addition, the proposed bicycle/pedestrian facilities would not be constructed and east-west connectivity in the downtown area would not be improved. While it is assumed other transportation improvement projects in the UTP, RTP, and TIP would be implemented with the No Build Alternative, none of these would address the purpose and need for this project; the need for the project would still exist with the No Build Alternative. Although it does not meet the purpose and need of the project, the No Build Alternative was carried through the environmental impact analysis to assess the impacts of no action as a comparison to the build alternatives, as required by NEPA. The evaluation of the No Build Alternative by criterion is included in Table 2.2-1 below.

2.3 Comparison of Reasonable Alternatives and the No Build Alternative

This section describes the methodologies and level of detail for analyzing alternatives that were presented to cooperating and participating agencies and the public and how the process led to the reasonable alternatives to be carried forward in the DEIS. At the March 2021 scoping meeting (Scoping Meeting Number 2), TxDOT presented the methodologies and level of detail for analyzing alternatives. Evaluation criteria were presented including measurements of an alternative’s ability to meet the project purpose and need; high-level engineering criteria such as constructability, ROW needs, complexity of utility relocation and preliminary project costs; and
an evaluation of environmental resource impacts. The criteria evaluated quantifiable impacts such as the acres of ROW required, travel times, number of potential displacements, number of historic resources affected, and acres of park impacts for each alternative. Feedback on the criteria was solicited.

Based on comments received from participating and cooperating agencies and the public, four additional evaluation criteria were added to the alternatives evaluation process: measuring air quality impacts; measuring person-carrying capacity along mainlanes and HOV managed lanes, including vehicles and transit; measuring annual cost of travel; and accommodation of CapMetro’s service plan at east-west crossings. The travel demand study was also increased to a 2-mile radius to accommodate public/agency comments and a health and equity study was requested.

The first alternative screening (Alternatives Evaluation Report, Appendix I) included TxDOT-proposed Build Alternatives 1, 2, and 3 and the No Build Alternative. As a result of the evaluation, TxDOT determined that Alternative 1 would not be carried forward through the DEIS process. The 8.25-mile continuous proposed tunnel for Alternative 1 would limit access, provide fewer egress options, and delay emergency response times. Alternative 1 had high constructability risks, utility conflicts, and drainage infrastructure complexities due to the continuous tunnel, which would require multi-level and complex construction phasing as well as an additional 1.5 years of construction time. During construction for Alternative 1, the NB mainlanes would be reduced to just two lanes for multiple years. Finally, at an estimated $8.02 billion, Alternative 1 was approximately twice the cost of Alternatives 2 and 3, and at an estimated $14.4 million/year, almost seven times the annual cost to operate and maintain.

Build Alternative 2 and Modified Build Alternative 3 were proposed to be carried forward for further study in this DEIS, based on:

- Faster response times for EMS, police, and fire departments;
- Shorter construction duration by 1.5 years;
- Improved traffic operations during construction, with fewer lane closures;
- Fewer utility conflicts and lower relocation costs;
- Fewer drainage conflicts;
- Lower design-build costs; and
- Lower annual and lifetime maintenance requirements and costs.

The Alternatives Evaluation Report and the Alternatives Evaluation Criteria Comparison Table were presented at the public meeting. Afterward, further comment and feedback were used to inform design refinements to the build alternatives to minimize adverse effects to environmental resources, improve east-west connections, and improve traffic and safety, as discussed above in Section 2.2.2. Ultimately, Build Alternative 2 and Modified Build Alternative 3 (and the No Build) were identified to be carried forward in the DEIS and further analyzed, as detailed in Chapter 3. Table 2.2-1 lists the parameters and criteria used to measure these alternatives and to identify the Preferred Alternative. These criteria are based on those presented at the scoping meeting, with data derived...
from further design and a more in-depth analysis of each alternative’s impacts to the community, traffic and safety, construction, drainage and utilities, environmental resources, and costs. The Decisional Criterion column shows where one Build Alternative performed substantially better than the other and are described below Table 2.2-1.

The Build Alternatives propose the construction of additional SUPs and sidewalks, which would improve current pedestrian and bicycle access across the I-35 corridor (east-west). The proposed I-35 Capital Express Central Project would improve bicycle and pedestrian safety and would be designed to meet Americans with Disabilities Act (ADA) accessibility standards. The SUPs would be constructed with curbs between the SUP and the FR. The proposed project would improve pedestrian and bicycle connectivity to the existing transit options and accessibility would be increased for those traveling on foot or by bicycle. Additionally, the proposed project will comply with TxDOT’s Bicycle Accommodation Design Guidance. TxDOT’s Bicycle Accommodation Design Guidance implements both the USDOT and FHWA policy regarding bicycle and pedestrian accommodations. The proposed SUPs would intersect with COA’s existing and planned bicycle and pedestrian routes. The proposed project would provide further connections to this infrastructure, expanding connectivity within the project corridor. The SUPs would also provide additional connectivity to current transit options within the project corridor. COA is a stakeholder agency and TxDOT will continue to coordinate with them to reach shared objectives within the project corridor. TxDOT will also coordinate with the Independent School Districts and CapMetro during project design to minimize the temporary and permanent impacts to bicycle and pedestrian facilities. Additionally, TxDOT would accommodate or replace existing trails that are permanently impacted by the proposed project, as well as allow for planned future trails as shown on COA Bike Plan.
Table 2.2-1. Comparison of Reasonable Alternatives

<table>
<thead>
<tr>
<th>Criteria Description</th>
<th>Evaluation Parameters</th>
<th>Metrics/Units*</th>
<th>No Build Alternative</th>
<th>Build Alternative 2</th>
<th>Modified Build Alternative 3</th>
<th>Decisional Criterion** Yes/No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purpose and Need: Enhancing safety within the corridor</td>
<td>Supports TxDOT’s mission to cut traffic fatalities in half by 2035 and then entirely by 2050. Supports COA’s mission to eliminate traffic deaths and serious injuries on Austin streets.</td>
<td>Yes/No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>
| Aligned with additional local plans                                                  | Aligns or is consistent with the following local plans:  
**COA:** Strategic Mobility Plan, Vision Zero, Downtown Austin Plan, Parks Department Long-Range Master Plan, Imagine Austin Comprehensive Plan, Sidewalk Master Plan and ADA Transition Plan Update, Bicycle Master Plan, and **CAMPO RTP.** | Yes/No         | No                   |                     | Yes                          | No                            |
Table 2.2-1. Comparison of Reasonable Alternatives

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<th>Decisional Criterion** Yes/No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improve emergency response time for EMS, police, fire, and hospitals</td>
<td>Adequate ramps, detour routes for emergency vehicles</td>
<td>High/Medium/Low (High = more reliable response time, Low = delayed response time)</td>
<td>Low</td>
<td>High</td>
<td>High</td>
<td>No</td>
</tr>
<tr>
<td>Emergency egress requirements</td>
<td>Ability to provide emergency egress requirements.</td>
<td>High/Medium/Low (High = fewer requirements, Low = more requirements)</td>
<td>Low</td>
<td>High</td>
<td>High</td>
<td>No</td>
</tr>
<tr>
<td>Reduction in total crashes</td>
<td>Reduction in total crashes (all severities)</td>
<td>% change compared to No Build in 2030</td>
<td>N/A</td>
<td>-24%</td>
<td>-24%</td>
<td>No</td>
</tr>
<tr>
<td>Reduction in fatalities and injury crashes</td>
<td>Reduction in fatalities and injury crashes</td>
<td>% change compared to No Build in 2030</td>
<td>N/A</td>
<td>-34%</td>
<td>-29%</td>
<td>Yes - Build Alt 2</td>
</tr>
</tbody>
</table>

Purpose and Need: Addressing demand by prioritizing the movement of people, goods, and services through and across the corridor; improving operational efficiency

| Mainlanes travel time | Average 2030 p.m. peak hour NB/SB travel time along mainlanes between US 290 East and US 290 West/SH 71 | % change from No Build | N/A | -57% | -57% | No |
### Table 2.2-1. Comparison of Reasonable Alternatives

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</tr>
</thead>
<tbody>
<tr>
<td>HOV Managed lanes travel time</td>
<td>Average 2030 p.m. peak NB/SB travel time along HOV managed lanes between US 290 East and US 290 West/SH 71</td>
<td>Travel time (min.)</td>
<td>N/A (No HOV managed lanes provided)</td>
<td>9 min.</td>
<td>9 min.</td>
<td>No</td>
</tr>
<tr>
<td>Person-carrying capacity along mainlanes and HOV managed lanes, including vehicles and transit</td>
<td>Mainlane lane and HOV managed lane person capacity at given point along corridor</td>
<td>Person-carrying capacity (people per hour) (% change from No Build)</td>
<td>13,500 people/hour</td>
<td>33,600 people/hour (+149%)</td>
<td>33,600 people/hour (+149%)</td>
<td>No</td>
</tr>
<tr>
<td>Travel demand along adjacent transportation roadway network</td>
<td>Daily travel demand patterns/traffic volumes along major (MoPac, US 183) and minor (e.g., downtown arterials) parallel facilities to I-35 in 2045</td>
<td>Network distance traveled (daily vehicle-miles) (% change from No Build)</td>
<td>14,600,820 daily VMT</td>
<td>14,388,636 daily VMT (-1.5%)</td>
<td>14,342,150 daily VMT (-1.8%)</td>
<td>No</td>
</tr>
<tr>
<td>Annual cost of travel</td>
<td>Cost of travel based on daily vehicle-hours of travel along I-35 mainlanes and HOV managed lanes in 2045</td>
<td>Travel cost -Y2022 dollars (% change from No Build)</td>
<td>$606M</td>
<td>$534M (-12.0%)</td>
<td>$559M (-7.9%)</td>
<td>Yes - Build Alt 2</td>
</tr>
</tbody>
</table>
### Table 2.2-1. Comparison of Reasonable Alternatives

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<th>Decisional Criterion**</th>
<th>Yes/No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purpose and Need: Purpose and Need: Creating a more dependable and consistent route for the traveling public including bicyclists, pedestrians, emergency responders, and transit</td>
<td>Number of enhanced vehicular and bicycle crossings, bicycle- and pedestrian-only crossings, and pedestrian bridges (does not include local enhancements)</td>
<td>Number of improved/enhanced east-west crossings</td>
<td>0</td>
<td>23</td>
<td>26</td>
<td>Yes - Mod Build Alt 3</td>
<td></td>
</tr>
<tr>
<td>Improves east-west connectivity</td>
<td>Accommodates CapMetro’s service plan at east-west crossings</td>
<td>Ability to accommodate Project Connect’s proposed light-rail system at east-west crossings</td>
<td>Yes/No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Bicycle and Pedestrian accommodations</td>
<td>Maximum distance between crossings</td>
<td>Miles</td>
<td>0.85 mile</td>
<td>0.57 mile</td>
<td>0.57 mile</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improves facilities for disabled populations</td>
<td>Conforms with ADA and Texas Accessibility Standards.</td>
<td>High/Medium/Low (High = enhanced improvements Low = no improvements)</td>
<td>Low</td>
<td>High</td>
<td>High</td>
<td></td>
<td>No</td>
</tr>
</tbody>
</table>

---

2.0 Alternatives Including the Proposed Action

Draft Environmental Impact Statement
### Table 2.2-1. Comparison of Reasonable Alternatives

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<th>Decisional Criterion** Yes/No</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Feasibility, Design and Engineering</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complexity of Construction</td>
<td>Estimated construction complexity and duration</td>
<td>High/Medium/Low (High = more complexity Low = less complexity)</td>
<td>N/A</td>
<td>Medium-High</td>
<td>High</td>
<td>Yes - Build Alt 2</td>
</tr>
<tr>
<td>CapMetro Blue Line accommodation</td>
<td>Accommodates CapMetro Blue Line metro rail at Riverside Drive intersection</td>
<td>High/Medium/Low (High = greater mobility through Riverside Drive Low = lower mobility through Riverside Drive)</td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
<td>Yes - Mod Build Alt 3</td>
</tr>
<tr>
<td>Utility conflicts</td>
<td>Anticipated utility relocation effort</td>
<td>High/Medium/Low (High = more conflicts Low = fewer conflicts)</td>
<td>N/A</td>
<td>High</td>
<td>High</td>
<td>No</td>
</tr>
<tr>
<td>Drainage infrastructure complexity</td>
<td>Construction and maintenance of drainage infrastructure</td>
<td>High/Medium/Low (High = more complexity Low = less complexity)</td>
<td>N/A</td>
<td>High</td>
<td>High</td>
<td>No</td>
</tr>
</tbody>
</table>
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<th>Decisional Criterion** Yes/No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of affected parcels</td>
<td>Number of parcels with ROW impacts out of total number of adjacent parcels</td>
<td>Number</td>
<td>0 parcel impacts</td>
<td>218 impacted parcels of 952 adjacent parcels</td>
<td>190 impacted parcels of 933 adjacent parcels</td>
<td>Yes - Mod Build Alt 3</td>
</tr>
<tr>
<td>Amount of new ROW required</td>
<td>Acres of ROW (Environmental Study Area)</td>
<td>Acres</td>
<td>0 acres</td>
<td>45.2 acres</td>
<td>41.7 acres</td>
<td>Yes - Mod Build Alt 3</td>
</tr>
<tr>
<td>Total Displacements</td>
<td>Travis Central Appraisal District property data</td>
<td>Number of residential and commercial displacements</td>
<td>N/A</td>
<td>291 displacements (97 parcels)</td>
<td>107 displacements (72 parcels)</td>
<td>Yes - Mod Build Alt 3</td>
</tr>
<tr>
<td>Minimize residential displacements</td>
<td>Travis Central Appraisal District property data</td>
<td>Number of residential displacements</td>
<td>N/A</td>
<td>145 displacements (2 single-family; 5 multifamily structures with 143 multifamily units) (7 parcels)</td>
<td>26 displacements (2 single-family; 1 multifamily structure with 24 multifamily units) (3 parcels)</td>
<td>Yes - Mod Build Alt 3</td>
</tr>
<tr>
<td>Minimize commercial displacements</td>
<td>Travis Central Appraisal District property data</td>
<td>Number of commercial displacements</td>
<td>N/A</td>
<td>131 displacements (75 parcels)</td>
<td>69 displacements (57 parcels)</td>
<td>Yes - Mod Build Alt 3</td>
</tr>
<tr>
<td>Minimize minority and low-income displacements***</td>
<td>Travis Central Appraisal District property data and American Community Survey (ACS) Data</td>
<td>Number of potential minority and low-income displacements based</td>
<td>N/A</td>
<td>172 displacements (73 parcels)</td>
<td>90 displacements (58 parcels)</td>
<td>Yes - Mod Build Alt 3</td>
</tr>
</tbody>
</table>
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</tr>
</thead>
<tbody>
<tr>
<td>Minimize impacts to Affordable Housing units</td>
<td>Travis Central Appraisal District property data and ACS Data</td>
<td>Number of affordable housing unit displacements (apartments and condo units) below market value</td>
<td>N/A</td>
<td>61 displacements (1 parcel)</td>
<td>0 displacements</td>
<td>Yes - Mod Build Alt 3</td>
</tr>
<tr>
<td>Vacant Building Displacements</td>
<td>Travis Central Appraisal District property data</td>
<td>Number of displaced vacant buildings (at time of study 9/1/2022)</td>
<td>N/A</td>
<td>15 displacements (15 parcels)</td>
<td>12 displacements (12 parcels)</td>
<td>No</td>
</tr>
</tbody>
</table>
| Minimize visual impacts                     | Quality of views from frontage roads and cross streets     | High/Medium/Low  
(High = greater visual impact  
Low = lesser visual impact) | High                 | Low                        | Low                      | No                       |
<p>| Environmental Resources                     |                                                            |                                                                  |                      |                             |                             |                          |
| Archeological sites and cemeteries          | Risk and probability of encountering or disturbing sites   | Number of Archeological Sites and Cemeteries                     | N/A                  | 4 archaeological sites and 1 cemetery near project limits – No | 4 archaeological sites and 1 cemetery near project limits – No | No                       |</p>
<table>
<thead>
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<th>Decisional Criterion**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historic properties</td>
<td>Direct Impacts to historic properties/districts</td>
<td>Number of Historic Properties Directly Impacted</td>
<td>N/A</td>
<td>6 historic properties directly impacted (displaced) by ROW acquisition 1 historic property impacted by temporary construction easement – no adverse effect.</td>
<td>4 historic properties directly impacted (displaced) by ROW acquisition 1 historic property impacted by temporary construction easement – no adverse effect.</td>
<td>No</td>
</tr>
<tr>
<td>Hazardous materials</td>
<td>Number of potential regulated materials sites within 200 feet of the proposed footprint that may be disturbed.</td>
<td>Number of Hazardous Materials Sites</td>
<td>N/A</td>
<td>185</td>
<td>177</td>
<td>No</td>
</tr>
<tr>
<td>Traffic noise</td>
<td>Number of receptors impacted</td>
<td>Number</td>
<td>N/A</td>
<td>53</td>
<td>51</td>
<td>No</td>
</tr>
<tr>
<td>Traffic noise</td>
<td>Number of proposed noise barriers</td>
<td>Number</td>
<td>N/A</td>
<td>8</td>
<td>9</td>
<td>No</td>
</tr>
</tbody>
</table>
Table 2.2-1. Comparison of Reasonable Alternatives

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<th>Decisional Criterion** Yes/No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Quality</td>
<td>Verify no Carbon Monoxide (CO) exceedances of the National Ambient Air Quality Standards (NAAQS) and overall Mobile Source Air Toxics (MSATs) reduction in the future</td>
<td>High/Medium/Low (High = more Air Quality impacts Low = fewer Air Quality impacts)</td>
<td>N/A</td>
<td>Low for 2030 and 2050; Low for both years at the intersections</td>
<td>Low for both 2030 and 2050; Low for both years at the intersections</td>
<td>No</td>
</tr>
<tr>
<td>GHG</td>
<td>Construction, maintenance and operational GHG emitted</td>
<td>Annual amount of GHG (by metric ton)</td>
<td>N/A</td>
<td>410,448 Metric Tons</td>
<td>420,561 Metric Tons</td>
<td>No</td>
</tr>
<tr>
<td>Parks purchased with Land and Water Conservation Funds impacts</td>
<td>Acres of Section 6(f) park impacts</td>
<td>Acres</td>
<td>N/A</td>
<td>1.90 total (1.20 Waller Beach; 0.70 Edward Rendon Park)</td>
<td>1.90 total (1.20 Waller Beach; 0.70 Edward Rendon Park)</td>
<td>No</td>
</tr>
<tr>
<td>Park impacts</td>
<td>Acres of Section 4(f) park impacts</td>
<td>Acres</td>
<td>N/A</td>
<td>0.71 International Shores_3 1.20 Waller Beach 0.70 Edward Rendon Park 0.57 Norwood Park 3.18 ACRES TOTAL</td>
<td>0.70 International Shores_3 1.20 Waller Beach 0.70 Edward Rendon Park 0.57 Norwood Park 3.17 ACRES TOTAL</td>
<td>No</td>
</tr>
</tbody>
</table>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>25 acres LBL waters and shoreline (recreation area)</td>
<td>25 acres LBL waters and shoreline (recreation area)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1,255 feet Ann &amp; Roy Butler Trail</td>
<td>1,207 feet Ann &amp; Roy Butler Trail</td>
<td></td>
</tr>
<tr>
<td><strong>Local Enhancements</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potential Deck Plaza Local Enhancements</td>
<td>Number of potential deck plaza enhancements accommodated</td>
<td>Number</td>
<td>0</td>
<td>6</td>
<td>8</td>
<td>Yes - Mod Build Alt 3</td>
</tr>
<tr>
<td>Potential Deck Plaza Local Enhancements</td>
<td>Acres of potential deck plaza enhancements accommodated</td>
<td>Acres</td>
<td>0</td>
<td>14.6</td>
<td>33.9</td>
<td>Yes - Mod Build Alt 3</td>
</tr>
<tr>
<td>Incorporates community alternatives</td>
<td>Includes boulevard section, bicycle and pedestrian facilities, shade structures, wide buffers between vehicle and non-vehicular traffic</td>
<td>High/Medium/Low (High = more aligned with community alternatives Low = less aligned with community alternatives)</td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
<td>Yes - Mod Build Alt 3</td>
</tr>
<tr>
<td>Access to Potential Deck Plazas</td>
<td>Would provide direct access to potential deck plazas</td>
<td>High/Medium/Low (High = greater access to potential deck)</td>
<td>N/A</td>
<td>Medium</td>
<td>High</td>
<td>Yes - Mod Build Alt 3</td>
</tr>
</tbody>
</table>
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<th>Decisional Criterion** Yes/No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimize construction cost</td>
<td>Preliminary construction cost estimate</td>
<td>Dollars</td>
<td>N/A</td>
<td>$4.45B</td>
<td>$4.50B</td>
<td>No</td>
</tr>
<tr>
<td>Minimize operation and maintenance cost</td>
<td>Preliminary operation and maintenance cost estimate</td>
<td>Dollars</td>
<td>$1.7M</td>
<td>$4.6M</td>
<td>$4.8M</td>
<td>No</td>
</tr>
</tbody>
</table>

* High/Medium/Low metrics were used for measuring criteria where exact values/quantities were unavailable. The subjective terms represent professional experience and judgment. These decisions are discussed in more depth in the text descriptions of the evaluation criterion below.

**Decisional Criterion – Where one Build Alternative performed substantially better than another.

***EJ displacements conservatively include those within a Census block with 50% or greater minority population, a Census block group where the median household income (MHI) is below the U.S. Department of Health and Human Services (HHS) poverty level, or a Census tract where the percentage of those in poverty is significantly greater than the poverty level within Travis County, with the understanding that not all such displaced persons or businesses may actually be EJ persons or businesses.
2.4 Identification of the Preferred Alternative

Build Alternative 2, Modified Build Alternative 3, and the No Build Alternative were evaluated throughout the DEIS process to determine their effects on the natural and human environments, as well as their ability to meet the proposed project’s purpose and need. As shown in Table 2.2-1, both build alternatives performed well against the No Build Alternative in several important criteria within the Purpose and Need performance measure, including:

- Alignment with TxDOT’s Road to Zero and COA’s Vision Zero (COA, 2016) safety initiatives through improved safety, compliance with current design standards, better ramp and weave distances, and lowered design speeds. The build alternatives would also improve pedestrian safety by providing new SUP and improving pedestrian visibility at crossing locations.

- Alignment with other local plans such as Austin Strategic Mobility Plan (COA, 2019a), Downtown Austin Plan, Parks Development Long-Range Master Plan, Imagine Austin Comprehensive Plan (COA, 2018b), Sidewalk Master Plan and ADA Transition Plan Update, Bicycle Master Plan, and CAMPO RTP. For example, the addition of HOV managed /transit lanes addresses Austin Strategic Direction 2023’s goal of discouraging driving alone.

- Improved emergency response times for EMS, police, fire, and hospitals through decreased travel time and access to HOV managed lanes. The build alternatives would provide direct access from the HOV managed lanes to the frontage roads near major regional health care facilities, and wider shoulder widths would improve emergency vehicles’ maneuverability.

- Improved travel time along the main and HOV managed lanes, with a 57 percent decrease in the mainlane travel time and a 9-minute decrease in the HOV managed lane travel time.

- Improved person-carrying capacity by 149 percent compared to the current facilities.

- Decreased travel demand along adjacent roadway network by 1.5 percent for Build Alternative 2 and 1.8 percent for Modified Build Alternative 3.

- Accommodation of CapMetro’s service plan at east-west crossings. Both build alternatives accommodate the proposed Blue Line crossing at Riverside Drive and provide grade separation (with mainlanes, ramps, and frontage roads) of the Red Line at Airport Boulevard and 4th Street.

- Decreased distance between bicycle and pedestrian crossings compared to the No Build.

- Improved facilities, such as sidewalks and SUPs, for disabled populations through compliance with current ADA regulations.

Within the Feasibility, Design, and Engineering performance measure, both build alternatives have similar utility conflicts and drainage infrastructure complexity when compared to the No Build. Under the Environmental Resources performance measure, both build alternatives have similar visual impacts, similar impacts to cultural resources, similar impacts to air quality, to parks, and from traffic noise. Impacts from GHG emissions, while higher for Modified Build Alternative 3, were found to be a non-decisional criterion due to the fact that traffic forecasts are not able to accurately predict mode shifts from non-single occupant vehicle travel to transit, bicycle,
and/or pedestrian transport modes, and such mode shifts are not reflected in the GHG emission estimates. Both build alternatives offer similar improvements for transit, bicycle, and pedestrian facilities when compared to the No Build Alternative and therefore, are not differentiated.

The alternatives evaluation also pointed out differences that were used to inform the decisional criteria in the screening process, where one alternative performed better than the other. Under the purpose and need performance measure, the alternatives were compared for their “Reduction in fatalities and injury crashes.” FHWA’s Interactive Highway Safety Design Model (IHSDM) software was used to assess safety impacts of each build alternative. IHSDM uses *Highway Safety Manual* safety performance functions along with roadway design elements (e.g., lateral clearance to concrete traffic barriers) of no build and proposed alternative conditions to determine relative differences in anticipated fatal and injury crashes along mainlanes (managed and general purpose) and ramps, and at interchanges (e.g., diamond intersections). Future year (2030) conditions were analyzed, based on approved daily traffic forecasts for each link within the study area. Appendix H contains crash data, traffic projections, and a traffic safety analysis.

IHSDM results showed fatal and injury crash reductions of 34 percent under Build Alternative 2 compared to the No Build Alternative. Under Modified Build Alternative 3, that reduction is 29 percent compared to the No Build. While the safety benefits of both build alternatives are evident, Build Alternative 2 does provide for a slightly greater decrease in predicted fatal and injury crashes, due in part to:

- Fewer conflict points, especially crossing conflicts that tend to lead to more severe crashes, at frontage road diamond intersections compared to boulevard standard four-way intersections. For instance, a standard intersection has 16 crossing conflict points (those not between vehicles traveling in the same direction), while a diamond intersection has 10 (5 at each of the two intersections composing the diamond), due in part to removal of many left-turn conflicts at the frontage road approaches.
- Lower frontage road traffic volumes, and thus potential conflicts, at spot locations (e.g., Woodland Avenue).
- No ingress/egress allowed between managed and mainlanes (one location in each direction, near Riverside Drive, is provided under Modified Build Alternative 3).

IHSDM, however, does not account for safety impacts of individual driveways; the lower numbers of driveways and access points in the downtown boulevard section under Modified Build Alternative 3 reduces the number of conflict points along the corridor, benefitting safety. Under the Feasibility, Design and Engineering performance measure, each alternative was evaluated for its complexity of construction; its accommodation of the CapMetro Blue Line; utility conflicts; drainage infrastructure complexity; number of affected parcels; and the amount of new ROW required. Within this criteria grouping, the following were identified as decisional criteria, where one build alternative performed better than the other and helped inform the Preferred Alternative.

- Build Alternative 2 performs better under Complexity of Construction. This criterion evaluated the estimated difficulty and duration of construction as a high/medium/low measurement where high signifies more complex and longer construction time. Build Alternative 2 scored as “medium-high” since it does not include frontage road shifts in the downtown area to create a boulevard section that Modified...
Build Alternative 3 does. Modified Build Alternative 3 scored “high” as it does accommodate the boulevard section.

- Under the Improves East-West Crossings criterion, the number of enhanced vehicular, bicycle and pedestrian crossings (not including local enhancements) was measured for each alternative. Modified Build Alternative 3 would provide 26 total east-west crossings, three more than Build Alternative 2, which would provide 23. Additional east-west crossings, including SUP, vehicular, bicycle and pedestrian crossings for Modified Build Alternative 3 include 3rd Street, 15th Street, and 41st Street.

- Under CapMetro Blue Line Accommodation criterion, alternatives were measured by a high/medium/low ranking for their ability to accommodate the Blue Line metro rail at the Riverside Drive intersection. Here, Modified Build Alternative 3 scored “high” as it would provide greater mobility through Riverside Drive at the Blue Line due to the proposed construction of a SPUI at this location, which would allow for north-south movement through the intersection without stopping during train crossings. Build Alternative 2 scored “medium,” as without the SPUI at Riverside Drive, it would not accommodate the Blue Line and there would be lower mobility.

- Under Number of Affected Parcels and Amount of New ROW required, Modified Build Alternative 3 outperformed Build Alternative 2 as it would impact 193 parcels and would require 41.7 acres of new ROW, while Build Alternative 2 would impact 220 parcels and require 45.2 acres of new ROW.

The next criteria group represents Environmental Resources. Criteria within this group measured total displacements; ability to minimize displacements including residential, commercial, minority, and low-income, and affordable housing units; impacts to cultural resources; impacts from hazardous materials and traffic noise; impacts related to air quality and GHGs; and impacts to parks [Sections 4(f) and 6(f)]. Decisional criteria are:

- Under the displacement criteria, Modified Build Alternative 3 would displace fewer residences and businesses than Build Alternative 2, including:
  - 26 residential displacements (2 single-family structures and 1 multifamily structure with 24 units) for Modified Build Alternative 3 versus 145 (2 single-family and 5 multifamily structures with 143 units) for Build Alternative 2;
  - 69 commercial displacements for Modified Build Alternative 3 versus 131 for Build Alternative 2;
  - 90 minority and low-income displacements for Modified Build Alternative 3 (residential and commercial) versus 172 for Build Alternative 2 (it should be noted that the number of displacements identified is conservatively based on the demographics of the Census block or block group on which the displacement occurs and not all such displaced persons or businesses located in Environmental Justice (EJ) blocks or block groups may actually be minority or low-income persons or businesses);
  - Zero affordable housing units for Modified Build Alternative 3 versus 61 for Build Alternative 2.

Under the Local Enhancements criteria, each alternative was measured for its ability to accommodate potential deck plaza and local enhancements proposed and paid for by others; its ability to incorporate community alternatives, and its ability to provide access to deck plazas. All three criteria under this grouping were considered decisional:
The Deck Plaza Local Enhancements criterion were divided into two measurements: one for the number of potential deck plazas accommodated by each alternative and one for the acres of deck plaza enhancements. Modified Build Alternative 3 performed better for both, with eight separate deck plazas equaling 33.9 acres as compared to Build Alternative 2, which allows for six separate deck plazas equaling 14.6 acres.

Modified Build Alternative 3 also better incorporates the community-provided alternatives when measured as a high/medium/low ranking, which included an evaluation of the following features: frontage road boulevard sections, bicycle and pedestrian facilities, shade structures, and wide buffers between vehicle and non-vehicular traffic including enhanced bicycle and pedestrian facilities and enhanced stitch bridge crossings. Modified Build Alternative 3 would provide frontage road boulevard sections while Build Alternative 2 would not. Modified Build Alternative 3 would also provide more enhanced bridges.

Modified Build Alternative 3 would provide greater access to potential deck plaza areas by providing easier access to deck plazas whereas Build Alternative 2 would require crossing a frontage road at some locations in order to access the deck plazas. Specifically at Palm Park, between 3rd and 4th Streets, Modified Build Alternative 3 would lower frontage roads under proposed deck plazas, thereby providing direct bicycle/pedestrian access over I-35 without having to cross traffic.

Modified Build Alternative 3 is the Preferred Alternative as it meets the need of the proposed project to accommodate current and future travel demand, bring the highway to current federal and state design standards, and improve safety and operational deficiencies and reduce crash rates in comparison to the No Build. Modified Build Alternative 3 also meets the need to lower peak period travel times for all users, including emergency response vehicles and transit along I-35 within the project limits. Modified Build Alternative 3 meets the purpose of the proposed project to improve I-35 by enhancing safety; prioritizing the movement of people, goods, and services through and across the corridor; improving operational efficiency; and creating a more dependable and consistent route for the traveling public, including bicyclists, pedestrians, emergency responders, and transit. In addition to meeting the purpose and need, Modified Build Alternative 3 also has fewer impacts than Build Alternative 2 when taking into consideration design and engineering, environmental resources, and local enhancements.

After identifying Modified Build Alternative 3 as the Preferred Alternative, it was developed to a higher level of detail than other reasonable alternatives to facilitate the development of mitigation measures and concurrent compliance with other applicable laws, as provided for by 23 USC §139(f)(4)(D). Development of such a higher level of detail will not prevent TxDOT from making an impartial decision as to whether to accept another alternative.
3.0 Affected Environment and Environmental Consequences

In support of this EIS, the following technical documentation was prepared:

- Transportation Equity and Access Studies (Appendix K)
- Archeological Background Study
- Individual Section 4(f) Evaluation (Appendix M)
- Section 6(f) Evaluation
- Park Non-conforming Use Application, Waller Beach at Town Lake Metro Park (Waller Beach) Conversion (Appendix M)
- Surface Water Analysis Form and Section 404 Impacts Table, Waters of the U.S. (WOTUS) and Wetlands Delineation Report (Appendix N)
- Species Analysis Form, Species Analysis Spreadsheet, TPWD Rare, Threatened, and Endangered Species of Texas, USFWS Information for Planning and Consultation (IPaC) (Appendix O)
- Carbon Monoxide Traffic Air Quality Analysis (CO TAQA) (Appendix P)
- Hazardous Materials Initial Site Assessment (ISA) Form (Appendix Q)
- Traffic Noise Analysis Report (Appendix R)
- Delphi Panel Summary Report (Appendix S)
- GHG Analysis Climate Change Assessment (Appendix V)

3.1 Right-of-Way/Displacements

The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 as amended (Uniform Act) contains specific requirements that determine the manner in which a government entity acquires private property for public use when federal funds are used for a project. The purpose of this act is to provide a uniform policy for fair and equitable treatment of persons and businesses displaced as a result of federal and federally-assisted programs in accordance with the following objectives:

- To ensure that owners of real property to be acquired for federal and federally-assisted projects are treated fairly and consistently, to encourage and expedite acquisition by agreements with such owners, to minimize
litigation and relieve congestion in the courts, and to promote public confidence in federal and federally-assisted land acquisition programs.

To ensure that persons displaced as a direct result of federal and federally-assisted projects are treated fairly, consistently, and equitably so that such persons will not suffer disproportionate injuries as result of projects designed for the benefit of the public.

The potential for displacements and relocations resulting from the I-35 Capital Express Central Project were identified using schematics dated April 8, 2022, and based on information provided by project engineers as a result of design changes implemented to reduce ROW needs and avoid and minimize displacements. HDR conducted a Geographic Information System (GIS) desktop review to identify potentially affected parcels. Displacements could change as design progresses. ROW acquisition would generally occur in small strips along the existing I-35 facility, and most of the displacements would be properties abutting the I-35 corridor.

3.1.1 Environmental Consequences

3.1.1.1 Build Alternative 2

Build Alternative 2 would require the acquisition of approximately 45.2 acres of additional ROW. Temporary and permanent easements would be required in the amount of approximately 3 acres for construction staging, and approximately 25 acres of Lady Bird Lake and shoreline, which would be restricted from recreation during construction to allow for movement of construction equipment.

The ROW acquisition would result in 291 displacements: 131 commercial properties, 145 residential properties, and 15 properties that were currently vacant. Displacements were calculated based on design drawings from April 8, 2022. Figures showing the locations of proposed displacements are included in as Figure 3.6-6 in Section 3.6. Tables showing the displacements for each alternative are included in Appendix J.

Of the 131 commercial displacements, 16 businesses serve a specific population, including minority or Spanish speaking, low-income, or children. The proposed displacements for Build Alternative 2 would include eight community facility displacements (these are included as commercial in the counts above): CommUnityCare – David Powell Health Center, CommUnityCare – Hancock Walk-In Care, Austin VA Veteran’s Center, Pathways Youth and Family Services, Texas State Independent Living Council, Escuelita del Alma, Copernicus STEM Academy Delwood Campus, and Extend-A-Care. At this time, it is unknown whether or not these facilities would be able to relocate within the community. Losing daycare and healthcare facilities within the Community Study Area is of concern for residents who may have difficulty finding replacement resources within the nearby area. The public involvement team is currently in the process of contacting community facilities that may potentially be displaced. TxDOT will continue to work with these facilities throughout the acquisition process, and TxDOT is committed to working with these critical facilities to find alternate locations near their current locations, when possible. TxDOT is currently looking at providing advanced relocation assistance for selected properties to minimize impacts to underserved communities. Federal regulations allow rental assistance supplement to residential tenants, but not for business tenants. As mitigation to the eight businesses within EJ areas who are
tenants, TxDOT is offering rental assistance supplement to these businesses that serve a specific community. Rental assistance supplement includes finding a comparable business location and opportunity for additional rental price differential over what they are currently paying, within limits, for 42 months. At this point, communication with the two CommUnityCare facilities and Escuelita del Alma, has been initiated. Please see Section 3.6.10 for a discussion on EJ.

Displacements, relocation, and property acquisition would be handled according to the Uniform Act of 1970, as amended.

3.1.1.2 Modified Build Alternative 3

Modified Build Alternative 3 would require the acquisition of approximately 41.7 acres of additional ROW. Temporary and permanent easements would be required in the amount of approximately 3 acres for construction staging, and approximately 25 acres of Lady Bird Lake and shoreline, which would be restricted from recreation during construction to allow for movement of construction equipment.

The ROW acquisition would result in 107 displacements: 69 commercial properties, 26 residential properties, and 12 properties that were currently vacant. Displacements were calculated based on design drawings from April 8, 2022. Figures showing the locations of proposed displacements are included as Figure 3.6-6 in Section 3.6. Tables showing the displacements for each alternative are included in Appendix J.

Of the 69 commercial displacements, eight businesses serve a specific population, including minority or Spanish speaking, low-income, or children. The proposed displacements for Modified Build Alternative 3 would include three community facility displacements (these are included as commercial in the counts above): CommUnityCare – David Powell Health Center, CommUnityCare – Hancock Walk-In Care, and Escuelita del Alma. At this time, it is unknown whether or not these facilities would be able to relocate within the community. Losing daycare and healthcare facilities within the Community Study Area is of concern for residents who may have difficulty finding replacement resources within the nearby area. The public involvement team is currently in the process of contacting community facilities that may potentially be displaced. TxDOT will continue to work with these facilities throughout the acquisition process and TxDOT is committed to working with these critical facilities to find alternate locations near their current locations, when possible. TxDOT is currently looking at providing advanced relocation assistance for selected properties to minimize impacts to underserved communities. Federal regulations allow rental assistance supplement to residential tenants, but not for business tenants. As mitigation to the eight businesses within EJ areas who are tenants, TxDOT is offering rental assistance supplement to these businesses that serve a specific community. Rental assistance supplement includes finding a comparable business location and opportunity for additional rental price differential over what they are currently paying, within limits, for 42 months. At this point, communication with the two CommUnityCare facilities and Escuelita del Alma, has been initiated. Please see Section 3.6.10 for a discussion on EJ.

Displacements, relocation and property acquisition would be handled according to the Uniform Act of 1970, as amended.
3.1.1.3 Alternative Comparison

Table 3.1-1 includes a comparison of ROW requirements between Build Alternative 2 and Modified Build Alternative 3, and Table 3.1-2 is a comparison of displacements between the two build alternatives. To mitigate impacts and in response to stakeholder input, Modified Build Alternative 3 was redesigned to reduce the required ROW overall and minimize the number of residential and commercial displacements as is shown by the large reduction in displacements between Build Alternative 2 and Modified Build Alternative 3. TxDOT is making an effort to assist community facilities that are being potentially displaced to find alternate locations near their current locations. No advanced acquisition of ROW has occurred, but TxDOT is looking at advanced relocation assistance for selected properties to minimize impacts to underserved communities and mitigate impacts. For more information about displacements including the location of proposed ROW acquisition and displacements, see Section 3.6.

Table 3.1-1. Alternative Comparison for ROW

<table>
<thead>
<tr>
<th>Proposed Build Alternative</th>
<th>ROW Required (no Displacement) (Acres)</th>
<th>ROW Required (Resulting in Displacement) (Acres)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Build Alternative 2</td>
<td>16.1</td>
<td>28.9</td>
<td>45.0*</td>
</tr>
<tr>
<td>Modified Build Alternative 3</td>
<td>17.1</td>
<td>24.4</td>
<td>41.5*</td>
</tr>
</tbody>
</table>

*Calculations are based on varying use of significant digits, which account for discrepancies of the totals.

Table 3.1-2. Alternative Comparison for Displacements

<table>
<thead>
<tr>
<th>Proposed Build Alternative</th>
<th># Community Facility*</th>
<th># Commercial **</th>
<th># Serve a Specific Community</th>
<th># Single-Family</th>
<th># Multi-Family (Units)</th>
<th>EJ***</th>
</tr>
</thead>
<tbody>
<tr>
<td>Build Alternative 2</td>
<td>8</td>
<td>131</td>
<td>16</td>
<td>2</td>
<td>143</td>
<td>172</td>
</tr>
<tr>
<td>Modified Build Alternative 3</td>
<td>3</td>
<td>69</td>
<td>8</td>
<td>2</td>
<td>24</td>
<td>90</td>
</tr>
</tbody>
</table>

* Build Alternative 2 displaced community facilities: David Powell Health Center, Hancock Walk-In Care, Escuelita del Alma, Pathways Youth and Family Services, Texas State Independent Living Council, Copernicus STEM Academy Delwood Campus, Austin VA Vets Center, and Extend-A-Care.

* Modified Build Alternative 3 displaced community facilities: David Powell Health Center, Hancock Walk-In Care, and Escuelita del Alma.

**Commercial parcel displacements would also include community facility displacements. Community facilities may be located within buildings or complexes that would be displaced, but also include other businesses.

***EJ displacements conservatively include those within a Census block with 50% or greater minority population, a Census block group where the median household income (MHI) is below the U.S. Department of Health and Human Services (HHS) poverty level, or a Census tract where the percentage of those in poverty is significantly greater than the poverty level within Travis County, with the understanding that not all such displaced persons or businesses may actually be EJ persons or businesses.
3.1.1.4 No Build Alternative

No new ROW would be acquired for the No Build Alternative; therefore, no displacements or relocations would occur.

3.2 Land Use

Existing land use surrounding the I-35 corridor is highly developed and consists of commercial, residential, institutional, governmental, and parks/open space properties. Higher density urban land uses are located in the vicinity of downtown, specifically from MLK Jr. Boulevard to Lady Bird Lake. Three cemeteries are located adjacent to the project corridor. Residential land uses primarily consist of apartments/condominiums, duplexes, and single-family residences. Industrial land uses are located primarily on the east side of I-35, north of Lady Bird Lake, and adjacent to the proposed Cesar Chavez drainage outfall. Parks and open spaces are scattered throughout the corridor with the majority located in the vicinity of Lady Bird Lake.

Planned actions in the area include a variety of transportation and development projects. See Section 3.15, Table 3.15-4 for a list of planned transportation and transit projects listed in the RTP and Table 3.15-2 for a list of planned developments. Induced growth impacts are addressed in Section 3.15.

To mitigate land use impacts and in response to stakeholder input, Modified Build Alternative 3 was redesigned to reduce the required ROW overall and minimize the impacts of residential and commercial displacements as is shown by the large reduction in displacements between Build Alternative 2 and Modified Build Alternative 3.

3.2.1 Environmental Consequences

3.2.1.1 Build Alternative 2

Build Alternative 2 would convert approximately 48 acres of existing urban land use to transportation use, including approximately 3 acres of temporary and permanent construction staging easements. In addition, approximately 25 acres of Lady Bird Lake and shoreline would be restricted from recreation during construction to allow for movement of construction equipment. Approximately 40 acres of existing commercial land use, 2 acres of existing residential land use, and 2 acres of vacant land use would be converted to transportation use. Calculations are based on varying use of significant digits, which account for the discrepancy of one acre of impacted land uses. All impacts from the construction staging areas would be temporary and would be restored to pre-construction conditions before or following the project’s approximately 8-year construction duration. Section 3.9 discusses Protected Lands, including parkland.

3.2.1.2 Modified Build Alternative 3

Modified Build Alternative 3 would convert 45 acres of existing urban land use to transportation use including approximately 3 acres of temporary and permanent construction staging easements. In addition, approximately 25 acres of Lady Bird Lake and shoreline would be restricted from recreation during construction to allow for movement of construction equipment. Approximately 38 acres of existing commercial land use, 1 acre of existing residential land use and 2 acres of existing vacant land use would be converted to transportation use.
Calculations are based on varying use of significant digits, which account for the discrepancy of one acre of impacted land uses. All impacts from the construction staging areas would be temporary and would be restored to pre-construction conditions before or following the project’s approximately 8-year construction duration. Section 3.9 discusses Protected Lands, including parkland.

3.2.1.3 No Build Alternative

Under the No Build Alternative, there would be no impact on existing or planned land uses within the project area. See Section 3.16.4.3 for a complete discussion on reasonably foreseeable actions.

3.3 Farmlands

The Farmland Protection Policy Act (FPPA) was intended to minimize the contribution of federal programs to the unnecessary conversion of prime and important farmlands to nonagricultural uses.

3.3.1 Environmental Consequences

3.3.1.1 Build Alternatives

There are no prime farmland units within the project area. Additionally, the project area is located within a Census-designated urbanized area; therefore, the project is not subject to the conditions of the FPPA, and no regulatory protection of prime farmlands is afforded.

3.3.1.2 No Build Alternative

Under the No Build alternative, no ROW would be acquired and, therefore, no farmland would be converted to non-agricultural uses.

3.4 Utility Relocation

3.4.1 Build Alternatives

It is reasonably foreseeable that utilities would have to be relocated as a result of Build Alternative 2 or Modified Build Alternative 3. For each of these alternatives, the impacts resulting from removal of any utilities from within existing highway ROW (e.g., construction noise, potential disturbance to archeological resources, and potential impacts to species habitat) have been considered as part of the overall project footprint impacts within this DEIS.

It has not yet been determined whether the dislocated utilities would be reinstalled within the highway ROW, or to a location outside the highway ROW for Build Alternative 2 or Modified Build Alternative 3. However, the potential impacts resulting from reinstallation of the displaced utilities within the highway ROW have been considered as part of the overall project footprint impacts (e.g., construction noise, potential disturbance to archeological resources, and potential impacts to species habitat) within this EIS. To the extent that the owner of any displaced utility determines to reinstall the displaced utility at a location outside of highway ROW, such location would be determined by the owner of the utility subject to the rules and policies governing the utility relocation process. Additionally, the owner of the utility would be responsible for acquiring any easements...
outside the highway ROW and ensuring that the design and construction meet all regulatory and environmental compliance requirements. See 43 Texas Administrative Code (TAC) 21.37(a)(9), (g)(1), and (g)(4); 43 TAC 21.38(e)(2).

3.4.2 No Build Alternative

Under the No Build alternative, there would be no relocation of utilities.

3.5 Bicycle and Pedestrian Facilities

Bicycle and pedestrian facilities comprising sidewalks, trails, bicycle lanes, and crossings are located along and intersect the I-35 Capital Express Central Project corridor. The bicycle and pedestrian facilities are limited in the north and south extents of the project corridor; as the corridor reaches central Austin, the presence of facilities increases. COA, through its Bicycle and Pedestrian Program is working to make walking and biking, safe, connected, and appealing to people of all ages and abilities. COA is also working to complete its bicycle network guided by the 2014 Austin Bicycle Plan and to address inadequacies in the sidewalk system.

Sidewalks along the corridor and SUP in downtown Austin, between MLK Jr. Boulevard and Holly Street, are used by residents to access businesses and community facilities within the project area. The pedestrian facilities within the study area include off-street urban trails, sidewalks along roadways, pedestrian signals, curb ramps, and crosswalks. Urban trails are wide paved trails which are often separated from on-street traffic and are built to connect with the existing sidewalk and bicycle facilities. Several existing and proposed urban trails are located within or partially within the project area, including the Mueller Trail, the Red Line Trail, 183 Tollway SUP, the Southern Walnut Creek Trail, the Lance Armstrong Bikeway, the proposed Colorado River Trail, Boardwalk Trail, Butler Hike and Bike Trail, Country Club Creek Trail, and the proposed East Ben White Boulevard Corridor. While used by the public to support recreational activities, bikeways and SUPs are not protected by Section 4(f) because these properties are used for transportation facilities and not officially designated for recreational use. As discussed in the Section 4(f) Evaluation (Appendix M) and according to 23 CFR Section 774.14 a Section 4(f) property as “publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance, or land of an historic site of national, State, or local significance.” FHWA interprets this definition as follows: “Publicly owned land is considered to be a park, recreation area or wildlife and waterfowl refuge when the land has been officially designated as such by a Federal, State, or local agency, and the officials with jurisdiction over the land determine that its primary purpose is as a park, recreation area, or refuge.” According to the FHWA Policy Paper at Question 15A bikeways and SUPs are integral parts of the local transportation system; therefore, the requirements of Section 4(f) do not apply to them as they are not recreational areas. However, in recognition of the fact that these bikeways and SUPs provide connectivity to the Butler Hike and Bike Trail on both sides of the lake, TxDOT included these bikeways and SUPs in the Section 4(f) evaluation (Appendix M).

Existing bicycle and pedestrian facilities also serve micromobility, which incorporates electric bicycles and scooters that are available for rent and are not required to be returned to a central location. Examples include Lime and Bird scooters and the CapMetro MetroBike. Austin began collecting data on micromobility use in 2019. Over the past four years, 10 million trips have been recorded, at an average of approximately 9,000 trips per day; these trips are usually less than 10 minutes long and between a half-mile and a mile. CapMetro and TxDOT...
are both working on programs to acknowledge this form of mobility as a component of the solution for last-mile challenges, referring to the “last mile” of travel between transit stations and home or places of work.

A quantitative analysis from the EPA National Walkability Index (Index) to evaluate walkability within each neighborhood in the study area was completed in April 2022 (Table 3.5-1 and Appendix K). The Index dataset assigns a score to each U.S. Census Bureau (USCB) Block Group in the United States; the score is based on three variables: (1) intersection density, (2) proximity to transit stops, and (3) diversity of land uses (employment mix and employment and household mix). The Index places block groups in 20 quantiles for each variable, 1 being the lowest and 20 being the highest. Block groups that are less walkable have lower scores (closer to 1), and block groups that are more walkable have higher scores (closer to 20). Thirty neighborhoods within the project area were evaluated and scored based on the three variables.

### Table 3.5-1. EPA Walkability Index for I-35 Capital Express Central Neighborhoods in the Study Area

<table>
<thead>
<tr>
<th>Geography/Neighborhood in Study Area</th>
<th>National Walkability Index Score or Score Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highland</td>
<td>11.8 to 18.7</td>
</tr>
<tr>
<td>St. John</td>
<td>11.6 to 14.6</td>
</tr>
<tr>
<td>Coronado Hills</td>
<td>9.1 to 13.1</td>
</tr>
<tr>
<td>University Hills</td>
<td>10.5 to 14</td>
</tr>
<tr>
<td>Windsor Park</td>
<td>11.6 to 18.5</td>
</tr>
<tr>
<td>Pecan Springs-Springdale</td>
<td>9.1 to 13.5</td>
</tr>
<tr>
<td>MLK-183</td>
<td>10.5 to 14</td>
</tr>
<tr>
<td>North Loop</td>
<td>13.5 to 17.1</td>
</tr>
<tr>
<td>Mueller</td>
<td>19</td>
</tr>
<tr>
<td>Upper Boggy Creek</td>
<td>13.6 to 18</td>
</tr>
<tr>
<td>MLK</td>
<td>9.5 to 17</td>
</tr>
<tr>
<td>Hancock</td>
<td>13.6 to 18.8</td>
</tr>
<tr>
<td>UT</td>
<td>18.8</td>
</tr>
<tr>
<td>Chestnut</td>
<td>15.6 to 16.6</td>
</tr>
</tbody>
</table>
Table 3.5-1. EPA Walkability Index for I-35 Capital Express Central Neighborhoods in the Study Area

<table>
<thead>
<tr>
<th>Geography/Neighborhood in Study Area</th>
<th>National Walkability Index Score or Score Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bouldin Creek (Rosewood)</td>
<td>13.5 to 15.3</td>
</tr>
<tr>
<td>Central East Austin</td>
<td>15.5 to 18</td>
</tr>
<tr>
<td>Govalle</td>
<td>14.1 to 17.6</td>
</tr>
<tr>
<td>Downtown Austin</td>
<td>16.3 to 18.8</td>
</tr>
<tr>
<td>East Cesar Chavez</td>
<td>14.5 to 19.3</td>
</tr>
<tr>
<td>Holly</td>
<td>15 to 17.5</td>
</tr>
<tr>
<td>Johnston Terrace</td>
<td>15.1</td>
</tr>
<tr>
<td>South River City</td>
<td>9.6 to 18.8</td>
</tr>
<tr>
<td>Riverside</td>
<td>8 to 15.6</td>
</tr>
<tr>
<td>Pleasant Valley</td>
<td>6.6 to 13.8</td>
</tr>
<tr>
<td>Montopolis</td>
<td>12.3 to 13.8</td>
</tr>
<tr>
<td>St. Edwards</td>
<td>13.8 to 16.5</td>
</tr>
<tr>
<td>Parker Lane</td>
<td>10.3 to 15.8</td>
</tr>
<tr>
<td>East Congress</td>
<td>7.5 to 13.6</td>
</tr>
<tr>
<td>McKinney</td>
<td>8.3</td>
</tr>
<tr>
<td>Franklin Park</td>
<td>10.1 to 13.6</td>
</tr>
</tbody>
</table>

Source: I-35 Capital Express Community Impacts Assessment: Supplemental Documentation, Task 5 (April 2022)

Generally, walkability decreases as one moves away from downtown. Neighborhoods and block groups closer to I-35 have better walk scores than block groups closer to US 183 (see Figure 3.5-1). This is a reflection only of the factors that contribute to the Index. Areas close to I-35 have more transit stops and a more balanced mixture of land uses than those areas along I-35 and west of US 183, often referred to as the “eastern crescent.” It is important to note that the Index does not measure safety or pedestrian infrastructure like sidewalks and crosswalks.
Figure 3.5-1. Map of EPA Walkability Index within Project Study Area.
3.5.1 Environmental Consequences

3.5.1.1 Build Alternative 2

For Build Alternative 2, 8- to 10-foot-wide SUPs would parallel the I-35 frontage roads on both the NB and SB sides from US 290 East to north of Woodward Street. Build Alternative 2 also includes deck plaza locations (to be funded by others) between 4th Street and 8th Street on the east side of the I-35 ROW, and between Dean Keeton Street and MLK Jr. Boulevard on the west side of the I-35 ROW. Build Alternative 2 would comply with TxDOT’s Bicycle Accommodation Design Guidance. TxDOT’s Bicycle Accommodation Design Guidance implements USDOT and FHWA policy regarding bicycle and pedestrian accommodations. SUP crossings for Build Alternative 2 would include (see map of SUP crossings in Chapter 3.6):

- Under US 290 East.
- Bicycle-/pedestrian-only bridge near East 56th ½ Street.
- Crosswalks at Airport Boulevard.
- Bicycle-/pedestrian-only bridge adjacent to the CapMetro Red Line (and future Gold Line) tracks, south of Airport Boulevard.
- Enhanced bridges with buffers between people who walk and bike and traffic at 38th ½ Street, 32nd Street, MLK Jr. Boulevard, 15th Street, 12th Street, 11th Street, 8th Street, 7th Street, 6th Street, 5th Street, Cesar Chavez Street, Riverside Drive, and Woodland Avenue.
- Crosswalks at Dean Keeton Street.
- Crosswalks at Clyde Littlefield Drive/Manor Road.
- Bicycle-/pedestrian-only bridge adjacent to the Red Line corridor at 4th Street.
- Underpass at Holly Street.
- Bicycle-/pedestrian-only bridge providing access to the Butler Hike and Bike Trail north and south of Lady Bird Lake.
- Underpass at SH 71.

3.5.1.2 Modified Build Alternative 3

For Modified Build Alternative 3, 8- to 10-foot-wide SUP would parallel the I-35 frontage roads on both the NB and SB sides from US 290 East to just north of Woodward Street. Modified Build Alternative 3 includes deck plaza locations (to be funded by others) between Cesar Chavez Street and 8th Street on the east side of the I-35 ROW, and by UT between Dean Keeton Street and 15th Street on the west side of the I-35 ROW. Modified Build Alternative 3 would comply with TxDOT’s Bicycle Accommodation Design Guidance. SUP crossings for Modified Build Alternative 3 would include (see map of SUP crossings in Chapter 3.6):

- Under US 290 East.
- Bicycle-/pedestrian-only bridge near 55th Street.
• Crosswalks at Airport Boulevard.
• Bicycle-/pedestrian-only bridge adjacent to the CapMetro Red Line (and future Gold Line) tracks, south of Airport Boulevard.
• Enhanced bridges with buffers between people who walk and bike and traffic at 41st Street, 38th ½ Street, 32nd Street, MLK Jr. Boulevard, 12th Street, 11th Street, 7th Street, 6th Street, 5th Street, and Cesar Chavez Street.
• Crosswalks at Dean Keeton Street.
• Crosswalks at Clyde Littlefield Drive/Manor Road.
• Bicycle-/pedestrian-only bridge north of MLK Jr. Boulevard.
• Bicycle-/pedestrian-only bridge at 15th Street.
• Bicycle-/pedestrian-only bridge adjacent to the Red Line corridor at 4th Street.
• Bicycle-/pedestrian-only bridge at 3rd Street.
• A bridge at Holly Street.
• Bicycle-/pedestrian-only bridge providing access to the Butler Hike and Bike Trail north and south of Lady Bird Lake.
• A SUP crossing at Riverside Drive.
• Bicycle-/pedestrian-only bridge at Woodland Avenue.
• Underpass at SH 71.

3.5.1.3 Comparison of Alternatives

As a whole, mobility for people walking, biking, and using micromobility devices (MetroBike, e-scooters, etc.) would improve within and across the study area with both build alternatives (Table 3.5-2). On-street bicycle facilities that currently or are planned to intersect the study area would not be impacted. The enhanced bridges would include 30 feet of buffer and SUP facilities, which are separated from roadway traffic to encourage the use of active transportation. The facility would be designed so that in the future, COA could provide deck plazas and/or stitches to further unite east and west Austin and foster a sense of community cohesion. The SUP along the entire length of the facility would serve to encourage the use of active transportation and provide connectivity within the Study Area. This connectivity would improve access to community facilities within the project area. The SUP, in the future, could be connected to other bikeway and trail projects within the greater Austin area providing access to/from the I-35 corridor. In addition to COA, CapMetro has also been involved with the project and will help to ensure the project would accommodate all modes of transit in the Study Area.
### Table 3.5-2. Summary of Bicycle and Pedestrian Facilities for each Alternative

<table>
<thead>
<tr>
<th>Project Alternative</th>
<th>Number of SUP Facilities</th>
<th>Number of Pedestrian/Bicycle Only Bridges</th>
<th>Distance between SUP bicycle and pedestrian facilities (miles)</th>
<th>Increase in Transit Connection Opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Build Alternative 2</td>
<td>23</td>
<td>4</td>
<td>0.57 miles</td>
<td>Yes</td>
</tr>
<tr>
<td>Modified Build Alternative 3</td>
<td>25</td>
<td>8</td>
<td>0.57 miles</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Source: Appendix B, Design Schematics

Design factors and best practices have been developed to uphold and improve walkability while integrating existing and future developments. Urban design features such as pedestrian-scale lighting, landscaping with traffic-calming characteristics, signage, pavement markings, bicycle racks, and track filler to address narrow bicycle tires would be considered during the design process. Both Build Alternative 2 and Modified Build Alternative 3 would be designed and constructed in compliance with TxDOT’s Bicycle Accommodation Design Guidance and USDOT and FHWA policy regarding bicycle and pedestrian accommodations. If modifications to existing facilities are deemed necessary during final design, TxDOT will coordinate with COA, so as to maintain the same level connectivity as the existing facilities. TxDOT will also coordinate with local government programs and bicycle/pedestrian groups to circulate information about construction activities. To keep the communities and affected populations informed, TxDOT will use a variety of proven public engagement techniques such as dynamic signage, maintaining a project web page, email newsletters, traditional and social media, and broadly distributed flyers.

#### 3.5.1.4 No Build Alternative

The No Build alternative would not construct any bicycle or pedestrian facilities. There would be no impact on existing bicycle and pedestrian facilities. Furthermore, there would be no increase in the number of SUPs and no increase in bicycle and pedestrian safety and accessibility within the project area.

#### 3.6 Community Impacts Assessment

##### 3.6.1 Background Information

I-35 in Austin was built along East Avenue, which was seen effectively as a racial divide in Austin's early history, and later evolved as a regional highway corridor throughout the 1930s, 40s and 50s. By 1955 (one year before the Interstate Highway Act was signed into law), the East Avenue corridor had progressed on this path and carried the designation as the ‘Interregional Highway’ and ‘Blue Star Memorial Highway’ along with US Highways 79, 81 and 290.
TxDOT understands the significance of I-35 to the local community and the present chance to address local concerns with development and implementation of the Capital Express Central Project. This project offers the option to remove the visual separation and provide opportunities to reconnect the communities and spaces east and west of I-35. The reconnection would involve removing the upper decks and elevated lanes, lowering of I-35 through the downtown core, and rebuilding the east/west bridges for wider and safer bicycle and pedestrian crossings. TxDOT is working closely with COA, CapMetro, and the community to allow for deck plazas and stitches (funded by others), or widened bridges, to be developed and to rebuild I-35 in a way that encourages transit and meets the needs of commuters and people who walk and bicycle.

The purpose of this DEIS section is to describe the population, demographics, community facilities, community characteristics, and access and travel patterns that currently exist within the study area and to describe potential impacts that would occur with the proposed No Build and Build Alternatives. This is done to comply with regulatory requirements as described in Section 3.6.1.1, and TxDOT policies. Additionally, this section will address the issues of equity, EJ, and health.

### 3.6.1.1 Regulatory Background

TxDOT projects are required to consider potential for impacts to community resources, as well as potential EJ and Title VI (Title VI of the Civil Rights Act) issues. A Community Impacts Assessment (CIA) is “a process to evaluate the effects of a transportation action on a community and its quality of life” (TxDOT 2020). This report documents the assessment of potential social and economic effects of the proposed Build Alternatives, as required by NEPA. This section was prepared using TxDOT’s Community Impacts, Environmental Justice, Limited English Proficiency, and Title VI Compliance Environmental Handbook (TxDOT, 2020a). The following regulations drive TxDOT’s policy and procedures related to CIAs:

- NEPA 42 USC [U.S. Code] Chapter 55 §4321 et seq. and CEQ rules to implement NEPA 40 CFR §1500 to 1508
- Title VI of the Civil Rights Act codified at 42 USC 2000(d)(1-7)
- USDOT Order 5610.2(a): Actions to Address EJ in Minority Populations and Low-Income Populations
- EO 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations
- FHWA Order 6640.23: Actions to Address EJ in Minority Population and Low-Income Populations, which defines quantitative techniques to readily identify groups of minority persons
- FHWA Technical Advisory 6640.8A: Guidance for Preparing and Processing Environmental and Section 4(f) Documents
- FHWA Memorandum: Guidance on Addressing EJ and NEPA
- EO 13166, Improving Access to Services for Persons with Limited English Proficiency (LEP)
- ADA/Section 504 of the Rehabilitation Act of 1973
3.6.1.2 Historical Background

In 1810, Mexico declared independence from Spain and Texas became the property of Mexico. The population of Texas included Mexicans, Americans, Native Americans, and enslaved people. Texas became part of the United States in 1845 and at the end of the Mexican-American War in 1848, Hispanics and Latinos who were living in this area were given the opportunity to stay and obtain United States citizenship.

Austin was settled during the Texas Republic period, and rapid growth occurred after it was designated the Capital of the Republic of Texas. In 1840, during the first census, the community had 865 residents, 145 of whom were enslaved. The community continued to grow until the time of the Civil War, and with it the number of enslaved people. After the war, “freedman’s communities,” also known as “Freedom Colonies,” emerged as newly emancipated African Americans moved to the area for safety and work during the Reconstruction era. One of the first freedman’s communities in the area was located in what is now east Austin. COA’s African American population increased over 100 percent, to more than 3,400 in 1874. Attempts by African Americans to change the status quo were often met with violent retribution during this period of growth. Segregation and separation of the races became law with the enactment of Jim Crow era laws (TxDOT, 2017a).

In addition to African Americans, east Austin was also settled by several immigrant groups including Swedes and Germans through the 1890s and many Mexicans immigrated to Texas during this period for work. By 1900, the area between East 8th and East 12th Streets had a high level of development and included important African American institutions, such as the Ebenezer Baptist Church and the Robertson Hill School (TxDOT, 2017a). COA’s population continued to grow after the turn of the century and was at 34,000 by 1920, leading to expansion and development of new areas for residential and commercial construction.

In 1917, after the U.S. Supreme Court addressed civil government-instituted racially biased zoning in residential areas, COA responded by recommending in its 1928 Master Plan the creation of a district specifically for Black people, just east of East Avenue (currently I-35) and south of COA cemetery. The schools, parks, and other facilities were to cater specifically to the Black community to encourage growth of the Black community in that area of COA (and discourage it in other areas). African American parks and schools were relocated to the east side and city utilities were denied to Black enclaves in other parts of COA (TxDOT, 2017a). Additionally, deed restrictions, and “red-lining,” a policy in which the Federal Housing Administration refused to insure mortgages in and near African American neighborhoods, led to east Austin becoming an almost entirely Black community prior to World War II (TxDOT, 2017a).

After World War II, COA’s segregationist policies continued and the highest concentrations of African Americans were found east of East Avenue (currently I-35) and between Manor Road and 7th Street (TxDOT, 2017a). This area included residences, businesses, schools, and churches to serve the local African American population. COA’s Hispanic population at this time also mainly resided east of East Avenue and south of 4th Street (TxDOT, 2017a). Prior to the 1928 Master Plan, most Mexican Americans in Austin lived between Waller Creek to the west and to the south by the Colorado River, including the area that is currently the Rainey Street Entertainment District (KXAN, 2019). The 1928 Master Plan also limited where Hispanic and Mexican American people could access services, pushing them east of East Avenue and south of areas occupied primarily by the Black and African American communities.
These ongoing racist and segregationist policies contributed to the eventual siting of I-35 along the East Avenue divide, and construction began in the 1950s amidst protests from residents that the project was “racially motivated” and intended to create “a physical barrier” between east Austin and downtown (TxDOT, 2017a). Today, I-35 still functions as a barrier to movement and reduces community cohesion between the east and west sides of the facility.

Increased reliance on automobiles in the 1950s led to suburban development and the removal of commercial and retail services from the downtown areas both in Austin and elsewhere throughout the country. Local leaders began the movement to desegregate COA’s schools and services in the 1950s (TxDOT, 2017a). This suburban migration and lack of facilities led to years of central east Austin remaining an affordable place for the communities that settled the area, particularly minorities. Currently there is a desire to move back into downtown areas, which has caused increased housing prices, gentrification, and loss of minority and low-income communities along the I-35 corridor in Austin. I-35 is a critical corridor through Austin for those who live along the corridor, as well as those who commute for work or leisure. There is a need and desire to preserve the character, community, and facilities in east Austin and to ensure the historically low-income and minority community residents remain.

### 3.6.2 General Character of the Community

#### 3.6.2.1 Study Area

The Community Study Area for the proposed project is irregularly shaped, extending along I-35 from just north of US 290 to south of SH 71 (Ben White Boulevard) and encompasses approximately 40 square miles. To the west of I-35, the Community Study Area includes the Neighborhood Planning Areas (NPAs) adjacent to the corridor. To the east, the study area extends to US 183 between US 290 and Ben White Boulevard to capture “the eastern crescent” where demographic shifts have occurred in the past, and involuntary displacement from gentrification pressures has been most intense. Figure 3.6-1 shows the Community Study Area.

The boundaries of the Community Study Area were chosen to accurately assess the populations that would be directly and indirectly impacted by the proposed project, as residents of these areas would be likely to use the I-35 facility and be affected by construction and changes to access and travel patterns. The populations residing within the eastern crescent face the greatest challenges to accessing opportunities downtown, which is why the study area was extended farther east than the adjacent NPAs.

The Community Study Area is largely urban, with the central portion of the project being within the downtown/urban core of Austin. The remainder of the Community Study Area includes a mosaic of commercial, residential, industrial, and institutional land uses. There are mostly commercial properties located in the northern portion of the Community Study Area, adjacent to the existing I-35 facility. The downtown/urban center is located along the central portion of the project corridor, and the southern portion, south of the Colorado River (Lady Bird Lake), is a mosaic of residential and commercial land uses adjacent to I-35. I-35 connects to multiple major roadways including US 183, US 290, Airport Boulevard, and SH 71, and many smaller roadways providing east-west access across I-35 and to commercial and residential properties throughout COA.
Figure 3.6-1. Community Study Area
3.6.2.2 Study Area Demographics

Socioeconomic information was collected from the USCB 2020 decennial census, the 2014–2019 American Community Survey (ACS), and TxDOT’s Community Impacts Data Tool. Information was captured for Census geographies including tracts, block groups and blocks which were entirely or partially within the Community Study Area as described above.

3.6.2.2.1 Race and Ethnicity

As shown in Table 1 included in Appendix J, overall, the white alone (not Hispanic or Latino) comprises the largest racial and ethnic group (42.2 percent) in the Community Study Area, followed by Hispanic or Latino individuals of any race (38.2 percent). The remaining study area population is comprised of racial minorities including Black or African American alone (9.7 percent), American Indian or Alaska Native alone (0.3 percent), Asian alone (5.5 percent), Native Hawaiian or Other Pacific Islander (0.1 percent), some other race alone (0.5 percent), or two or more races (3.5 percent). Over half of the Census blocks within the study area comprise a minority population of equal to or greater than 50 percent (1,114 blocks of 2,130 total populated blocks within the study area). Similarly, the largest racial and ethnic groups in Travis County were white alone (47.5 percent) and Hispanic or Latino of any race (32.6 percent). Travis County contained a minority population of approximately 52.5 percent. Census blocks with 50 percent or greater minority populations are considered to comprise an EJ population (Figure 3.6-16).

3.6.2.2.2 Household Income

Household income data are used to understand the economic characteristics of a project area and to identify the presence of low-income populations. According to the U.S. Department of Health and Human Services (HHS) 2022 poverty guidelines, a household is considered low-income if they earn less than $27,750 for a four-person family/household (HHS 2022). 2019 ACS income data was used to determine median household income (MHI) at the block group level, the lowest level for which income information is collected. The 2019 MHI in the demographic Study Area ranged between $2,500 and $163,675. Seven of the block groups within the study area had a MHI that was below the 2022 poverty guideline of $27,750 (seven of 134 total block groups or approximately five percent). Income data for all Community Study Area block groups are included on Table 2 in Appendix J. Census block groups where the MHI is below the 2022 poverty guideline are considered to contain an EJ population. Additionally, census tracts where the percentage of people in poverty was meaningfully greater than the percentage of people in poverty for Travis County overall were also considered to contain an EJ population. This included approximately 36 percent of the census tracts within the Community Study Area (19 of 53 total census tracts). Low-income census block groups and tracts were spread out throughout the Community Study Area (Figures 3.6-17 and 3.6-18).

3.6.2.2.3 Disability Status

The ACS collects data on disability status at the census tract level. Table 2 in Appendix J summarizes the disability status of the civilian, non-institutionalized population within the Community Study Area census tracts. Overall, the percentage of people with a disability within the overall Community Study Area (9.2 percent) is just above the percentage of people with a disability found in Travis County (8.8 percent). Census tracts within the Community Study Area had percentages of disabled people that ranged from 3.7 percent to 15.3 percent.
3.6.2.2.4 Age

Table 3 in Appendix J includes information on children (under 18) and elderly (65 and over) populations within the Community Study Area. Overall, the census tracts within the Community Study Area had a smaller percentage of children and elderly than the surrounding county. Approximately 17.6 percent of the population within the Community Study Area consisted of children under the age of 18, and approximately 7.2 percent of the population was over 65 years of age. Approximately 22 percent of the population of Travis County was under 18, and approximately 9.5 percent of the population was over 65.

3.6.2.2.5 Zero Car Households

Data on zero car households is collected at the census block group levels. Table 3 in Appendix J summarizes the percentage of households with no access to a vehicle within the Community Study Area census block groups. Overall, approximately 10.6 percent of the population within the Community Study Area does not have access to a car. This is greater than the Travis County estimated percentage of households without access to a vehicle (approximately 6.0 percent). Renter occupied households were more likely to not have access to a vehicle (9.6 percent of renter occupied households within the Community Study Area versus 1.2 percent of the owner-occupied households). The percentage of households without access to a vehicle ranged from zero percent to almost 55 percent in the Community Study Area's census block groups.

3.6.2.2.6 Food Assistance

The ACS includes estimates on the number of households who have received public assistance or food stamps/Supplemental Nutrition Assistance Program (SNAP) benefits. Table 3 in Appendix J summarizes the percentage of households within each census block group in the Community Study Area. Approximately 13 percent of households within the Community Study Area were estimated to have received public assistance or SNAP benefits within the past 12 months, compared with approximately 7.6 percent of the households in Travis County. The census block groups ranged between zero to approximately 65.5 percent of households within the Community Study Area receiving public assistance or food stamps.

3.6.2.2.7 Internet Availability

Information on internet availability was available at the census block group level. Table 3 in Appendix J includes data on the percentage of people in each block group within the Community Study Area that have a computer, but no access to the internet, or those that do not own a computer at all. Overall, approximately 12 percent of the Community Study Area has a computer, but no access to the internet and approximately eight percent do not have a computer. These are greater than the percentage found within Travis County as a whole with approximately 5.3 percent with a computer and no internet access and approximately 4.6 percent with no computer. The percentage of those with a computer but no internet access ranged from zero to almost 56 percent within the block groups comprising the Community Study Area. The percentage of those with no computers available ranged from zero to 31.9 percent within the Community Study Area block groups.
3.6.2.8 Homelessness

Austin has communities of people experiencing homelessness; the most recent point in time count indicated there were over 2,500 people who were in shelters, transitional housing, or unsheltered (outside, tents, cars, etc.) but others have put the population of those experiencing homelessness in the Austin area at about 10,000 (COA, 2020). Since 2011, it is estimated that the number of people experiencing homelessness has tracked with the population, but changes to COA’s policies in 2019 allowed public camping and made this homelessness more visible to the wider community. In 2021, Austin voters passed Proposition B which made public camping illegal again. COA has recently (summer/fall 2021) begun to enforce this law and has removed people experiencing homelessness from many public areas. There is more detailed information on homelessness within the Community Study Area included in Section 3.6.4.1.

3.6.3 Population Growth

The Austin area has experienced substantial and sustained growth since 1990, as summarized in Table 3.6-1. Table 3.6-1 shows the historic population growth of COA, as well as encompassing Travis County and the five-county Austin-Round Rock MSA. Also included are population forecasts for these geographies through 2050. The Austin-Round Rock MSA is expected to grow over 260 percent from 2000 to 2050, with smaller population gains of almost 110 percent and 190 percent for COA and Travis County, respectively. Continued growth within COA, county, and MSA would be expected to increase the demand for area roadways including I-35, as well as the need for housing and other services. Demographic estimates from COA for 2020 indicate that Austin grew faster than any other large metropolitan area for the 10th year in a row (COA, 2021d).

Table 3.6-1. Population Growth 1990–2050 (Projected)

<table>
<thead>
<tr>
<th>Year</th>
<th>Travis County</th>
<th>COA</th>
<th>Five County MSA**</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>576,407</td>
<td>465,622</td>
<td>846,227</td>
</tr>
<tr>
<td>2000</td>
<td>812,280</td>
<td>656,562</td>
<td>1,249,763</td>
</tr>
<tr>
<td>2010</td>
<td>1,024,266</td>
<td>790,390</td>
<td>1,716,289</td>
</tr>
<tr>
<td>2020*</td>
<td>1,339,103</td>
<td>1,006,727</td>
<td>2,298,740</td>
</tr>
<tr>
<td>2030*</td>
<td>1,659,936</td>
<td>1,153,409</td>
<td>2,936,954</td>
</tr>
<tr>
<td>2040*</td>
<td>2,023,453</td>
<td>1,289,928</td>
<td>3,668,853</td>
</tr>
<tr>
<td>2050*</td>
<td>2,348,300</td>
<td>1,372,843</td>
<td>4,527,389</td>
</tr>
</tbody>
</table>

Percent Change Forecast 2000–2050

189.1% 109.1% 262.3%


*Forecast data
**The Five County Austin – Round Rock MSA wholly includes these counties: Bastrop, Caldwell, Hays, Travis, and Williamson.
The makeup of Travis County’s racial and ethnic populations has also changed between 1990 and 2021. In both 1990 and 2021, the largest racial and ethnic group in Travis County was the white (non-Hispanic) comprising over 65 percent of the county’s population in 1990 and over 48 percent of the population in 2021. The percent of the population identifying as Hispanic/Latino increased from about 21 percent in 1990 to over 33 percent in 2021 and the Asian and Pacific Islander (non-Hispanic) racial group increased from about 2.8 percent to 7.7 percent over the timeframe. Additionally, the percent of the population identifying as two or more races (non-Hispanic) had increased to about 2.1 percent in 2021. One racial group that decreased in percent of the population was Black (non-Hispanic) going from approximately 10.6 percent in 1990 to about 7.7 percent in 2021 (USAFacts, 2022).

3.6.4 Affected Environment and Environmental Consequences

3.6.4.1 Affordability

In addition to population growth over the past few decades, which is expected to continue in the future (as discussed in Section 3.6.3), the MSA has also seen a dramatic rise in housing costs growing from an average housing price of approximately $72,000 in 1990 to almost $440,000 in 2021 (US Federal Housing Finance Agency 2021). This increase in housing prices is a major issue facing Austinites. Imagine Austin, COA’s comprehensive plan, includes several priorities, one of which is to develop and maintain household affordability throughout Austin. COA has worked toward this goal since the adoption of Imagine Austin and has analyzed Austin’s affordability challenges, developed policies and strategies to address affordability issues, and has adopted the Austin Strategic Housing Blueprint which includes housing goals (COA, 2021b). Other Austin programs aimed to maintain the affordability of COA include the Affordability Unlocked Development Bonus Program which, in exchange for providing low- and moderate-income housing, waives or modifies some development restrictions, and the Austin Housing Finance Corporation (AHFC) which partners with affordable housing developers to develop AHFC-owned properties with rental and owner-occupied housing reserved for low-income households (COA, 2021a).

3.6.4.2 Gentrification

Increasing housing costs in Austin, coupled with the desire of more affluent residents to move into central neighborhoods, has impacted low-income residents. Austin residents and officials became concerned with the ongoing displacement of low- and moderate-income residents, loss of diversity, and destabilization of existing communities, which led to UT being tasked with studying gentrification and displacement in Austin (UT 2018). According to the Austin Uprooted report (UT 2018), “The impacts of Austin’s rising housing costs have been particularly dramatic in COA’s “eastern crescent,” where historically low housing costs, produced in part through COA’s history of publicly-supported racial and ethnic segregation, now combine with broader social and economic trends to make these neighborhoods more desirable to higher-income households.”

Gentrification occurs when a low-income household is displaced by a higher-income household, resulting in higher housing costs, increased property taxes, transformation of the neighborhood, and cultural change to the neighborhood (UT 2018). Evidence of gentrification was observed during a visit to the project study area on August 3 and 4, 2021. Large, newly constructed homes were replacing smaller homes in areas throughout the
study area. The Uprooted report provided maps of Austin depicting where there had been a significant
demographic change, where a neighborhood was vulnerable to gentrification, and the type of gentrification
occurring in an area. The demographic factors the Uprooted report used to determine a significant increase in
non-vulnerable residents included home ownership, racial change, educational attainment, and income since
the year 2000. The Demographic Map (Figure 3.6-2) shows there was a significant increase in non-vulnerable
populations between 2000 and 2016 within much of the Community Study Area. Most of the populations
adjacent to I-35 along the SB side, as well as east-central Austin to US 183, underwent a significant change in
demographics.

Figure 3.6-3 shows that the areas vulnerable to gentrification within the study area occur mostly east of I-35.
The most vulnerable areas are located east of I-35 south of SH 71, along US 183 from south of the Colorado
River north to US 290, along Airport Boulevard, and both east and west of I-35 between US 290 and US 183. As
shown in Figure 3.6-4, most of the Community Study Area ranges from being susceptible to gentrification to
being already gentrified with continued loss of residents and changes to the culture of the community.
Figure 3.6-2. Significant Demographic Changes from 2000–2016 (Source: UT 2018).

*It should be noted the significant change in demographics is from a more vulnerable population to a non-vulnerable population.
Figure 3.6-3. Census Tracts Vulnerable to Gentrification (Source: UT 2018)
Figure 3.6-4. Neighborhood Gentrification (Source: UT 2018)
3.6.4.3 Homelessness

The Community Study Area included several visible encampments of people experiencing homelessness during the field visit in August 2021, most notably under I-35 near Hancock, under I-35 between 7th and 4th Streets, Festival Beach along Lady Bird Lake, and east of I-35 along Riverside Drive. As noted previously, the most recent count in January 2020 indicated there were over 2,500 people experiencing homelessness in Austin. With the COVID-19 pandemic a more recent count has not been completed. The pandemic may have also increased the number of people in unstable situations due to job loss, loss of childcare, and other pandemic-related issues.

Some areas with visible encampments included services such as public restrooms or port-a-potties, hand washing stations, and trashcans. In May 2021, Austin voters approved Prop B to reinstate a camping ban within the city limits. Recently (as of October 2021), COA has worked to remove residents from homeless encampments throughout COA. According to the Texas Tribune, Austin officials have cleared out many of the visible camps and people experiencing homelessness have been forced to move to areas where they are less visible to avoid being ticketed or arrested (Texas Tribune 2021).

In an effort to find more suitable living conditions for those experiencing homelessness, TxDOT’s Austin District began the Mobility35 Initiative to Address Homelessness (IAH).

The goal of Mobility35 IAH is to develop public-private-philanthropic partnerships that will proactively address the future displacement of individuals in a humane and safe manner. The group is a coalition of local and state government agencies, nonprofits, and faith-based organizations. These subject-matter experts and local partners have helped convey information on upcoming construction projects, evaluated individuals for assistance, and transitioned them to more permanent housing.

In February 2017, Mobility35 IAH initiated a series of workshops to address immediate pedestrian safety issues and long-term displacements associated with upcoming construction projects. The IAH group reviewed and modified Austin District guidelines on how to conduct construction and maintenance operations in areas with individuals experiencing homelessness. Assessment teams were used to provide advanced notification of construction operations and perform assessments on service needs and eligibility for housing. These teams also distributed reflective “Be Safe Be Seen” bags that provided contact information for local services and safe pedestrian routes in upcoming work zones.

3.6.4.3.1 Esperanza (Hope) Community – Transitional Housing Facility

In October 2019, Governor Abbott tasked TxDOT along with the Department of Public Safety and Texas Department Emergency Management to establish a state-sanctioned camp for individuals living under Austin state highways. Working together, the state agencies provided a campsite with basic needs (BN) including food, water, and 24-hour security. The IAH assisted in the provision of resources, mental/medical services, coordinated assessments, and more. The campsite was later named “Camp Esperanza.”

In June 2021, the Texas Transportation Commission approved a 10-year lease agreement between TxDOT and The Other Ones Foundation (TOOF) effectively transferring operations of the Esperanza Community to TOOF. TxDOT, in partnership with TOOF, helped develop a master planned community that operates as a supportive
transitional facility with safe and dignified living spaces. As the community service coordinator, TOOF works closely with several IAH service providers (Integral Care, CommUnity Care, Mobile Loaves & Fishes, etc.) to provide the necessary resources to properly support Camp Esperanza residents.

3.6.5 Environmental Consequences

3.6.5.1 Build Alternative 2

The proposed project would address safety and congestion along the I-35 facility, as well as improve bridges and minimize the barrier effect of I-35, as discussed in Section 3.6.8.2.1. East-west access across I-35 would improve. As discussed above, the Austin-Round Rock MSA is experiencing a large and continued population growth, as well as unprecedented increases in housing costs. According to Redfin (2021), in September 2021 Austin home prices were up 27.9 percent over last year, and the market was described as very competitive.

As shown in the figures above, much of the Community Study Area adjacent to I-35 along the SB side, as well as in east-central Austin to US 183 experienced a significant shift from vulnerable to non-vulnerable population demographics, while the area east of I-35 (south of SH 71, along US 183, along Airport Boulevard, and east and west of I-35 between US 290 and US 183) is now vulnerable to gentrification; however, impacts from gentrification are likely to continue to occur whether or not the proposed project is built. By reducing congestion and improving the I-35 corridor through central Austin, the proposed project may further increase the desirability of the central downtown area; however, as development trends have shown, these areas are already considered highly attractive for redevelopment in the absence of the proposed improvements.

Recently, COA entered a contract to develop a city-owned parcel (the former Home Depot on the northeast corner of the I-35 intersection with St. John Avenue, in north Austin) located in the St. John neighborhood. In July 2021, the Austin City Council authorized an exclusive negotiation agreement with Greystar Development Central LLC (Greystar), a developer, to redevelop this site. It is expected that 560 rental units would be included and half of those homes would be reserved for people and families making less than 70 percent of the MHI, or no more than $69,250 per year for a family of four (KUT 2021). This affordable housing would be situated just north of the I-35 Capital Express Central corridor and would have access to the facility and proposed SUPs. This development is located in an area that is most vulnerable to gentrification according to the Uprooted report. In April 2022, an Exclusive Negotiating Agreement was executed between COA and Greystar. Under this agreement, meetings will be held to negotiate proposed terms of a Master Development Agreement governing the redevelopment of this site.

Also within the project area, the Rebekah Baines Johnson Center (RBJ) located east of I-35 and north of the Colorado River, provides affordable housing for seniors. The RBJ tower can currently house 250 seniors, and a new apartment community is under construction which will provide affordable housing for another 250 elderly residents (RBJ 2021).

As discussed in the paragraphs above, a high degree of gentrification has already occurred within the Community Study Area, and many residents who historically lived in areas east of I-35 and elsewhere in Austin have already been displaced to places east of US 183 or to other more affordable areas. Even with increases in affordable
housing within the Community Study Area, as described above, the movement of minority and low-income
individuals and families further east and elsewhere would be expected to continue.

Build Alternative 2 would move mainlanes below grade through central Austin. Prop B (COA’s camping ban
approved in May 2021) in large part has already forced people experiencing homelessness to move from visible
camps under the existing I-35 facility. The Build Alternatives would be depressed and as designed would no
longer provide shelter under the I-35 facility through downtown.

As part of the Be Safe Be Seen program, TxDOT has been convening service providers, agencies, and elected
leaders for four years through the agency’s IAH. The goals of the initiative are to share information on upcoming
construction activities and community resources, to assess specific needs for assisting individuals experiencing
homelessness, and to identify potential opportunities for temporary and permanent shelter or housing
alternatives.

TxDOT’s IAH is a two-pronged approach to managing homelessness. As part of the Mobility35 IAH, TxDOT
provides outreach to connect people experiencing homelessness with necessary services and also provides
opportunity for donation drives benefiting homeless communities. As described above, Camp Esperanza was
established as a state-sanctioned mitigation measure for the Mobility 35 Program, including the proposed
project, to assist those experiencing homelessness, communicate upcoming construction project impacts,
assess individuals for needed services, and transition them to more permanent housing.

Second, TxDOT engages agencies and nonprofit providers supporting people experiencing homelessness as part
of their public involvement activities and community outreach. Some of TxDOT’s outreach to homeless
communities stopped during the COVID-19 pandemic in 2020 through the present.

By reducing congestion, improving pedestrian and bicycle facilities, and connecting east and west Austin in the
downtown core, Build Alternative 2 could further increase the desirability of the central downtown area and
thereby raise housing prices; thus, gentrification would be expected to continue. With the lowering of mainlanes,
there would be less covered space to serve as campsites for those experiencing homelessness; however, efforts
to remove these encampments have already begun by COA. It is expected that gentrification and affordability
would continue to be issues for the residents of the Community Study Area, as well as COA overall, regardless of
whether Build Alternative 2 is implemented or not.

3.6.5.2 Modified Build Alternative 3

In response to public comments, Modified Build Alternative 3 incorporated many changes since the public
meeting in August 2021. These included changes to project design to reduce the number of displacements by
approximately 20 properties, and several design changes to add bicycle and pedestrian crossings of I-35,

improve traffic flow, and reduce the visual impacts of the elevated facility. Modified Build Alternative 3 would
improve safety and congestion, enhance bridges and pedestrian and bicycle facilities, and depress the
mainlanes. Frontage roads would be at grade or elevated over the depressed mainlanes between Luther Lane
and approximately 11th Street. Modified Build Alternative 3 would reduce the barrier effect of I-35 (as discussed
in Section 3.6.8.2.2) over the No Build condition and improve east-west access across I-35. Much of the
Community Study Area adjacent to I-35 along the SB side, as well as in east-central Austin to US 183 experienced a significant shift from vulnerable to non-vulnerable population demographics, while the area east of I-35 (south of SH 71, along US 183, along Airport Boulevard, and east and west of I-35 between US 290 and US 183) is now vulnerable to gentrification. By reducing congestion and improving the I-35 corridor through central Austin, the proposed project may further increase the desirability of the central downtown area. As development trends have shown, these areas are already considered highly attractive for redevelopment in the absence of the proposed improvements and a high degree of gentrification has already occurred within the community study area with many low-income and minority residents being forced east of US 183 and other more affordable areas. Even with increases in affordable housing within the Community Study Area, such as the proposed development of the Home Depot site in the St. John neighborhood and the additional affordable housing for seniors at the RBJ Center (described in 3.1.1.2), the movement of minority and low-income individuals and families from areas east of I-35 and elsewhere would be expected to continue.

Modified Build Alternative 3 would move mainlanes below grade through central Austin and no longer provide shelter for those experiencing homelessness. Prop B (COA’s camping ban approved in May 2021) in large part has already forced people experiencing homelessness to move from visible camps under the existing I-35 facility through downtown. As discussed above in Section 3.6.4.1, TxDOT’s IAH provides outreach to people experiencing homelessness and strives to connect people with necessary services and benefits. Additionally, the IAH also engages agencies and nonprofit providers supporting people experiencing homelessness as part of their public involvement activities and community outreach.

By reducing congestion, improving pedestrian and bicycle facilities, and connecting east and west Austin in the downtown core, Modified Build Alternative 3 may help to further increase the desirability of the central downtown area and thereby raise housing prices and gentrification would continue to occur. With the lowering of mainlanes, there would be less covered space to provide campsites for those experiencing homelessness; however, efforts to remove these encampments have already been initiated by COA. It is expected that gentrification and affordability would continue to be issues for the residents of the Community Study Area, as well as COA overall, regardless of whether Modified Build Alternative 3 is implemented or not.

3.6.5.3 No Build Alternative

Under the No Build Alternative, there would be no changes to the I-35 facility, and the issues surrounding affordability, gentrification and homelessness would likely continue at their current rate.

3.6.6 Community Facilities

3.6.6.1 Affected Environment

The Community Study Area is large, encompassing an approximately 40 square-mile area. For community facilities, the study area was reduced to within 0.5 mile of the proposed ROW. The study area was intended to capture community facilities with proximity access to I-35 and that may experience direct community impacts from either access/travel patterns or displacement. The 0.5 mile buffer provided a list of potentially impacted facilities for further analysis and was not a boundary for researching replacement properties or comparable
Information on community facilities was gathered using a combination of desktop review using publicly-available GIS datasets, and a field visit conducted on August 3 and 4, 2021. Figure 3.6-5 (Maps 1 through 6) shows the locations of these community facilities and Appendix J includes a listing of community facilities within a 0.5-mile buffer of the proposed ROW listed below.

- Four Austin Fire Department (AFD) fire stations and the AFD Medical Operations facility
- Austin Police Department Headquarters Station
- Six Austin-Travis County Emergency Medical Services stations or demand medic stations
- Six hospitals, six federally-qualified health centers (FQHC), a disability advocate, foster and adoption services, and a veteran’s service center
- Six colleges or universities
- Nineteen Austin Independent School District (AISD) elementary, middle, or high school campuses or other AISD facilities including the headquarters, performing arts center, and sports stadiums
- Nine private or faith-based schools or early childhood centers
- Fifty-eight places of worship
- Numerous parks including metropolitan parks, smaller neighborhood and pocket parks, nature preserves and greenbelts, school parks, special use sites, a cemetery, and a golf course
- Three Austin Public Libraries
- Numerous BN locations where people, including those experiencing homelessness, may have access to restrooms, showers and handwashing, food, and technology charging
Figure 3.6-5. Community Facilities (Map 1 of 6)
Figure 3.6-5. Community Facilities (Map 2 of 6)
Figure 3.6-5. Community Facilities (Map 3 of 6)
Figure 3.6-5. Community Facilities (Map 4 of 6)
Figure 3.6-5. Community Facilities (Map 5 of 6)
Figure 3.6-5. Community Facilities (Map 6 of 6)
3.6.6.2 Community Facilities Environmental Consequences

3.6.6.2.1 Build Alternative 2

Based on the design dated April 8, 2022, with Build Alternative 2, there would be direct impacts resulting in 10 displacements of community facilities including two FQHCs (CommUnityCare – David Powell Health Center [Map ID HC-2] and CommUnityCare – Hancock Walk-In Care [Map ID HC-1]), an Austin VA Veteran’s Center, Special Kid’s Care, Pathways Youth and Family Services, and Texas State Independent Living Council (all inside the Petroleum Building Map ID HC-13), Green Doors (Map ID BN-13), and three early childhood centers (Escuelita del Alma [Map ID S-45], Extend-A-Care [Map ID S-42], and Copernicus STEM Academy Delwood Campus [Map ID S-46]). These displacements are discussed in more detail in Section 3.6.7. There would be acquisition of small amounts of ROW, which would not result in displacements, to additional community facilities as discussed below.

Non-Displacement Impacts to Community Facilities

Minor ROW acquisition not resulting in displacement would also occur at the following community facilities based on the design dated April 8, 2022:

- UT (Map ID C-2) – Mike Myers Stadium (approximately 0.04 acre of ROW would be acquired from this parcel). This acquisition would be a small area of construction laydown area next to the Moody Center (construction of the Moody Center was completed first quarter of 2022). This acquisition would not affect access to this property or any of its facilities.

- UT (Map ID C-2) – Frank Erwin Center (approximately 0.01 acre of ROW would be required from this parcel). The ROW acquisition would be a sliver along the corner of I-35 and 15th Street on the perimeter of the parking area. The acquisition would not affect the facility or parking. The Frank Erwin Center closed in May 2022 and events have moved to the Moody Center which opened in April 2022.

- University Medical Center at Brackenridge (Map ID HC-12) (approximately 0.10 acre of ROW would be acquired from this parcel). The ROW acquisition would be a sliver along the I-35 FR. At this time, it appears the ROW acquisition could affect the walk-in-entrance along the FR, and two parking garages. As design progresses, potential impacts and access points to this parcel would be finalized.

- COA Norwood House Parkland (Map ID P-47) (approximately 0.57 acre of construction staging easement would be required from this parcel along the frontage of I-35). This would be used for construction at Lady Bird Lake for the duration of the project and would be expected to

- COA Waller Beach (P-58) – (approximately 1.20 acres of construction staging easement would be required from this parcel). This would be used for construction at Lady Bird Lake for the duration of the project and would be permanently converted to TxDOT ROW under Section 6(f).

- COA Edward Rendon Sr. Metro Park at Festival Beach (Edward Rendon Park) (P-62) (approximately 0.70 acre of construction staging easement would be required from this parcel along the frontage of I-35). This would be used for construction at Lady Bird Lake for the duration of the project and would be expected to
only cause minor disruption during construction and would be returned to existing condition following construction.

- COA International Shores at Town Lake Metro Park_3 (International Shores_3) (P-2) (approximately 0.71 acre of construction staging easement would be required from this parcel along the frontage road of I-35). This would be used for construction at Lady Bird Lake for the duration of the project and would be expected to only cause minor disruption during construction and would be returned to existing condition following construction.

Additionally, it would be expected that several BN services that are currently provided under existing bridges of I-35, including at I-35 at Airport Boulevard (BN-4) and 7th Street at I-35 (BN-8), would also be required to relocate to a new location. These BN services include handwashing, port-a-potties, food, and mobile showers. These services are mobile and would have the ability to be moved if new locations are provided in an area of need.

Since the SB frontage road between 32nd Street and MLK Jr. Boulevard would be bridged and moved to the east, no driveways to adjacent businesses or community facilities would be provided in this section. However, access to adjacent community facilities in this area including St. David’s Hospital (HC-10), Mt. Calvary Cemetery (CM-1), and Oakwood Cemetery (CM-2) from the SB frontage road would be similar to existing condition with access provided at major cross streets.

Under Build Alternative 2, temporary changes in traffic patterns would be expected during construction. Emergency service providers would receive notification from TxDOT prior to construction and/or temporary roadway closures or detours. TxDOT will continue to coordinate with emergency responders to develop detour route plans and ensure emergency response times remain consistent during construction of the proposed project. Emergency response times would be anticipated to decrease after construction of the project due to increased access, mobility, and reduced congestion.

During construction, temporary changes in traffic patterns would occur which would cause changes to bus routes or commutes to schools, places of worship, parks, libraries, and other community facilities. TxDOT would work to maintain access to community facilities during construction. Reduced congestion, facility improvements (increased connection between east and west Austin across I-35, bypass lanes, HOV managed lanes, etc.) and improved bicycle and pedestrian facilities with Build Alternative 2 would be expected to improve access to community facilities once construction is completed. See Section 3.17 for a complete discussion of construction phase impacts.

3.6.6.2.2 Modified Build Alternative 3

In April 2022, design refinements aimed at reducing impacts were implemented in response to stakeholder engagement. Based on the design dated April 8, 2022, with Modified Build Alternative 3 there would be direct impacts resulting in three displacements of community facilities including two FQHCs (CommUnityCare – David Powell Health Center [Map ID HC-2] and CommUnityCare – Hancock Walk-In Care [Map ID HC-1]), and an early childhood center (Escuelita del Alma [Map ID S-45]). These displacements are discussed in more detail in Section 3.6.7. There would be acquisition of small amounts of ROW, which would not result in displacements, to additional community facilities as discussed below.
Non-Displacement Impacts to Community Facilities

Minor ROW acquisition not resulting in displacement would occur at the following community facilities, based on the design dated April 8, 2022:

- COA Norwood House Parkland (Map ID P-47) (approximately 0.57 acre of construction staging easement). The construction staging easement would be a sliver along I-35 frontage road and would be used for construction at Lady Bird Lake for the duration of the project. This could affect the fencing and eastern perimeter of the Norwood Estate Dog Park. It would be anticipated that TxDOT would coordinate with COA PARD to minimize any disruption to this facility during construction.

- COA Waller Beach (P-58) (approximately 1.20 acres of construction staging easement would be required from this parcel). This would be used for construction at Lady Bird Lake for the duration of the project and would be expected to only cause minor disruption during construction and would be permanently converted to TxDOT ROW under Section 6(f).

- COA Edward Rendon Park (P-62) (approximately 0.70 acre of construction staging easement would be required from this parcel along the frontage of I-35). This would be used for construction at Lady Bird Lake for the duration of the project and would be expected to only cause minor disruption during construction and would be returned to existing condition following construction.

- COA International Shores_3 (P-2) (approximately 0.70 acre of construction staging easement would be required from this parcel along the frontage road of I-35). This would be used for construction at Lady Bird Lake for the duration of the project and would be expected to only cause minor disruption during construction and would be returned to existing condition following construction.

Similar to Build Alternative 2, BN services which are currently provided under existing bridges of I-35, including at I-35 at Airport Blvd. (BN-4) and 7th Street at I-35 (BN-8) would be required to relocate to a new location. These BN services include handwashing, port-a-potties, food, and mobile showers. These services are mobile and would have the ability to be moved if new locations are provided in an area of need.

Since the frontage roads between 32nd Street and 11th street would be bridged and meander across the facility, there would be areas where driveways to adjacent businesses or community facilities would not be provided in this section. However, access to adjacent community facilities in this area including St. David’s Hospital (HC-10), Mt. Calvary Cemetery (CM-1), Oakwood Cemetery (CM-2), and the UT (Mike Myers Stadium and athletic fields, Moody Center) from the frontage road would have access provided at major cross streets.

Under Modified Build Alternative 3, temporary changes in traffic patterns would be expected during construction. Emergency service providers would receive notification from TxDOT prior to construction and/or temporary roadway closures or detours. TxDOT will continue to coordinate with emergency responders to develop detour route plans and ensure emergency response times remain consistent during construction of the proposed project. Emergency response times would be anticipated to decrease after construction of the project due to increased access, mobility, and reduced congestion.
During construction, temporary changes in traffic patterns would occur which would cause minor changes to bus routes or commutes to schools, places of worship, parks, libraries, and other community facilities. TxDOT would work to maintain access to community facilities during construction. Reduced congestion, facility improvements (increased connection between east and west Austin across I-35, bypass lanes, HOV managed lanes, etc.) and improved bicycle and pedestrian facilities with Modified Build Alternative 3 would be expected to improve access to community facilities once construction is completed. See Section 3.17 for a complete discussion of construction phase impacts.

3.6.6.2.3 No Build Alternative

No ROW would be required for the No Build Alternative and no community facilities would be directly affected. However, increased congestion and reduced mobility throughout the corridor would be expected with this alternative. Bicycle and pedestrian improvements as proposed with the Build Alternatives would not occur. In the long-term, the No Build Alternative could result in longer travel times and more congestion throughout the Community Study Area.

3.6.7 Displacements

3.6.7.1 Legal and Regulatory Background

The Uniform Act contains specific requirements that determine the manner in which a government entity acquires private property for public use when federal funds are used for a project. The purpose of this act is to provide a uniform policy for fair and equitable treatment of persons and businesses displaced as a result of federal and federally-assisted programs in accordance with the following objectives:

- To ensure that owners of real property to be acquired for federal and federally assisted projects are treated fairly and consistently, to encourage and expedite acquisition by agreements with such owners, to minimize litigation and relieve congestion in the courts, and to promote public confidence in federal and federally assisted land acquisition programs.
- To ensure that persons displaced as a direct result of federal and federally assisted projects are treated fairly, consistently, and equitably so that such persons will not suffer disproportionate injuries as result of projects designed for the benefit of the public.
- To ensure that agencies implement these regulations in a manner that is efficient and cost effective.

3.6.7.2 Methodology

The potential for displacements and relocations resulting from the Capital Express Central Project were identified utilizing schematics dated April 8, 2022, and based on information provided by project engineers and as a result of design changes implemented to avoid and minimize displacements. A GIS desktop review was conducted to identify potentially affected parcels. Displacements could change as design progresses. ROW acquisition would generally occur in small strips along the existing I-35 facility, and most of the displacements would be properties immediately abutting the I-35 corridor.
3.6.7.3 Environmental Consequences Related to Displacements

3.6.7.3.1 Build Alternative 2

Build Alternative 2 displacements were calculated based on design drawings from April 8, 2022. Figure 3.6-6 shows the locations of the Build Alternative 2 displacements and the Displacements Table included in Appendix J lists all of the anticipated displacements. Table 3.6-2 at the end of this section includes a comparison of the types and numbers of displacements for both Build Alternative 2 and Modified Build Alternative 3.

Community Facilities

Escuelita del Alma (Map ID D-62) a Spanish-immersion early childhood center, Extend-A-Care (Map ID D-71), and Copernicus STEM Academy (D-27 and D-28) are early childhood center community facility displacements. At this time, it is unknown whether or not these facilities would be able to relocate within the community. Losing daycare facilities within the Community Study Area is of concern for area residents who may have difficulty finding replacement resources within the nearby area. The public involvement team is currently in the process of contacting community facilities that may potentially be displaced. TxDOT will continue to work with these facilities throughout the acquisition process and is committed to assisting these critical facilities find alternate locations near their current location, when possible. TxDOT is currently considering advanced relocation assistance for selected properties in order to minimize impacts to underserved communities. At the time of this analysis, communication with Escuelita del Alma has been initiated.

Pathways Youth and Family Services offers foster care and adoption services, including residential in-home care and behavioral health. Special Kids Care is a pediatric specialty home health agency; the office appears to be administrative but services may also be provided out of this office. The Texas State Independent Living Council is a nonprofit with the goal of helping Texans with disabilities to live as independently as they choose. This organization also advocates on issues relating to people with disabilities. The administrative offices of these community facilities are currently located at the Petroleum Building (D-83), which would be displaced with Build Alternative 2. Green Doors (D-85) is a mission-based organization whose goal is to prevent and help end homelessness and poverty housing for those working to achieve independent living in central Texas. Currently located along I-35, Green Doors would be displaced with Build Alternative 2.

Healthcare Displacements

This section includes community facility and general healthcare facility displacements that would occur with Build Alternative 2. The two FQHCs, and the Austin VA Veteran’s Center include the community facility healthcare displacements. The two FQHCs that would be displaced are CommUnityCare – David Powell Health Center (Map ID D-22) and CommUnityCare – Hancock Walk-In Care (Map ID D-31). FQHCs include a specific scope that includes care for those without health insurance.

The David Powell Health Center includes primary care, walk-in care, women’s healthcare, psychiatry, and HIV prevention, testing, and treatment. Apart from the David Powell clinic, HIV treatment is available at the South Austin Health Center (currently not accepting new patients), the Southeast Health and Wellness Center, and the
North Central CommUnityCare locations approximately 7 miles south, 9 miles southeast, and 7 miles north of the David Powell Health Center, respectively. If the David Powell Health Center is displaced and not relocated near its current location, the nearest HIV care provider listed on COA’s Austin HIV resources page ([https://www.austintexas.gov/department/service-providers](https://www.austintexas.gov/department/service-providers)) includes the Vivent Health Main Campus/Moody Medical located at 7215 Cameron Road approximately 2.5 miles northeast of the existing clinic. HIV testing services, but not treatment, are offered at Ashwell Sexual Health and Wellness located at 3100 Red River Street, approximately 3 miles to the southwest of the David Powell Health Center, and the Sexual Health Center located at 15 Waller Street, approximately 5.5 miles south of the David Powell Health Center. If this facility was not displaced, then in order to accommodate the design, ROW would be required from the eastern side of I-35, which would result in the displacement of 56 below-market rate housing units at the Abali.

The Hancock Walk-In Care is a walk-in clinic with no scheduled services that also provides after-hours care. CommUnityCare offers same day acute care services at one other location apart from Hancock, the Southeast Health & Wellness Center 9 miles away in the Montopolis neighborhood. These walk-in facilities also provide immediate care services in support of home clinics by accepting overflow patients.

The Austin VA Veteran’s Center (Map ID HC-13) is located within the Petroleum Building. The Austin VA is a veteran’s center that provides confidential help for veterans, service members, and their families at no cost in a non-medical setting. Services include counseling for needs such as depression, post-traumatic stress disorder, and the psychological effects of military sexual trauma. If the Austin VA Veteran’s Center is displaced, satellite locations are located in Bastrop, San Marcos, Cedar Park, and Georgetown all of which are more than 20 miles from the current location.

The general healthcare displacements that would occur with Build Alternative 2 are:

- **Austin Medical Building (D-35)** – This facility includes Austin Eye Clinic Association, Dr. Wong et al, Optometry, pediatric healthcare, and Dr. Michael Gutierrez, family medicine.
- **Dr. Emilio Torrez – Obstetrics and Gynecology (D-60).**
- **Dell Children’s Medical Group - Specially for Children – Pediatrics (D-10).**
- **The Petroleum Building (D-83)** – Inside the Petroleum Building, the following healthcare facilities would be displaced: Roots Behavioral Health – psychiatric mental health services; Airrosti Rehab Center, and Jason Long M.D.
- **Brookside Women’s Medical Center (D-92)** – Gynecology and primary care.

At this time, it is unknown whether or not these healthcare facilities would be able to relocate within the community. Losing healthcare facilities within the Community Study Area is of concern for area residents who may have difficulty finding replacement resources within the nearby area. The public involvement team is currently in the process of contacting healthcare facilities that may potentially be displaced. TxDOT is currently considering advanced relocation assistance for selected properties in order to minimize impacts to underserved communities and to minimize disruption of services. At the time of this analysis, communication with the two CommUnityCare facilities has been initiated.
Commercial

The Community Study Area includes a wide variety of businesses, including commercial, retail, and restaurants primarily accessed by car. Based on the design dated April 8, 2022, there would potentially be 131 commercial displacements with Build Alternative 2 (this includes the community facility and healthcare displacements which may be located on parcels with other businesses such as in the Hancock Center or the Petroleum Building). Field verification of the number and types of businesses potentially displaced is ongoing and will be updated to gather the most recent and accurate information for the Community Study Area. Figure 3.6.6 shows the locations of these displacements, and Appendix J includes a table of businesses which may be affected. This table also includes the distance a traveler would need to go to access a similar service. The number of displacements may change based on further design. It should be noted that commercial parcels that would potentially be impacted may not be entirely displaced pending final design. Table 3.6.2 shows the types of businesses, as of October 1, 2022, which may be lost with Build Alternative 2. This may change as businesses turnover in the Community Study Area.

Of the 131 potential commercial displacements, 16 businesses serve a specific population including minority or Spanish-speaking, low-income, and children. These include:

- CommUnityCare – David Powell Heath Center (FQHC run by the Travis County Healthcare District) specializes in the treatment of HIV and AIDS and providing services to low-income or those without medical insurance.
- CommUnityCare – Hancock Walk-In Care (Hancock Center), FQHC that provides medical services to the general public as well as low-income or those without medical insurance.
- Pediatric Healthcare (located in the Austin Medical Building) serves children.
- Dr. Emilio Torres, an obstetrician/gynecologist, serves women and children.
- Daycare (Escuelita del Alma), Spanish immersion preschool (occupies two commercial parcels that would be displaced).
- Extend-A-Care (Northshore Plaza), YMCA afterschool program.
- Copernicus STEM Academy, Delwood Campus, serves children.
- Pathways Youth and Family Services Behavioral Health (located in the Petroleum Building) serves children.
- Special Kids Care (located in the Petroleum Building) serves children.
- Texas State Independent Living Council (located in the Petroleum Building) serves individuals with disabilities.
- Brookside Women’s Medical Center serves women.
- Jimmy’s Barbershop – provides barber services for the Black/African American community.
- The BL Barbershop – provides barber services for the Black/African American community.
• Green Doors – provides homelessness prevention services and serves the low-income community.

The appraised value of the commercial properties that would be displaced ranged from $264,700 to $85,000,000 according to 2021 Travis County Appraisal Rolls. The commercial property valued at $85,000,000 (Hancock Center) was an outlier and the entire parcel would not be affected by the proposed project. All other commercial property displacements valued below $16,600,000. The average of the commercial property values was about $3,077,100 and the median was $960,800. According to LoopNet, there were five commercial properties for sale within the Community Study Area which were between $250,000 and $1,000,000 and 41 commercial properties for sale between $1,000,000 and $16,600,000 (LoopNet 2021).

As shown on TxDOT economics form in Appendix J, these displacements could result in the loss of approximately 1,125 jobs. The public involvement team is currently in the process of contacting businesses which may potentially be displaced. TxDOT will continue to work with these businesses throughout the acquisition process. The unemployment rate in Austin was 6.1 percent in 2020, up from 2.5 percent in 2019, which reflected the impact of the COVID-19 pandemic (COA, 2021c). Locally, regionally, and nationally, businesses have been affected by the labor shortage, rising cost of wages, supply chain issues, and rising cost of supplies (CNBC 2021). These issues may affect businesses wishing to relocate within the project area. Some of the jobs lost due to displacement could be replaced near the project area; however, if all 1,125 jobs were lost and not replaced, it would comprise less than 0.18 percent of the labor force in Travis County. Prior to the pandemic (2018–2019), employment grew at a rate of 3.38 percent in Travis County. It would be anticipated that jobs would be available near the project area for employees whose jobs were lost due to commercial displacement.

Residential

Based on the design dated April 8, 2022, there are 145 residential displacements for Build Alternative 2. These are listed on the Displacements Table in Appendix J. The number of residential displacements could change based on further design changes. The displacements include two single-family residences and five multifamily complexes. The multifamily complexes include the Aria Grand Apartments (70 units), Avalon Apartments (24 units), Gardens Apartments (40 units), 1500 Summit Condos (7 displacements), and two units at 1048 East 43rd Street.

In 2021, the appraised value for these homes ranged from approximately $368,000 to $916,000 for single-family parcels and from approximately $2,824,000 to $3,561,000 for multifamily units (1500 Summit Condos did not have an appraised value listed). Appraised value accounts for an objective account of a property including things like location, size, and market trends, while market values are more subjective and include what an average buyer would be willing to pay for a property at a particular time. According to Zillow, on March 18, 2022, there were over 51 single-family homes listed below $950,000 in the four ZIP codes encompassing the single-family residential displacements (78702, 78722, 78723, and 78751). Only two of those listings were listed below $400,000. According to RedFin, in February 2022 housing prices in Austin were up 14.1 percent compared to last year and selling for a median price of $576,000 (RedFin, 2022a). The RedFin data showed that over 62 percent of houses in Austin sold for over listing price in February 2022. The dramatic rise in housing costs (from an average housing price of approximately $72,000 in 1990 to almost $440,000 in 2021) has created a highly competitive housing market indicating those residents displaced by the proposed project,
especially with homes valued under $576,000 (the median home sales price), would enter into a highly competitive housing market. Additional GIS data were reviewed to estimate the number of property owners versus renters. It appears that all of the proposed residential displacements were renters. Renters generally have less access to the level of financial security that property ownership entails. Those with low incomes could experience challenges in finding replacement rental or purchased housing within or near the Community Study Area. TxDOT will provide relocation assistance in accordance with the Uniform Act for those displaced by the proposed project.

Zillow included eight listings for multifamily buildings between $800,000 and $2,400,000 within the three ZIP codes encompassing the apartment building displacements (78704, 78705, and 78741) on May 5, 2022. While these were listed as multifamily housing, they included duplexes, triplexes, cottages, and townhomes and none of the listings included buildings with large complexes of 20 to 70 units such as would be displaced with Build Alternative 2. A search on Loop Net for commercial properties included several listings in Austin for apartment complexes (6 units to 40 units) or multifamily redevelopment between $2,200,000 and $12,000,000.

Fifteen displacements were considered “vacant” as of October 1, 2022. The vacant displacements included unoccupied office spaces (including the former First Worker COA Day Labor Center), residential parcels (including the former Acacia apartments and one parcel owned by the Guadalupe Neighborhood Development Corporation [GNDC] who has plans to develop the tract into two below-market rate single-family rental homes), unoccupied warehouse spaces, a vacant auto repair garage, and vacant lots.

**Tax Value**

Several properties would be displaced under Build Alternative 2, and the sum of the appraised value for these potential displacements would be approximately $266,111,139 (2021 appraised values). As mentioned in the Economic Analysis in Appendix J, the proposed project design is still being refined and parcels with displacements may not be entirely impacted (e.g., Hancock Center has an appraised value of $85,000,000 but the entire center would not be affected). Once design progresses the local tax revenue lost can be more accurately calculated. Based on the Travis County Tax Office, the 2021 Travis County tax rate was 0.36 percent. The annual tax revenue lost as a result of the proposed project (conversion of taxable property to public ROW) would be approximately $1 Million to Travis County, which would amount to a tax revenue loss of less than one percent of the tax base for Travis County. Taxes are also assessed for several taxing units, and revenue would be lost in the following amounts based on the Travis County Property Tax Estimator: Travis Central Health (approximately $300,000), Austin Community College (approximately $280,000), COA (approximately $1.4 million), and AISD (approximately $2.8 million).
Table 3.6-2. Types of Businesses that may be Lost with Build Alternative 2

<table>
<thead>
<tr>
<th>Type of Displacement</th>
<th>Total</th>
<th>Number that Serve a Specific Population*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthcare</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>Auto Sales/Service</td>
<td>11</td>
<td>0</td>
</tr>
<tr>
<td>Gas Station/Convenience Store/Liquor Store</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>Daycare</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Motel</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Barbershop/Salon</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Entertainment–Arcade, Gym, Adult Entertainment</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>News/Media/Printing Company</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Storage Facilities</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Restaurant</td>
<td>9</td>
<td>0</td>
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<tr>
<td>Office</td>
<td>38</td>
<td>4</td>
</tr>
<tr>
<td>Retail</td>
<td>13</td>
<td>0</td>
</tr>
<tr>
<td>Parking Services</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Various (Tattoo shop, Bank, Bail Bonds, and Other)</td>
<td>18</td>
<td>0</td>
</tr>
</tbody>
</table>

*Specific populations may include minorities, low-income individuals, children, the elderly, the disabled or any other specific group.
Figure 3.6-6. Displacements – Build Alternative 2 (Map 1 of 22)
Figure 3.6-6. Displacements – Build Alternative 2 (Map 2 of 2)
Figure 3.6-6. Displacements – Build Alternative 2 (Map 3 of 22)
Figure 3.6-6. Displacements – Build Alternative 2 (Map 4 of 22)
Figure 3.6-6. Displacements – Build Alternative 2 (Map 5 of 22)
Figure 3.6-6. Displacements – Build Alternative 2 (Map 6 of 22)
Figure 3.6-6. Displacements – Build Alternative 2 (Map 7 of 22)
Figure 3.6-6. Displacements – Build Alternative 2 (Map 8 of 22)
Figure 3.6-6. Displacements – Build Alternative 2 (Map 9 of 22)
Figure 3.6-6. Displacements – Build Alternative 2 (Map 10 of 22)
Figure 3.6-6. Displacements – Build Alternative 2 (Map 11 of 22)
Figure 3.6-6. Displacements – Build Alternative 2 (Map 12 of 22)
Austin VA Veterans Center, Pathways Youth & Family Services, Special Kids Care, and Texas State Independent Living Council at the Petroleum Building

Figure 3.6-6. Displacements – Build Alternative 2 (Map 13 of 22)
Figure 3.6-6. Displacements – Build Alternative 2 (Map 14 of 22)
Figure 3.6-6. Displacements – Build Alternative 2 (Map 15 of 22)
Figure 3.6-6. Displacements – Build Alternative 2 (Map 16 of 22)
Figure 3.6.6. Displacements – Build Alternative 2 (Map 17 of 22)
Figure 3.6-6. Displacements – Build Alternative 2 (Map 18 of 22)
Figure 3.6-6. Displacements – Build Alternative 2 (Map 19 of 22)
Figure 3.6-6. Displacements – Build Alternative 2 (Map 20 of 22)
Figure 3.6-6. Displacements – Build Alternative 2 (Map 21 of 22)
Figure 3.6-6. Displacements – Build Alternative 2 (Map 22 of 22)
3.6.7.3.2 Modified Build Alternative 3

In March 2022, design refinements aimed at reducing impacts and minimizing displacements were implemented in response to stakeholder engagement. Modified Build Alternative 3 displacements were calculated based on design drawings from April 8, 2022. Figure 3.6-7 shows the locations of the Modified Build Alternative 3 displacements and the Displacements Table included in Appendix J lists all of the anticipated displacements. Table 3.6-4 at the end of this section includes a comparison of the types and numbers of displacements for both Build Alternative 2 and Modified Build Alternative 3.

**Important note regarding ongoing design modifications and late-identified changes to displacement data reported in this and other sections of the DEIS:** TxDOT is continuously evaluating ROW requirements. Shortly before printing this DEIS, changes to the schematic design for this alternative resulted in refinements to the displacements reported in this section: TxDOT has evaluated the ROW requirements north of E. Oltorf Street, which has resulted in access being maintained as to not displace the Whip In. Additionally, based on roadway construction requirements near the CapMetro Redline at Airport Boulevard, it is reasonably foreseeable that displacement of the Nature’s Treasures business located at 4103 N I-35 will be necessary. Following the Public Hearing comment period, additional changes to the design may be implemented based on the continuation of the design process and in response to public and agency comment. In the publication of the combined Final Environmental Impact Statement (FEIS) and Record of Decision (ROD), we will adjust and finalize the displacements data and maps in this and other sections of the EIS to reflect these changes regarding Whip In and Nature’s Treasures, which could not be made in time for the DEIS publication, and any other changes to displacements that are identified following the public hearing comment period.

**Early Childhood Centers**

Escuelita del Alma (Map ID D-62) is a Spanish-immersion early childhood center and is listed as a community facility displacement for Modified Build Alternative 3. At this time, it is unknown whether or not this facility would be able to relocate within the community. Losing a daycare facility within the Community Study Area is of concern for area residents who may have difficulty finding replacement resources within the nearby area. The public involvement team is currently in the process of contacting community facilities that may potentially be displaced. TxDOT will continue to work with these facilities throughout the acquisition process and is committed to assisting these critical facilities find alternate locations near their current location, when possible. TxDOT is currently considering advanced relocation assistance for selected properties in order to minimize impacts to underserved communities. At the time of this analysis, communication with Escuelita del Alma has been initiated.

**Healthcare Displacements**

This section includes community facility and general healthcare facility displacements that would occur with Modified Build Alternative 3. The two FQHCs that would be displaced are CommUnityCare – David Powell Health Center (Map ID D-22) and CommUnityCare – Hancock Walk-In Care (Map ID D-31). FQHCs include a specific scope that includes care for those without health insurance.
The David Powell Health Center includes primary care, walk-in care, women's healthcare, psychiatry, and HIV prevention, testing, and treatment. Apart from the David Powell clinic, HIV treatment is available at the South Austin Health Center (currently not accepting new patients), the Southeast Health and Wellness Center, and the North Central CommUnityCare locations approximately 7 miles south, 9 miles southeast, and 7 miles north of the David Powell Health Center, respectively. If the David Powell Health Center is displaced and not relocated near its current location, the nearest HIV care provider listed on COA’s Austin HIV resources page (https://www.austintexas.gov/department/service-providers) includes the Vivent Health Main Campus/Moody Medical located at 7215 Cameron Road approximately 2.5 miles northeast of the existing clinic. HIV testing services, but not treatment, are offered at Ashwell Sexual Health and Wellness located at 3100 Red River Street, approximately 3 miles to the southwest of the David Powell Health Center and the Sexual Health Center located at 15 Waller Street, approximately 5.5 miles south of the David Powell Health Center. If this facility was not displaced, in order to accommodate the design, ROW would be required from the eastern side of I-35 and would result in the displacement of 56 below-market rate housing units at the Abali.

The Hancock Walk-In Care is a walk-in clinic with no scheduled services, that also provides after hours care. CommUnityCare offers same day acute care services at one other location apart from Hancock, the Southeast Health & Wellness Center 9 miles away in the Montopolis neighborhood. These walk-in facilities also provide immediate care services in support of home clinics by accepting overflow patients.

The general healthcare displacements that would occur with Modified Build Alternative 3 are:

- Austin Medical Building (D-35) – This facility includes Austin Eye Clinic Association, Dr. Wong et al, Optometry, pediatric healthcare, and Dr. Michael Gutierrez, family medicine.
- Dr. Emilio Torrez – Obstetrics and Gynecology (D-60).

The public involvement team is currently in the process of contacting community and healthcare facilities that may potentially be displaced. TxDOT will continue to work with these facilities throughout the acquisition process and is committed to assisting these critical facilities find alternate locations near their current location, when possible. TxDOT is currently considering advanced relocation assistance for selected properties in order to minimize impacts to underserved communities. At the time of this analysis, communication with the two CommUnityCare facilities has been initiated.

Commercial

The Community Study Area includes a wide variety of businesses, including commercial, retail, and restaurants which are primarily accessed by car. Based on the design dated April 8, 2022, there would potentially be 69 commercial displacements with Modified Build Alternative 3 (this includes the community facility and healthcare displacements that may also be on parcels with other businesses such as in Hancock Center). Field verification of the number and types of businesses potentially displaced is ongoing and will be updated to gather the most recent and accurate information for the Community Study Area. Figure 3.6-7 shows the locations of these displacements and Appendix J includes a table of businesses that may be affected. This table also includes the distance a traveler would need to go to access a similar service. The number of displacements may change based on further design. Commercial parcels that would potentially be impacted may not be entirely displaced.
Of the 69 potential commercial displacements, eight businesses serve a specific population including minority or Spanish-speaking, low-income, and children. These include:

- CommUnityCare – David Powell Heath Center (FQHC run by the Travis County Healthcare District) specializes in the treatment of HIV and AIDS and providing services to low-income or those without medical insurance.
- CommUnityCare – Hancock Walk-In Care (Hancock Center), FQHC that provides medical services to the general public as well as low-income or those without medical insurance.
- Pediatric Healthcare (located in the Austin Medical Building) serves children.
- Dr. Emilio Torres, an obstetrician/gynecologist, serves women and children.
- Daycare (Escuelita del Alma) Spanish immersion preschool (occupies two commercial parcels that would be displaced).
- Jimmy’s Barbershop provides barber services for the Black/African American community.
- The BL Barbershop – provides barber services for the Black/African American community.

The appraised value of the commercial properties that would be displaced ranged from about $319,000 to $85,000,000 according to 2021 Travis County Appraisal Rolls. The commercial property valued at $85,000,000 (Hancock Center) was an outlier and the entire parcel would not be affected by the proposed project. All other commercial property displacements valued below $16,600,000. The average of the commercial property values was about $2,800,000 and the median was $890,000. According to LoopNet, there were six commercial properties for sale within the Community Study Area, which were between $250,000 and $1,000,000 and more than 25 commercial properties for sale between $1,000,000 and $16,600,000 (LoopNet, 2022).

As shown in Table 3.6-3 and on TxDOT economics form in Appendix J, these displacements could result in the loss of over approximately 625 jobs. The public involvement team is currently in the process of contacting businesses that may potentially be displaced. TxDOT will continue to work with these businesses throughout the acquisition process. The unemployment rate in Austin was 6.1 percent in 2020, up from 2.5 percent in 2019, which reflected the impact of the COVID-19 pandemic (COA, 2021c). Locally, regionally, and nationally businesses have been affected by the labor shortage, rising cost of wages, supply chain issues, and rising cost of supplies (CNBC 2021). These issues may affect businesses wishing to relocate within the project area. Some of the jobs lost due to displacement could be replaced near the project area; however, if all 625 jobs were lost and not replaced, it would comprise less than 0.1 percent of the labor force in Travis County. Prior to the pandemic (2018–2019), employment grew at a rate of 3.38 percent in Travis County. It would be anticipated that jobs would be available near the project area for employees whose jobs were lost due to commercial displacement.

Residential

Based on the design dated April 8, 2022, there are 26 residential displacements for Modified Build Alternative 3. These are listed on the Displacements Table in Appendix J. The number of residential displacements could
The displacements include two single-family residences and one multifamily complex. The multifamily complex is the Avalon Apartments (24 units).

The appraised value for these homes ranged from approximately $368,000 to $873,000 for single-family parcels, and the multifamily units ranged in appraised value from approximately $1,200,000 to $2,823,000. According to Zillow, on March 18, 2022, there were over 22 single-family homes listed below $950,000 in the three ZIP codes encompassing the single-family residential displacements (78702, 78722, and 78751). Only one of those listings were listed below $400,000. According to RedFin, in February 2022 housing prices in Austin were up 14.1 percent compared to last year and selling for a median price of $576,000 (RedFin, 2022a). The RedFin data showed that over 62 percent of houses in Austin sold for over listing price in February 2022. The dramatic rise in housing costs (from an average housing price of approximately $72,000 in 1990 to almost $440,000 in 2021) has created a highly competitive housing market indicating those residents displaced by the proposed project, especially with homes valued under $576,000 (the median home sales price), would enter into a highly competitive housing market. Additional GIS data were reviewed to estimate the number of property owners versus renters. It appears that all of the proposed residential displacements were renters. Renters generally have less access to the level of financial security that property ownership entails. Those with low incomes could experience challenges in finding replacement rental or purchased housing within or near the Community Study Area. TxDOT will provide relocation assistance to those displaced by the project in accordance with the Uniform Act.

Zillow included five listings for multifamily buildings between $625,000 and $1,100,000 within the two ZIP codes encompassing the apartment building displacements (78705 and 78751) on March 18, 2022. While these were listed as multifamily housing, they included duplexes, triplexes, cottages, and townhomes and none of the listings included buildings with large complexes of 20 to 70 units such as would be displaced with Modified Build Alternative 3.

Twelve displacements were considered “vacant” as of September 1, 2022. The vacant displacements included two unoccupied office spaces (including the former First Worker COA Day Labor Center), six residential parcels (including the former Acacia apartments and one parcel owned by the GNDC who has plans to develop the tract into two below-market rate single-family rental homes), three unoccupied warehouse spaces, and a vacant auto repair garage.

### Tax Value

Modified Build Alternative 3 would displace several properties, and the sum of the appraised value for these potential displacements would be approximately $201,202,000 (2021). As noted in the Economic Analysis in Appendix J, the proposed project design is still being refined and parcels with displacements may not be entirely impacted (e.g., Hancock Center has an appraised value of $85,000,000 but the entire center would not be affected). Once design progresses, the local tax revenue lost can be more accurately calculated. Based on the Travis County Tax Office, the 2021 Travis County tax rate was 0.36 percent. The annual tax revenue lost as a result of the proposed project (conversion of taxable property to public ROW) would be approximately $720,000 to Travis County, which would amount to a tax revenue loss of less than one percent of the tax base for Travis County. Taxes are also assessed for several taxing units and revenue would be lost in the following amounts.
Table 3.6-3. Types of Businesses that may be Lost with Modified Build Alternative 3

<table>
<thead>
<tr>
<th>Type of Displacement</th>
<th>Total</th>
<th>Number that Serve a Specific Population*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthcare</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Auto Sales/Service</td>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td>Gas Station/Convenience Store/Liquor Store</td>
<td>10</td>
<td>0</td>
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<tr>
<td>Daycare</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Motel</td>
<td>2</td>
<td>0</td>
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<tr>
<td>Barbershop/Salon</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Entertainment-Arcade, Gym, Adult Entertainment</td>
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<td>0</td>
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<td>News/Media/Printing Company</td>
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<tr>
<td>Storage Facilities</td>
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<td>Retail</td>
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<tr>
<td>Parking Services</td>
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<td>0</td>
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<tr>
<td>Various (Tattoo Shop, Bank, Bail Bonds, and Other)</td>
<td>7</td>
<td>0</td>
</tr>
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</table>

*Specific populations may include minorities, low-income individuals, children, the elderly, the disabled or any other specific group.
Figure 3.6-7. Displacements – Modified Build Alternative 3 (Map 1 of 20)
Figure 3.6-7. Displacements – Modified Build Alternative 3 (Map 2 of 20)
Figure 3.6-7. Displacements – Modified Build Alternative 3 (Map 3 of 20)
Figure 3.6-7. Displacements – Modified Build Alternative 3 (Map 4 of 20)
Figure 3.6-7. Displacements – Modified Build Alternative 3 (Map 5 of 20)
Figure 3.6-7. Displacements – Modified Build Alternative 3 (Map 6 of 20)
Figure 3.6-7. Displacements – Modified Build Alternative 3 (Map 7 of 20)
Figure 3.6-7. Displacements – Modified Build Alternative 3 (Map 8 of 20)
Figure 3.6-7. Displacements – Modified Build Alternative 3 (Map 9 of 20)
Figure 3.6-7. Displacements – Modified Build Alternative 3 (Map 10 of 20)
Figure 3.6-7. Displacements – Modified Build Alternative 3 (Map 11 of 20)
Figure 3.6-7. Displacements – Modified Build Alternative 3 (Map 12 of 20)
Figure 3.6-7. Displacements – Modified Build Alternative 3 (Map 13 of 20)
Figure 3.6-7. Displacements – Modified Build Alternative 3 (Map 14 of 20)
Figure 3.6-7. Displacements – Modified Build Alternative 3 (Map 15 of 20)
Figure 3.6-7. Displacements – Modified Build Alternative 3 (Map 16 of 20)
Figure 3.6-7. Displacements – Modified Build Alternative 3 (Map 17 of 20)
Figure 3.6-7. Displacements – Modified Build Alternative 3 (Map 18 of 20)
Figure 3.6-7. Displacements – Modified Build Alternative 3 (Map 19 of 20)
Figure 3.6-7. Displacements – Modified Build Alternative 3 (Map 20 of 20)
3.6.7.3 Alternative Comparison

Modified Build Alternative 3 was redesigned to reduce the number of residential and commercial displacements as is shown by the large reduction in displacements between Build Alternative 2 and Modified Build Alternative 3. These design changes were implemented in response to community involvement and provided a drastic reduction in displacements between the alternatives.

Table 3.6-4. Alternative Comparison for Displacements

<table>
<thead>
<tr>
<th>Proposed Build Alternative</th>
<th># Community Facility*</th>
<th># Commercial **</th>
<th># Serve a Specific Community</th>
<th># Single-Family</th>
<th># Multifamily (Units)</th>
<th>EJ***</th>
</tr>
</thead>
<tbody>
<tr>
<td>Build Alternative 2</td>
<td>10</td>
<td>131</td>
<td>16</td>
<td>2</td>
<td>143</td>
<td>172</td>
</tr>
<tr>
<td>Modified Build Alternative 3</td>
<td>3</td>
<td>69</td>
<td>8</td>
<td>2</td>
<td>24</td>
<td>90</td>
</tr>
</tbody>
</table>

* Build Alternative 2 displaced community facilities: David Powell Health Center, Hancock Walk-In Care, Escuelita del Alma, Pathways Youth and Family Services, Texas State Living Council, Austin VA Vets Center, Green Doors, Copernicus STEM Academy Delwood Campus, and Extend-A-Care.
* Modified Build Alternative 3 displaced community facilities: David Powell Health Center, Hancock Walk-In Care, and Escuelita del Alma.
** Commercial displacements would also include community facility displacements. Community facilities may be located within buildings or complexes which would be displaced, but also include other businesses.
*** EJ displacements conservatively include those within a Census block with 50% or greater minority population, a Census block group where the MHI is below the HHS poverty level, or a Census tract where the percentage of those in poverty is significantly greater than the poverty level within Travis County, with the understanding that no all such displaced persons or businesses may actually be EJ persons or businesses.

3.6.7.3.4 No Build Alternative

No new ROW would be acquired for the No Build Alternative; therefore, no displacements or relocations would occur.

3.6.8 Neighborhoods and Community Cohesion

As described previously, the Community Study Area was historically divided along racial and ethnic backgrounds, and I-35 was placed between east and west Austin, which solidified this physical barrier. The people residing in the eastern crescent, east of I-35, have the largest barriers to travel to access downtown’s amenities. This section will briefly describe the neighborhoods within the Community Study Area and the project’s impacts.

3.6.8.1 Affected Environment

Neighborhood planning is a way for the public to have input on the planning and direction of their neighborhood. The NPAs included in the Community Study Area are described below and are shown in Figure 3.6-8. Table 3.6-5 includes a summary of demographic characteristics taken from the census tracts, blocks, or block groups.
within each of the NPA boundaries. The rates of different groups within the NPAs can be compared to the larger overall Travis County area. Travis County overall had approximately 52.5 percent minority population, a MHI of $80,726, approximately 8.8 percent disabled population, approximately 22 percent children under 18, and approximately 9.5 percent persons over 65. Approximately 6.0 percent of households within Travis County had no access to a car, and approximately 5.3 percent of households had either no computer or no internet available. The percentage of households which had received public assistance or food stamps/SNAP in Travis County was approximately 7.6 percent and approximately 11.5 percent of the population over 5 years old spoke English less than “very well.”

- West of I-35 from north to south:
  - Highland. The Highland neighborhood is bounded by Anderson Lane on the north, Twin Crest and Middle Fiskville Road to the east, Koenig Lane to the south, and Lamar Boulevard on the west. Its neighborhood plan is combined with Brentwood and was adopted May 13, 2004. Highland neighborhood transportation recommendations included improving pedestrian and bicycle accommodations and improving the accessibility of public transit. Overall, the Highland neighborhood is approximately 48 percent minority with an average MHI of $59,220. This neighborhood had a slightly higher percentage of disabled persons (10.5 percent), and a smaller percentage of children (16.7 percent) and those over 65 (6.5 percent), than Travis County. Within this neighborhood, there was a similar percentage of no car households (5.8 percent), a lesser percentage of LEP (10.4 percent), and a greater percentage of households receiving public assistance or food stamps/SNAP (12.9) compared to the county.
  - North Loop. The North Loop Neighborhood Plan was adopted in May 2002. The North Loop neighborhood is located between Koenig Lane to the north, I-35 to the east, 51st Street on the south, and Lamar Boulevard to the west. The neighborhood plan discusses increased property values and a subsequent increase in property taxes following the closure of Robert Mueller Airport in 1999. The North Loop Neighborhood Plan envisioned a pedestrian-friendly, mixed-use neighborhood. Overall, the North Loop neighborhood is approximately 36 percent minority with an average MHI of $71,614. This neighborhood had a slightly higher percentage of disabled persons (9.8 percent), and a smaller percentage of children (13.7 percent) and those over 65 (6.2 percent), than Travis County. Within this neighborhood, there was a similar percentage of no car households (6.3 percent), a lesser percentage of LEP residents (3.4 percent), a less percentage of households receiving public assistance or food stamps (2.9 percent), and a greater percentage of households with no internet or no computer (9.1 percent) compared to the county.
  - Hancock. The Hancock neighborhood is located between 45th Street to the north, I-35 to the east, Dean Keeton Street to the south, and Duval on the west. This neighborhood is included in the Central Austin Combined Neighborhood Plan adopted in August 2004. Goals in this plan included preserving the integrity and character of the single-family neighborhoods, preserving historic character, allowing mixed use development and pedestrian oriented travel, and providing a safe environment and opportunities for all modes of transport. Overall, the Hancock neighborhood is approximately 35.9 percent minority with an average MHI of $72,565. Hancock NPA had the smallest percentage of people with a disability of all the Community Study Area (5.1 percent). The Hancock neighborhood had a much smaller percentage of children (7.2 percent) and those over 65 (5.8 percent) than Travis County. Within this
neighborhood, there was a greater percentage of no car households (10.8 percent) and households with no access to a computer or the internet (11.0 percent), and a much lower percentage of LEP (3.0 percent). Out of all the NPAs in the Community Study Area, the Hancock NPA had the smallest percentage of households receiving public assistance or food stamps/SNAP (2.0 percent).

- UT (Non-NPA). The UT area includes the main campus of the UT at Austin. This area comprises approximately 64 percent minority with an average MHI of $65,549. The UT area had a very low percentage of people with disabilities (approximately 6.1 percent) and had a much smaller percentage of children (5.1 percent) and those over 65 (3.7 percent) than Travis County. Within the UT area, there was a higher percentage of no car households (9.3 percent) and households with no computer or internet access (8.4 percent), a lower percentage of LEP individuals (2.3 percent), and a much lower percentage of households receiving public assistance or food stamps/SNAP (2.6 percent) compared to the county.

- Downtown (Non-NPA). The Downtown area is composed of the Medical Innovation, Capitol, Red River, 6th Street, Congress Ave, Convention Area, and Rainey Street Districts. It was composed of approximately 40.0 percent minority populations with the highest MHI in the Community Study Area at $113,991. Downtown had the smallest percentage of children (3.2 percent) of any neighborhood within the Community Study Area. Approximately 11.5 percent of the population was over 65, which is slightly higher than the rate for Travis County. Downtown was the only area within the community study area to have a smaller percentage of households with no computer or internet access than the county as a whole (4.6 percent). This area also had a low percentage of those receiving public assistance or food stamps (2.6 percent). Approximately 6.6 percent of the population had a disability and only approximately 1.9 percent of the population 5 and older spoke English less than very well (LEP).

- South River City. The South River City neighborhood is located south of Lady Bird Lake, west of I-35, north of Oltorf, and east of South Congress Avenue. The Greater South River City Combined Neighborhood Plan includes the South River City and St. Edwards neighborhoods and was adopted September 29, 2005. This NPA had the smallest minority percentage of any NPA within the Community Study Area (27.2 percent), which was much lower than the minority percentage within Travis County and had the second highest MHI at $99,310. South River City had a larger percentage of zero car households (9.4 percent) and households with no computer or internet access (12.7 percent) compared with the county. This neighborhood had a lower percentage of children (11.8 percent), those over 65 (8.6 percent), as well as a lower percentage of LEP individuals (5.0 percent), and those receiving public assistance or food stamps (5.7 percent), when compared with Travis County.

- St. Edwards. The St. Edwards neighborhood is included in the South River City district, and it is located south of Oltorf, west of I-35, north of Ben White Boulevard, and east of South Congress Avenue. This neighborhood includes the campus of St. Edwards University. The Greater South River City Combined Neighborhood Plan includes the South River City and St. Edwards neighborhoods and was adopted September 29, 2005. Approximately 54.3 percent of the population within the St. Edwards neighborhood is minority and the average MHI was on the lower end of the NPAs within the Community Study Area at $45,396. This NPA contained a similar percentage of people with disabilities (8.2 percent) compared to Travis County but had lower percentages of children (12.7 percent) and those over 65 (7.5 percent).
percent). There were approximately 17.3 percent of zero car households and 17.8 percent of
households with no computer or internet access; these percentages are almost three times and just
over three times greater than the county percentages overall. Approximately 9.9 percent of households
had received public assistance or food stamps within the past year which is slightly greater than the
percentage within the county, and approximately 4.3 percent were LEP.

- East Congress. The East Congress neighborhood is included in the South River City District and the
South Congress Combined Neighborhood Plan, which was adopted August 18, 2005. The East Congress
neighborhood is bounded to the north by Ben White Boulevard, to the east by I-35, to the south by
Stassney Lane, and to the west by South Congress Avenue. Approximately 54.3 percent of the
population in the East Congress neighborhood comprises minorities and the average MHI within the
NPA was $66,935. Persons with disabilities accounted for approximately 6.6 percent of the population.
Children composed approximately 14.8 percent of the neighborhood’s population and those over 65
accounted for approximately 9.1 percent. The East Congress neighborhood had the lowest percentage
of zero car households of all neighborhoods within the Community Study Area (3.8 percent). This
neighborhood had about three times more households with no computer or no internet access, when
compared to the county (16.2 percent). A smaller percentage of households within this NPA had
received public assistance or food stamps (4.3 percent) compared with the county. Approximately 12.7
percent of the population within the East Congress neighborhood was LEP.

- East of I-35 generally from north to south:

  o Coronado Hills. The Coronado Hills Neighborhood is located where US 183 and US 290 meet. The St.
John/Coronado Hills Combined Neighborhood Plan was adopted in April 2012. The Coronado Hills
neighborhood had the highest minority population (90.1 percent) and also had the lowest average MHI
($38,176) of all the NPAs within the Community Study Area. This neighborhood had a similar percentage
of children (23.4 percent) and a slightly greater percentage of those over 65 (12.6 percent) compared
to Travis County. Coronado Hills NPA had the highest percentage of LEP (28.9 percent) within the
Community Study Area and also had a much higher percentage of households with no computer or
internet access (22.7 percent), households who had received public assistance or food stamps within
the past year (21.6 percent), and zero car households (19.3 percent), compared to the county.

  o St. John. The St. John neighborhood is primarily located east of I-35 but crosses over to Middle Fiskville
Road and Twin Crest Drive to the west. The neighborhood is bounded by US 183 to the north, Cameron
Road to the east, and US 290 to the south. The St. John/Coronado Hills Combined Neighborhood Plan
was adopted April 26, 2012. The St. John neighborhood comprises approximately 78.7 percent minority
population and had an average MHI of $46,103. This neighborhood had a slightly larger population of
persons with disabilities than Travis County at 11.1 percent. Children (19.6 percent) and those over 65
(6.7 percent) comprised a smaller percentage of the population within this neighborhood than the
county. St. John had a much higher portion of households with no access to a car (14.6 percent), no
computer or internet access (26.2 percent), and households who had received public assistance or food
stamps (18.7 percent) compared to the county. Approximately 28.6 percent of the population was LEP,
the second highest percentage of LEP population within the Community Study Area.
University Hills. The University Hills neighborhood is located in the Windsor Park district. It is bounded by US 290 on the north, Ed Bluestein Drive (US 183) on the east, the Little Walnut Creek Greenbelt to the south, and Northeast Drive to the west. The University Hills/Windsor Park Neighborhood Plan was adopted in August 2007. The population of this neighborhood comprises approximately 65.5 percent minority and had an average MHI of $70,481. There was a slightly higher percentage of persons with disabilities (9.9 percent) than Travis County. Approximately 21.9 percent of the population was children, similar to Travis County, and the portion of people over 65 was slightly higher in the neighborhood (11.8 percent) than in the county. Approximately 6.4 percent of households had no access to a car and just over 20 percent of the households had no computer or no access to the internet. Approximately 12.9 percent of the population within University Hills had received public assistance or food stamps within the past year, and approximately 7.6 percent of the population identified as LEP.

Windsor Park. Windsor Park is located south of US 290, west of Northeast Drive and Manor Road, north of 51st Street and east of I-35. As noted above, the combined neighborhood plan for University Hills and Windsor Park was adopted in August 2007. The population of Windsor Park comprises approximately 60.2 percent minority and the average MHI in the NPA was $65,302. Windsor Park had a slightly higher portion of persons with disabilities (11.2 percent), a slightly higher percentage of children 24.5 percent, and a slightly lower percentage of people over 65 (8.1 percent) than Travis County. This NPA had a greater portion of households with no access to a car (10.4 percent), and a much greater portion of households with no access to a computer or the internet (25.2 percent), or households who had received public assistance or food stamps (20.7 percent) than the county. Approximately 20.1 percent of the population identified as LEP speaking English less than very well.

Pecan Springs–Springdale. The Pecan Springs–Springdale neighborhood is bounded by Manor Road and Springdale Road to the west, Walnut Creek to the northeast, US 183 to the east, and MLK Jr. Boulevard to the south. This neighborhood is included in The East MLK Combined Neighborhood Plan, adopted November 7, 2002. The population of the Pecan Springs – Springdale NPA is composed of approximately 67 percent minority and the average MHI was $59,006. Pecan Springs had a slightly higher percentage of persons with disabilities (10.8 percent), children (23.9 percent), and persons over 65 (10.3 percent) than Travis County. This neighborhood had a slightly higher percentage of households with no access to a car (8 percent), and a much higher percentage of households with no computer or internet access (26.3 percent) or who had received public assistance or food stamps within the past year (21.9 percent) compared with the county. Approximately 14.3 percent of the population within the Pecan Springs-Springdale neighborhood was LEP.

Robert Mueller Municipal Airport (RMMA) (Non-NPA). The population of the RMMA neighborhood comprises approximately 44.7 percent minority, less than the percentage within the county, and had an average MHI of $93,750, which was higher than the county average and one of the highest within the Community Study Area. RMMA had a slightly lower percentage of persons with disabilities (6.5 percent), children (17.6 percent) and people over 65 (8.4 percent) than Travis County. The NPA had a similar portion of households with no access to a car (7.1 percent), but almost three times as many households with no computer or no internet access (15.3 percent) compared with the county. A slightly lesser
percentage of households received public assistance or food stamps (5.3 percent) compared to the
county. Approximately 6.3 percent of the population within this neighborhood were LEP.

- **MLK.** The MLK neighborhood is located in east Austin and is bounded by Manor Road to the northwest, East 51st Street to the north, Springdale Road to the east, and Airport Boulevard to the southwest. This neighborhood is included in the East MLK Combined Neighborhood Plan, adopted November 7, 2002. The population of the MLK neighborhood was approximately 65 percent minority and the average MHI was $61,177. The population of persons with disabilities (10.6 percent) was slightly higher than the county overall. The percentage of children in the NPA 18.8 percent was slightly lower compared to the county and the portion of those 65 and older (10.9 percent) was similar to the percentage within the county. The MLK neighborhood had a similar percentage of no car households (5.9 percent) compared to Travis County, but a much greater percentage of households with no computer or no internet access (approximately 20 percent) compared with Travis County. Approximately 12.4 percent of households within the NPA had received public assistance or food stamps within the past year, slightly higher than the whole of the county. Approximately 9.4 percent of the population within the MLK neighborhood were LEP.

- **Upper Boggy Creek (Cherrywood).** The Upper Boggy Creek neighborhood is bounded by Wilshire Boulevard to the north, Airport Boulevard to the east, Manor Road and East Dean Keeton Street to the south, and I-35 to the west. This area is locally known as Cherrywood. The Upper Boggy Creek Neighborhood Plan was adopted on August 1, 2002. The population within this neighborhood was composed of approximately 41.7 percent minority, which is much lower than the county, and the average MHI was $79,346. Persons with disabilities accounted for 6.3 percent of the population, slightly less than Travis County as a whole and the percentage of children (approximately 11 percent) and those over 65 (8.8 percent) were also less than the percentages for the county. Within this neighborhood, approximately 7.1 percent of households had no access to a car and about 9.3 percent of households had no computer or no access to the internet, which were greater than that for the county, while approximately 5.2 percent of the households had received public assistance or food stamps within the past year, which is a smaller percentage than Travis County. Upper Boggy Creek had the smallest percentage of LEP speakers within the Community Study Area at 1.4 percent.

- **MLK-183.** This neighborhood is irregularly shaped and bounded by Springdale Road to the southwest, US 183 to the northwest, MLK Jr. Boulevard and Loyola Lane on the north, Johnny Morris Road on the east, and roughly follows Walnut Creek to approximately Dessau Road on the southeast. This neighborhood is included in the East MLK Combined Neighborhood Plan, adopted November 7, 2002. The population of the MLK-183 neighborhood was composed of approximately 74.1 percent minorities and the average MHI was one of the lowest in the Community Study Area at $42,418. This neighborhood had the highest percentage of persons with disabilities (13.5 percent) within the Community Study Area. There was a slightly lower percentage of children (17.9 percent) and slightly higher percentage of those over 65 (12.3 percent) than Travis County. This neighborhood had higher portions of households with zero car access (11.9 percent), zero computer or internet access (23.6 percent), and households who had received public assistance or food stamps (24.9 percent) than Travis County. Approximately 15.1 percent of the population within the MLK-183 NPA was LEP.
o Rosewood. Rosewood is an irregularly shaped neighborhood with many boundaries including Airport Boulevard, Oak Springs, Webberville Road, Northwestern Avenue, Chicon Avenue, and Manor Road. The Rosewood Neighborhood Plan was adopted November 29, 2001. Approximately 58.5 percent of the population within Rosewood was minority and the average MHI was $50,294. This neighborhood had similar portions of persons with disabilities (10.2 percent), children (21.1 percent), and those over 65 (9.4 percent) compared to Travis County. The percentage of zero car households (23.5 percent), households without access to a computer or the internet (27.8 percent), and households who had received public assistance or food stamps (29.9 percent) were much higher than Travis County and were amongst the highest in the Community Study Area as well. Approximately 4.1 percent of the population within Rosewood was LEP.

o Chestnut. The Chestnut neighborhood is bordered by MLK Jr. Boulevard to the north, Miriam Avenue to the railroad tracks to the east, 12th Street to the south, and Chicon Avenue to the west. Its neighborhood plan was adopted in July 1999. The population in the Chestnut neighborhood was composed of approximately 48.7 percent minorities and the average MHI was near the highest in the Community Study Area at $94,244. Persons with disabilities accounted for approximately 7.5 percent of the population, and the portion of children (8.3 percent) and those over 65 (2.7 percent) were amongst the lowest within the Community Study Area. This neighborhood had a slightly higher percentage of households with no access to a car (7.1 percent) or no computer or internet access (10.1 percent) compared to Travis County. Chestnut had the lowest percentage of households who had received public assistance or food stamps within the past year (2.4 percent) of all the NPAs within the Community Study Area. Approximately 2.7 percent of the population in the Chestnut neighborhood was LEP.

o Central East Austin. This Central East Austin neighborhood is located south of MLK Jr. Boulevard, west of Chicon Avenue and Northwestern Avenue, generally north of 6th Street, and east of I-35. The Central East Neighborhood Plan was adopted December 13, 2001. The population in the Central East Austin neighborhood was composed of approximately 52.5 percent minorities and had an average MHI of $79,145. The percentage of persons with disabilities was similar to Travis County (8.9 percent), but the percentage of children (12.5 percent) and those over 65 (5.2 percent) were lower than the county overall. Zero car households (12.0 percent), households with no computer or internet access (24.9 percent), and households who had received public assistance or food stamps within the past year (16.9 percent) were all a greater proportion of the population than was found in Travis County. Approximately 5.3 percent of the population was LEP.

o Govalle. The Govalle neighborhood is bounded by Oak Springs to the north, Airport Boulevard to the east, Lady Bird Lake to the south, and Pleasant Valley and Webberville Road to the west. The Govalle/Johnson Terrace Combined Neighborhood Plan was adopted March 27, 2003. Approximately 65.8 percent of the population within the Govalle neighborhood was composed of minorities and the average MHI was $50,764. The percentage of persons with disabilities (13.1 percent) was larger than for Travis County. There was a smaller percentage of children (18.4 percent) and a slightly larger percentage of people over 65 (11.7 percent) than the surrounding county. The portion of households with no access to a car (12.7 percent), no computer or internet access (22.2 percent), and those
receiving public assistance or food stamps (15.4 percent) were much greater than the portion in the county as a whole. Approximately 13.4 percent of the population was LEP.

- Johnston Terrace. Johnston Terrace is located on the far eastern portion of the project area and is bounded by Austin NW Railroad to the north, US 183 to the east, and Airport Boulevard to the southwest. The Govalle/Johnson Terrace Combined Neighborhood Plan was adopted March 27, 2003. The population within Johnston Terrace was composed of approximately 70.5 percent minorities and the average MHI was $54,547. The percentage of persons with disabilities (13.2 percent) was larger than for Travis County overall. There was a similar percentage of children (22.3 percent) and a slightly larger percentage of people over 65 (10.6 percent) than the surrounding county. The portion of households with no access to a car (7.9 percent), no computer or internet access (15.5 percent), and those receiving public assistance or food stamps (15.5 percent) were much greater than the portion in the county as a whole. Approximately 13.4 percent of the population was LEP.

- East Cesar Chavez. The planning area boundaries include the alley between 6th and 7th Streets to the north, Chicon to the east, the Colorado River (Lady Bird Lake) to the south, and I-35 to the west. The East Cesar Chavez Neighborhood Plan was adopted May 13, 1999. Approximately 47.9 percent of the population within the East Cesar Chavez neighborhood was composed of minorities and the average MHI was $65,567. There was a higher percentage of persons with disabilities (13.2 percent) than the surrounding county. The percentage of children (13.8 percent) was lower than the percentage within Travis County and the percentage of people over 65 (13.5 percent) was greater than for the county overall. Zero car households (22.9 percent), households with no computer or internet access (24.6 percent), and households who had received public assistance or food stamps (22.1 percent) were at much greater proportion than for Travis County. Within the East Cesar Chavez neighborhood, approximately 10.6 percent of the population was LEP.

- Holly. The Holly neighborhood is bounded by 7th Street to the north, Pleasant Valley Road to the east, Lady Bird Lake to the south, and Chicon Avenue to the west. The Holly Neighborhood Plan was adopted December 13, 2001. The Holly neighborhood was composed of approximately 52.5 percent minorities and had an average MHI of $67,191. There was a higher percentage of persons with disabilities (13.2 percent) than the surrounding county. The percentage of children (13.8 percent) was lower than the percentage within Travis County and the percentage of people over 65 (13.5 percent) was greater than for the county overall. Zero car households (14.2 percent), households with no computer or internet access (20.3 percent), and households who had received public assistance or food stamps (18.2 percent) were at much greater proportion than for Travis County. Approximately 13.2 percent of the population within this NPA was LEP.

- Pleasant Valley. The Pleasant Valley neighborhood is bounded by the Colorado River to the north, Grove Boulevard and Montopolis Drive to the east, Oltorf Road to the south, and Pleasant Valley Road to the west. The East Riverside/Oltorf Combined Neighborhood Plan includes this neighborhood. The plan was adopted November 2006. The population within this neighborhood comprises approximately 43 percent minorities and had an average MHI of $45,307. There was a slightly lower percentage of persons with disabilities within the neighborhood (7.2 percent) versus Travis County. Both children (10.0 percent) and those over 65 (3.2 percent) comprised a much smaller percentage of the population than in Travis County.
County. Zero car households (11.9 percent) and households with no computer or internet access (29.2 percent) comprised a larger portion of the households than within Travis County as a whole. Pleasant Valley had the largest percentage of households with no computer or internet access of any NPA within the Community Study Area. A slightly higher percentage of households had received public assistance or food stamps (9 percent) than the surrounding county. Approximately 14.1 percent of the population within the Pleasant Valley neighborhood were LEP.

- Montopolis. The Montopolis neighborhood boundaries are Grove Boulevard on the northwest, Montopolis Boulevard on the southwest, US 183 on the northeast, and SH 71/Ben White Boulevard on the southeast. The Montopolis Neighborhood Plan was adopted September 27, 2001. The population within the Montopolis NPA was comprised of approximately 82.6 percent minorities and had an average MHI of $49,769. Persons with disabilities comprised approximately 10.3 percent of the population, slightly higher than the county overall. The percentage of children (19.3 percent) and those over 65 (4.2 percent) were both below the percentages of those demographics within Travis County. Montopolis had the largest percentage of houses with no computer or access to the internet (30.0 percent) of any NPA within the Community Study Area. This neighborhood also had a larger percentage of zero car households (9.6 percent) and households which had received public assistance or food stamps within the past year (16.1 percent) than the county. Approximately 22.9 percent of the population within the Montopolis neighborhood was LEP.

- Riverside. The Riverside neighborhood is located south of the Colorado River (Lady Bird Lake), west of Pleasant Valley Road, north of Oltorf Road and east of I-35. The East Riverside/Oltorf Combined Neighborhood Plan includes this neighborhood. The plan was adopted November 2006. The Riverside neighborhood was composed of approximately 59.6 percent minorities and had an average MHI of $50,490. The percentage of persons with disabilities (6.4 percent) and those receiving public assistance or food stamps in the past year (5.7 percent) were slightly lower than for all of Travis County. The percentage of children (11.6 percent) and people over 65 (3.4 percent) were also lower than the surrounding county. Zero car households (10.5 percent) and households with no computer or internet access (19.6 percent) were higher than the percentages for Travis County. Approximately 20.9 percent of the population within this neighborhood was LEP.

- Parker Lane. The Parker Lane neighborhood is bounded by Oltorf Road to the north, Montopolis on the east, Ben White Boulevard to the south, and I-35 to the west. The East Riverside/Oltorf Combined Neighborhood Plan includes this neighborhood. The plan was adopted November 2006. The population within the Parker Lane NPA was composed of approximately 64.4 percent minorities and had an average MHI of $54,138. The percentage of persons with a disability (13.1 percent) was greater than for the surrounding county, but the percentage of children (18.5 percent) and those over 65 (6.2 percent) were slightly less than the percentage in the county overall. The percentage of zero car households (13.3 percent), zero computer or internet access households (20.6 percent) and households who had received public assistance or food stamps within the past year (16.3 percent) were all greater than the percentages of households in each of those categories for Travis County as a whole. Approximately 14.4 percent of the population in the Parker Lane neighborhood was LEP.
3.0 Affected Environment and Environmental Consequences

- McKinney. The McKinney neighborhood is irregularly shaped, bounded by Ben White Boulevard, Stassney Lane, Williamson Creek, Nuckols Crossing, St. Elmo, and I-35. The Southeast Combined Neighborhood Plan, adopted October 10, 2002, includes the McKinney neighborhood. The McKinney neighborhood was composed of a very high percentage of minority residents (82.1 percent) and had an average MHI of $61,686. The percentage of persons with disabilities (8.8 percent) was the same as that observed for Travis County. Within the McKinney neighborhood, children composed 31.0 percent of the population, which was the highest of any NPA and greater than the surrounding county percentage. People over 65 composed approximately 6.0 percent of the population, slightly lower than the county. Zero car households (9.6 percent), households with no computer or internet access (11.4 percent), and households that had received public assistance or food stamps within the past year (18.6 percent) were a greater proportion of the households than the overall values observed for Travis County. Approximately 25 percent of the population of this NPA was LEP.

- Franklin Park. Franklin Park is bounded by St. Elmo to the north, Nuckols Crossing to the east, Williamson Creek to the south, and I-35 to the west. The Southeast Combined Neighborhood Plan, adopted October 10, 2002, includes this neighborhood. The Franklin Park neighborhood is composed of 89.6 percent minorities, this was the second highest percentage of minorities within the NPAs in the Community Study Area. The average MHI was $46,527. The percentage of people with disabilities within this NPA (10.5 percent) was slightly greater than for the county overall. This neighborhood had the second highest percentage of children (30.1 percent) of all the NPAs within the Community Study Area, but the percentage of those over 65 was 6.1 percent and slightly lower than for Travis County. The percentage of zero car households (11.3 percent), households with no computer or internet access (27.0 percent) and households that had received public assistance or food stamps within the past year (24.7 percent) were all greater than the values observed within Travis County as a whole. Approximately 27.6 percent of the population within Franklin Park was LEP.

In addition to residential areas, the NPAs also include a variety of commercial, retail, offices, institutional and industrial type land uses. Parks, schools and universities, hospitals and community health centers, places of worship, BN stations (food pantries, restroom facilities, handwashing stations, etc.), libraries and other community facilities near the existing I-35 facility are included in Appendix J. Community facilities that may be impacted by the proposed project are discussed in Section 3.6.7.3.
Figure 3.6-8. Neighborhood Planning Areas
### Table 3.6-5. Select Demographic Characteristics of Community Study Area NPAs

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<th>NPA/Geography</th>
<th>Percent of Minority in Census Blocks within NPA</th>
<th>Average Median HH Income</th>
<th>Percent Disability</th>
<th>Percent Renter-Occupied</th>
<th>Percent Owner-Occupied</th>
<th>Percent Under 18</th>
<th>Percent 65+</th>
<th>Percent Zero Car</th>
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Table 3.6-5. Select Demographic Characteristics of Community Study Area NPAs

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<th>NPA/Geography</th>
<th>Percent of Minority in Census Blocks within NPA</th>
<th>Average Median HH Income</th>
<th>Percent Disability</th>
<th>Percent Renter-Occupied</th>
<th>Percent Owner-Occupied</th>
<th>Percent Under 18</th>
<th>Percent 65+</th>
<th>Percent Zero Car</th>
<th>Percent Received Public Assistance or Food Stamps</th>
<th>Percent No Internet Available or No Computer Available</th>
<th>Percent LEP</th>
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<td>11.3</td>
<td>24.7</td>
<td>27.0</td>
<td>27.6</td>
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Source: ACS 5-year estimates 2014–2019

Text bolded to show the two percentages (except where tied) for each column that illustrate either the highest or lowest.
3.6.8.2 Environmental Consequences Related to Neighborhoods and Community Cohesion

3.6.8.2.1 Build Alternative 2

Barrier Effect

I-35 was constructed in the 1950s and created a barrier to movement between east and west Austin for the past six decades. The current facility’s elevated “upper decks” also create a visual barrier. The speed of traffic, vehicular congestion, and lack of continuous pedestrian and bicycle facilities, along with the visual barrier reduces community cohesion between the east and west sides of Austin. The project’s history has included years of data gathering from the public on how to reduce the barrier effect of I-35. TxDOT listened to the public when it rejected proposals for more elevated structures through the corridor. Build Alternative 2 would serve to minimize the existing barrier effect of I-35. Build Alternative 2 would be constructed below existing grade in some locations with at-grade bridges, which would reduce the visual intrusion and open the vista between the east and west sides of the facility. Enhanced bridges with SUPs would be constructed to increase vehicular, as well as bicycle and pedestrian accessibility across I-35. A buffer would be placed between the SUP and vehicular traffic to increase safety by separating vehicular traffic from bicyclists and pedestrians. The buffer space also allows people who walk and bicycle to feel safer when using the SUP. For the proposed project, the enhanced bridges would include a 20-foot buffer and a 10-foot SUP lane. Along the I-35 corridor within the project area, intersections, frontage roads, and SUPs would be improved with the proposed project and all modes of transit would be accommodated in the design. Build Alternative 2 would increase the number of travel lanes, but not necessarily widen pavement. Engineers have worked diligently to design the facility to move people not just north-south, but also east-west across the facility and with multiple modes of transport.

Additionally, in coordination between COA and TxDOT, multiple deck plaza locations to be designed as green spaces (funded by others) within the urban core of Austin are being considered between 4th Street and 8th Street, and UT is evaluating locations between Dean Keeton Street and MLK Jr. Boulevard on the west side of I-35 near UT which could be incorporated with the proposed alternative in the future. COA is also considering stitches, or areas where enhancements and amenities could be added along east-west bridges, at 11th, 12th, and 15th, and 38th ½ Streets. These future deck plazas and stitches would be constructed by others following construction of the proposed project and would further reduce the division caused by construction of the original freeway facility. The NPAs which would benefit most from construction of enhanced bridges or SUP connections, by number of crossings, would be: Downtown (11 enhanced bridges or SUP connections); Central East Austin (eight enhanced bridges or SUP connections); Hancock and Upper Boggy Creek (six and seven enhanced bridges or SUP connections, respectively), East Cesar Chavez, North Loop, and UT (each with three enhanced bridges); and South River City, Riverside, Windsor Park and RMMA (each with one enhanced bridge). Figures 3.6-9 through 3.6-11 depict renderings of enhanced bridges and SUP connections.
Figure 3.6-9. Rendering of proposed enhanced bridge at 32nd Street for both Build Alternatives.

Figure 3.6-10. Rendering of proposed SUP at Upper Boggy Creek neighborhood for both Build Alternatives.
The NPAs adjacent to the existing facility would incur the most direct impacts. As ROW would be acquired mostly in areas adjacent to the existing I-35 facility, businesses and residences along the frontage roads are more likely to be impacted by ROW acquisition and displacement. The number of displacements in each NPA is shown in Table 3.6-6. See Section 3.6.7.3 above for more information about project-related displacements.

Table 3.6-6. Build Alternative 2 Displacements per NPA*

<table>
<thead>
<tr>
<th>Neighborhood Planning Area</th>
<th>Number of Commercial Displacements</th>
<th>Number of Residential Displacements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Windsor Park</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>North Loop</td>
<td>16</td>
<td>0</td>
</tr>
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<td>Hancock</td>
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<td>Upper Boggy Creek</td>
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</tr>
<tr>
<td>Downtown</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>East Cesar Chavez</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>Riverside</td>
<td>24</td>
<td>47</td>
</tr>
<tr>
<td>South River City</td>
<td>36</td>
<td>70</td>
</tr>
<tr>
<td>Total</td>
<td>131</td>
<td>145</td>
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*Utilizing the schematic dated April 8, 2022. No potential displacements were identified in any other NPAs within the Community Study Area.
The North Loop, Windsor Park, Hancock, and Upper Boggy Creek NPAs, north of the river and the Riverside and South River City NPAs south of Lady Bird Lake would experience the majority of the displacements. The bullets below discuss displacements with potential to affect community cohesion within each NPA (displacements in general are covered in the previous section):

- Windsor Park: The displacements in this NPA include Specially for Children (a pediatrician), a gas station, two casual restaurants, auto sales and service, and a small retail center including a thrift store and the BL Barbershop, which caters to Black/African American customers.

- North Loop: Family Health Center (CommUnityCare - David Powell Clinic, a family healthcare center that specializes in the treatment of HIV and AIDS). If this facility was not displaced, then in order to accommodate the design, ROW would be required from the eastern side of I-35, which would result in the displacement of 56 below-market rate housing units at the Abali. Other displacements include a gas station, auto sales and service, a restaurant, and commercial and retail businesses.

- Hancock: Austin Chronicle and Hancock Center, which includes CommUnityCare Hancock Walk-In Care. Three other healthcare clinics include an optometrist, pediatrician, and family medicine. Offices, storage facilities, and restaurants include other displacements within this NPA.

- Upper Boggy Creek: Escuelita del Alma is a Spanish immersion preschool located in Cherrywood, which has been discussed with TxDOT during public involvement activities. An obstetrician/gynecologist and Hector's Barbershop, a Spanish-speaking barbershop. The 24-unit Avalon Apartments as well as three single-family residential parcels would be displaced. Other displacements within this NPA include a gas station, video store, attorney's office, and a few retail shops.

- Downtown: The Downtown non-NPA area would lose a gas station and a car rental business.

- East Cesar Chavez: Extend-A-Care is a YMCA afterschool program located at Northshore Plaza. Additionally, one single-family residence would be displaced. Other displacements within the NPA include a gas station and offices and would not be expected to affect the neighborhood or community cohesion.

- Riverside: This NPA would lose several office buildings as well as two multifamily complexes, Garden Apartments and 1500 Summit.

- South River City: This NPA would lose several office buildings as well as the 70-unit Aria Grand Apartments. The Aria Grand includes a majority of lower-income housing units and is considered an EJ displacement.

With the exception of the non-NPAs (UT, Downtown and RMMA), each of the NPAs has an adopted neighborhood plan that creates a vision and goals for the community. Removing businesses, community facilities, healthcare centers, daycare facilities, and residences with these NPAs may disrupt the identity of the area. Due to the issues affecting Austin’s housing and real estate prices, it may be difficult for those who are displaced to relocate within the same area. This could force businesses and residents out of the area and leave a gap in services, especially for those unique businesses or those that serve a particular or underserved population. TxDOT is committed to assisting critical facilities find alternate locations near their current locations, when possible. TxDOT is currently looking at providing advanced relocation assistance for selected properties to minimize impacts to underserved
communities. At this point, communication with the two CommUnityCare facilities and Escuelita del Alma has been initiated.

The Community Study Area includes transit-oriented development (TOD) in portions of the Mueller Development (RMMA), the MLK Jr. Station TOD (within the MLK, Upper Boggy Creek, Rosewood, and Chestnut NPAs) and Plaza Saltillo Station TOD (within East Central Austin, East Cesar Chavez, and Holly Street NPAs). TOD is an intentional mixing of land use and transit, creating mixed-use communities within walking distance of a transit stop or station. The proximity of these TOD developments to the I-35 corridor and the proposed bicycle and pedestrian improvements would allow more access to these planned communities for shopping or access to transit.

The proposed project would be constructed below existing grade and with multiple enhanced bridges (discussed in Section 3.5). The enhanced bridges would include 30 feet of buffer and SUP facilities which are separated from roadway traffic to encourage the use of active transportation. The facility would be designed so that in the future, COA could provide a deck plazas and/or stitches to further unite east and west Austin and foster a sense of community cohesion. The SUP along the entire length of the facility would serve to encourage the use of active transportation and provide connectivity within the Community Study Area. This connectivity would improve access to community facilities within the project area. In the future, the SUP could be connected to other bikeway and trail projects within the greater Austin area, providing access to/from the I-35 corridor. In addition to COA, CapMetro has also been involved with the project and will help to ensure the project will accommodate all modes of transit in the Community Study Area. Specifically, TxDOT is allocating up to $9.4 million to CapMetro as mitigation to maintain bus service during the Red Line construction. Additionally, the CapMetro Red Line crossings at Airport Boulevard and 4th Street, and the MLK Jr. Boulevard pedestrian crossing would be constructed before construction of the mainlanes so that east-west crossings are maintained during construction of I-35.

3.6.8.2.2 Modified Build Alternative 3

Barrier Effect

I-35 was constructed in the 1950s and created a barrier to movement between east and west Austin for the past six decades. The current facility’s elevated “upper decks” also create a visual barrier. The speed of traffic, vehicular congestion, and lack of continuous pedestrian and bicycle facilities, along with the visual barrier reduces the level of community cohesion between the east and west sides of Austin. The project’s history has included years of data gathering from the public on how to reduce the barrier effect of I-35. TxDOT listened to the public when it rejected proposals for more elevated structures through the corridor. Modified Build Alternative 3 would serve to minimize the existing barrier effect of I-35. The mainlanes of Modified Build Alternative 3 would be constructed below existing grade at some locations with at-grade bridges, which would reduce the visual intrusion and open the vista between the east and west sides of the facility. Enhanced bridges with SUPs and buffers would be constructed to increase accessibility across I-35. A buffer would be placed between the SUP and vehicular traffic to increase safety by separating vehicular traffic from bicyclists and pedestrians. The buffer space also would allow people who walk and bicycle to feel safer when using the SUP. For the proposed project, the enhanced bridges would include a 20-foot buffer and a 10-foot SUP lane. Along the I-35 corridor within the project area, intersections, frontage roads, and SUPs would be improved with the proposed project and all modes
of transit would be accommodated in the design. Modified Build Alternative 3 would increase the number of travel lanes, but not necessarily widen pavement. Engineers have worked diligently to design the facility to move people not just north-south, but also east-west across the facility and with multiple modes of transport.

Additionally, in coordination between COA and TxDOT, potential deck plaza locations to be designed as green spaces (funded by others) within the urban core of Austin are being proposed for some areas downtown between Cesar Chavez and 8th Streets. UT is evaluating caps between Dean Keeton Street and 15th Street on the west side of I-35. Stitches are also being evaluated at the CapMetro Red Line crossing south of Airport Boulevard, Wilshire Boulevard, 38th ½ Street, 32nd Street, 12th Street, 11th Street, Holly Street, and Woodland Avenue. These future deck plazas and stitches would be constructed by others following construction of the proposed project and would further reduce the division caused by construction of the original freeway facility. The NPAs or areas which would benefit most from construction of enhanced bridges, by number of crossings, would be Downtown (non-NPA) (10 enhanced bridges or SUP crossings); Central East Austin (seven enhanced bridges or SUP crossings); Hancock and Upper Boggy Creek (each with six enhanced bridges or SUP crossings), East Cesar Chavez, UT, and North Loop (each with three enhanced bridges or SUP crossings); South River City, Riverside, Windsor Park, North Loop, and UT (each with one or two enhanced bridges or SUP connections). Each bridge or SUP would affect two or more NPAs depending on its origin and destination NPA. Figures 3.6-12 and 3.6-13 depict renderings of enhanced bridges and SUP connections.

Figure 3.6-12. Rendering of enhanced bridges with 10-foot SUP and 20-foot buffers for Modified Build Alternative 3.
The NPAs adjacent to the existing facility would incur the most direct impacts. As ROW would be acquired mostly in areas adjacent to the existing I-35 facility, businesses and residences along the frontage roads are more likely to be impacted by ROW acquisition and displacement. Table 3.6-7 shows the number of displacements in each NPA. See Section 3.6.7.3 above for more information about project-related displacements.

### Table 3.6-7. Modified Build Alternative 3 Displacements per NPA*

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<th>Neighborhood Planning Area</th>
<th>Number of Commercial Displacements</th>
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<td>Windsor Park</td>
<td>11</td>
<td>0</td>
</tr>
<tr>
<td>North Loop</td>
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<tr>
<td>South River City</td>
<td>6</td>
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Table 3.6-7. Modified Build Alternative 3 Displacements per NPA*

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<thead>
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<th>Neighborhood Planning Area</th>
<th>Number of Commercial Displacements</th>
<th>Number of Residential Displacements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>69</td>
<td>26</td>
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*Utilizing the schematic dated April 8, 2022. No potential displacements were identified in any other NPAs within the Community Study Area.

The Upper Boggy Creek, North Loop, Windsor Park, and Hancock NPAs, north of the river would experience the majority of the displacements. The bullets below discuss displacements with potential to affect community cohesion within each NPA or non-NPA area (displacements in general are covered in the previous section):

- Windsor Park: The displacements in this NPA include a gas station, auto sales and service, two casual restaurants, and a small retail center including a thrift store and the BL Barbershop, which specializes in serving Black/African American customers.
- North Loop: Family Health Center (CommUnityCare - David Powell Clinic, a family healthcare center that specializes in the treatment of HIV and AIDS). If this facility was not displaced, then in order to accommodate the design, ROW would be required from the eastern side of I-35, which would result in the displacement of 56 below-market rate housing units at the Abali. Other displacements include a gas station, a restaurant, and commercial and retail businesses.
- Hancock: Austin Chronicle and Hancock Center, which includes CommUnityCare Hancock Walk-In Care and three other healthcare clinics including an optometrist, pediatrician, and family medicine. Offices, storage facilities, and restaurants comprise other displacements within this NPA.
- Upper Boggy Creek: Escuelita del Alma is a Spanish immersion preschool located in Cherrywood, which has been discussed with TxDOT during public involvement activities. An obstetrician/gynecologist and Hector’s Barbershop, a Spanish-speaking barbershop. The 24-unit Avalon Apartments would be displaced. Other displacements within this NPA include a gas station, restaurants, and a few retail shops.
- Downtown (non-NPA): The Downtown non-NPA area would lose a gas station and a car rental business.
- East Cesar Chavez: Displacements within the NPA include auto sales and gas stations and would not be expected to affect the neighborhood or community cohesion.
- South River City: This NPA would lose Jimmy’s Barbershop, which serves the Black/African American community and several convenience stores and office buildings.

With the exception of the non-NPAs (UT, Downtown and RMMA), each of the NPAs has an adopted neighborhood plan that creates a vision and goals for the community. Removing businesses, community facilities, healthcare centers, daycare facilities, and residences with these NPAs may serve to disrupt the identity of the area. Due to the issues affecting Austin’s housing and real estate prices, it may be difficult for those who are displaced to relocate within the same area. This could force businesses and residents out of the area and leave a gap in services, especially for those unique businesses or those that serve a particular or underserved population.
TxDOT is committed to assisting critical facilities find alternate locations near their current locations, when possible. TxDOT is currently looking at providing advanced relocation assistance for selected properties to minimize impacts to underserved communities. At this point, communication with the two CommUnityCare facilities and Escuelita del Alma has been initiated.

The Community Study Area includes TOD in portions of the RMMA, the MLK Jr. Station TOD (within the MLK, Upper Boggy Creek, Rosewood, and Chestnut NPAs) and Plaza Saltillo Station TOD (within East Central Austin, East Cesar Chavez, and Holly Street NPAs). TOD is an intentional mixing of land use and transit, creating mixed-use communities within walking distance of a transit stop or station. The proximity of these TOD developments to the I-35 corridor and the proposed bicycle and pedestrian improvements would allow more access to these planned communities for shopping or access to transit.

The proposed project would be constructed below existing grade and with multiple enhanced bridges (discussed in Section 3.5). The enhanced bridges would include 30 feet of buffer and SUP facilities separated from roadway traffic to encourage the use of active transportation. The facility would be designed so that in the future, COA and/or UT could provide deck plazas and/or stitches to further unite east and west Austin and foster a sense of community cohesion. The SUP along the east west frontage of the facility would serve to encourage the use of active transportation and provide connectivity within the Community Study Area. This connectivity would improve access to community facilities within the project area. In the future, the SUP could be connected to other bikeway and trail projects within the greater Austin area providing access to/from the I-35 corridor. In addition to COA, CapMetro has also been involved with the project and will help to ensure the project will accommodate all modes of transit in the Community Study Area. Specifically, TxDOT is allocating $10 million to CapMetro to maintain bus service during the project construction phase. Additionally, the CapMetro Red Line crossings at Airport Boulevard and 4th Street, and the MLK Jr. Boulevard pedestrian crossing would be constructed before project construction is planned to begin so that east-west crossings are maintained during construction of I-35.

Under the No Build Alternative, neighborhoods and community cohesion within the Community Study Area could be negatively affected over time. As the region continues to grow, increased congestion and reduced mobility would be expected for those who live and work near the project corridor, as well as those commuting through it. Increased congestion on I-35 may encourage travelers to find alternate routes on local streets and through neighborhoods, thereby increasing congestion on local streets.

Within the Community Study Area people use cars, walking, cycling, and mass transit to access destinations. Several CapMetro routes are located within the Community Study Area and bicycle lanes and sidewalks are present in various locations throughout the Community Study Area.
3.6.9.1.1 Active Transportation

Bicycle and pedestrian facilities comprising sidewalks, trails, bicycle lanes, and crossings are located along and intersect the project corridor. In the north and south extents of the corridor, facilities generally become more limited, and, as the corridor reaches central Austin, the presence of facilities increases. COA, through its Pedestrian Program and its Bicycle Program, is working to make walking and biking safe, connected, and appealing to people of all ages and abilities. COA is working to complete its bicycle network guided by the 2014 Austin Bicycle Plan and to address inadequacies in the sidewalk system.

Urban trails are wide paved trails that are often separated from on-street traffic and are built to connect with the existing sidewalk and bicycle facilities. Several existing and proposed urban trails are located within or partially within the Community Study Area, including the Mueller Trail, the Red Line Trail, 183 Tollway SUP, the Southern Walnut Creek Trail, the Lance Armstrong Bikeway, the proposed Colorado River Trail, Boardwalk Trail, Butler Hike and Bike Trail, Country Club Creek Trail, and the proposed East Ben White Corridor.

TxDOT is preparing supplemental studies to better understand active transportation and health in the Community Study Area. Streetlight data modeling and focused travel pattern analyses are underway to understand how non-drivers are currently using existing facilities and the surrounding network (Section 3.6.12).

3.6.9.1.2 Health

TxDOT is preparing supplemental studies to better understand health characteristics within the Community Study Area (Section 3.6.12).

3.6.9.1.3 Transit

The I-35 Capital Express corridor currently has traditional fixed-route bus service and one commuter rail line (MetroRail Red Line) along and intersecting the Community Study Area. Bus routes operate at different service levels including high frequency/MetroRapid, MetroBus Local (high frequency as well as regular routes), UT Shuttle, and the MetroRail Shuttle. There are 895 bus stops, seventeen MetroRapid stations, and three rail stations (Highland, Plaza Saltillo, and Downtown) served by these routes located throughout the Community Study Area.

Project Connect is CapMetro’s system plan for regional high-capacity transit (HCT) for the Central Texas region. Adopted in 2020, the Project Connect System Plan includes a variety of improvements to different aspects of the CapMetro system. The plan includes new light rail with service throughout Austin and direct service to the airport; a downtown transit tunnel to separate rail from traffic; expanded bus service with new connections; new regional rail service connecting downtown to Manor and Elgin; and nine new regional park and ride locations. According to its website, the project “will expand transit capacity and offer more options, linking people, neighborhoods and employers” (https://www.capmetro.org/project-connect). Funded portions of the system plan include the Blue Line, with limits from Republic Square (downtown) to AUS, and the Orange Line which has limits from Tech Ridge Park and Ride to Slaughter Lane Park and Ride. The proposed Blue Line will cross the I-35 Capital Express Central Project at Riverside Drive and cross Lady Bird Lake via a new river crossing parallel to I-35, into downtown. The Orange
Line does not cross the I-35 corridor, but it would run parallel to the majority of the western Community Study Area boundary along North Lamar Boulevard, Guadalupe Street, and South Congress Avenue.

3.6.9.1.4 Vehicular Travel

I-35 provides the major north-south thoroughfare through the east side of Austin and to destinations north and south of COA, including commuter cities such as Kyle, Buda, Pflugerville, Round Rock, and Georgetown to those further afield including San Antonio, Waco, and Dallas. Frontage roads provide vehicular access to businesses and residences adjacent to the facility, and connection to local roads. East-west travel across I-35 within the Community Study Area is provided by (from north to south):

- Anderson Lane (US 183)
- St. Johns Avenue
- US 290
- 51st Street
- Airport Boulevard
- Entrance to Hancock Center
- 38th ½ Street
- 32nd Street
- Dean Keaton Street
- Manor Road
- MLK Jr. Boulevard
- 15th Street
- 12th Street
- 11th Street
- 8th Street
- 7th Street
- 6th Street
- Cesar Chavez Street
- Holly Street
- Art Dilly Drive
- Riverside Drive
- Woodland Avenue
- Oltorf Street
- Woodward Street
- Ben White Boulevard (SH 71), and
- Stassney Lane.

Additionally, U-turns are provided at US 183, US 290, 51st Street, Airport Boulevard, at Hancock Center, 15th Street, 4th Street, at the north shore of Lady Bird Lake, Oltorf Street, Ben White Boulevard, and Stassney Lane.

3.6.9.2 Environmental Consequences related to Access and Travel Patterns

3.6.9.2.1 Build Alternative 2

Based on the design dated April 8, 2022, the proposed project would add two non-tolled HOV managed lanes in each direction along I-35 from US 290 East to SH 71/Ben White Boulevard, with additional flyovers at I-35 and US 290 East. The proposed project also includes various operational and safety enhancements, including reconstructing ramps, bridges and intersections; improving frontage roads; enhancing bicycle and pedestrian paths; and accommodating transit routes. These changes would be expected to decrease travel times along the facility and within the Community Study Area post construction. Methods to minimize construction related impacts would include construction phasing, public involvement activities such as maintaining a project
construction website, performing business outreach, and providing detour notifications where appropriate. More information can be found in the Construction Phase Impacts section of the DEIS (Section 3.17).

With Build Alternative 2, bicycle and pedestrian SUPs would begin just north of US 290 with connections under the direct connectors at this location. The SUPs would parallel the I-35 frontage roads on both the NB and SB sides to north of Oltorf Street and south of St. Edwards Drive, respectively. SUP crossings of I-35 within the Community Study Area would be provided at the following locations:

- A bicycle and pedestrian bridge near 56th ½ Street (provides access to and from Capital Plaza) connecting the North Loop NPA to the Windsor Park NPA
- Crosswalks at Airport Boulevard connecting the North Loop NPA and the Hancock NPA to the Upper Boggy Creek NPA
- Adjacent to the CapMetro Red Line (and future Gold Line) tracks, south of Airport Boulevard connecting Hancock NPA to the Upper Boggy Creek NPA
- Enhanced bridges include buffers between people who walk and bicycle and traffic to make active transport safer and more comfortable. Enhanced bridges at 38th ½ Street and 32nd Street (connecting the Hancock NPA to the Upper Boggy Creek NPA), MLK Jr. Boulevard (connecting UT and Downtown to the northern part of the Central East Austin NPA), 15th Street, 12th Street, 11th Street, 8th Street, 7th Street (bridges between 15th and 7th Streets would connect Downtown to the Central East Austin NPA), 6th Street, 5th Street, Cesar Chavez Street (6th Street through Cesar Chavez Street would connect Downtown to the Cesar Chavez NPA), and Riverside and Woodland Avenue (bridges at Riverside and Woodland would connect the South River City NPA to the Riverside NPA).
- Crosswalks at Dean Keeton Street connecting Hancock NPA and UT to the Upper Boggy Creek NPA
- Crosswalks at Clyde Littlefield Drive/Manor Road connecting the UT area to the Upper Boggy Creek NPA
- Bridge adjacent to the Red Line corridor at 4th Street connecting Downtown to the Central East Austin NPA
- Underpass at Holly Street connecting Downtown to the Central East Austin NPA
- Providing access to the Butler Hike and Bike Trail north and south of Lady Bird Lake
- SUP connections would also be provided under direct connectors at Ben White Boulevard, even though the SUPs parallel to the facility would not extend to the southern project extent (as stated above, NB SUP lanes would begin north of Oltorf Street and SB SUP lanes would extend to south of St. Edwards Drive). This would allow bicycle and pedestrian connection between St. Edwards NPA and the Parker Lane NPA and between the Congress and McKinney NPAs.

The Community Study Area would be expected to benefit from the increased SUP connections along the facility. The enhanced bridge design includes 20-foot buffers in addition to the 10-foot SUP lanes, in each direction. This design supports people who walk and bicycle by providing a safe, comfortable and seamless connection which encourages walking and biking. Businesses, facilities, and residents along I-35 would be expected to benefit from the increased mobility. Providing safe alternatives to single occupancy vehicle use within the corridor could increase accessibility to businesses and facilities for underserved or vulnerable populations, reduce congestion,
improve community cohesion, and would include health benefits to the user. Additionally, by depressing the facility through downtown, the proposed project would reduce the barrier and visual intrusion of I-35.

TxDOT is coordinating with CapMetro, a participating agency with the I-35 Capital Express Central Project, to incorporate existing and proposed transit routes in the corridor, and to provide a reliable route for transit in HOV managed lanes of the project. The design for both build alternatives would maintain direct access to transit in the corridor and incorporate existing and proposed transit routes. As a participating agency, CapMetro will continue to be involved with the project. Changes to the locations of bus stops due to Build Alternative 2 may be required, either temporarily during construction or permanently. Initial conversations with CapMetro in October 2022 regarding bus stop locations indicated the following concerns: alternate bus stop locations must provide for safe crossings and access to work or neighborhood destinations (sidewalks, crosswalks), the stops need bus landings and appropriate shelter, and it takes considerable time to plan for rerouting buses, moving stops, and providing proper signage for temporary bus stop closures. Of 895 bus stops within the Community Study Area, the following 14 bus stops were identified as potentially affected by Build Alternative 2:

- **6444**: Ben White and SB I-35 with access to the new AISD headquarters. This bus stop would be expected to be temporarily relocated during construction. A new bus stop location would potentially be established if safe crossing can be established.
- **1467**: Oltorf at Schrieber/Travis High School. This stop would be relocated to the far side of the intersection to avoid impacts during construction.
- **1188**: Riverside/Kenwood. This stop would likely be permanently consolidated with stop 1187, which is approximately 600 feet west of this stop at Riverside Drive at Travis Heights. Due to proximity of the two stops, this would be expected to cause minor inconvenience.
- **4175**: 700 Cesar Chavez/Red River would be consolidated with stop 1038, which is located approximately 1,000 feet west at Cesar Chavez and Trinity.
- **5209**: 705 11th and Sabine services the Sheraton Austin. Customers would be relocated to stop 657 at 12th Street and Branch.
- **1109**: 12th Street/I-35 is located in a congested area. This stop would be relocated to 12th Street and Oleander; the next stop would be at 11th Street at San Jacinto.
- **1113**: 12th Street at Branch (EB) would be relocated to the far side of the light.
- **2012**: 1101 38th ½/Robinson. CapMetro is in talks with COA to move this stop closer to I-35, but more planning would be required since this area would be impacted by Build Alternative 2. This stop would need to be relocated.
- **4737**: 38th ½/Hollywood. This stop has high ridership and would need to be relocated. The new location for this stop is to be determined.
- **2312**: 4120 I-35/Clarkson would be permanently closed by the proposed project and would require relocation. The location of the new stop would hinge on access to East 41st Street and access to the HEB at Hancock Center would be maintained.
• 3272: 4613 Airport/46th would need to be relocated; however, there are non-continuous sidewalks in this area and access to adjacent neighborhoods needs to be maintained. It is anticipated this site would be relocated to the entrance of the shopping plaza.

• 3290: 4600 Airport/46th would need to be relocated; however, there are non-continuous sidewalks in this area and access to adjacent neighborhoods needs to be maintained. This stop would be relocated approximately 100 feet north of its existing location.

• 3271: 4335 Airport/Parkwood. This bus stop would be relocated approximately 250 feet west of Rowood Road and would require the construction of a new bus pad.

• 2388: Cameron/52nd (NB). This stop would be closed for the duration of construction and customers would be pushed to Cameron Road at Broadmoor. Due to the topography at the existing stop, there is no alternative location for a relocated bus stop.

TxDOT will continue to coordinate with CapMetro to find the best locations for any bus stops that require relocation to ensure transit users will continue to have access to their stops within a reasonable distance, and will work with CapMetro on rerouting bus stops during construction as necessary. Expected bus stop closures could change as design progresses.

Emergency response times would be anticipated to decrease after construction of the project due to increased access, mobility, and reduced congestion. TxDOT will continue to coordinate with emergency responders to develop detour route plans and ensure emergency response times remain consistent during construction of the proposed project. The HOV managed lanes would be reserved for carpools, transit, and emergency responders.

With Build Alternative 2, access and travel patterns would change. The bullets below provide a brief description of travel pattern changes as reviewed on the project schematic dated April 8, 2022:

• Bypass lanes would allow the traveler to bypass signalized intersections. Bypass lanes provided on frontage roads in the SB direction for Build Alternative 2 include:
  ◦ Under 51st Street
  ◦ Under Airport Boulevard
  ◦ Under MLK Jr. Boulevard
  ◦ Under 15th Street, 12th Street, and 11th Street before reconnecting with the frontage roads in SB direction at 8th Street
  ◦ From just south of 11th Street a driver could access a bypass lane to travel under 8th, 7th, 6th, 5th, and Cesar Chavez Streets before reconnecting with the frontage road south of Cesar Chavez Street
  ◦ From 3rd Street under Cesar Chavez Street
  ◦ Under Riverside Drive and under Woodland Avenue before reconnecting with the frontage road or mainlanes

• Bypass lanes NB direction:
Under 51st Street

Under Airport Boulevard

Under 38th ½ Street

Under MLK Jr. Boulevard

Under 11th Street and 12th Street

Heading NB on the frontage roads, a driver could access the bypass lane from just north of Lady Bird Lake (the Colorado River) and travel continuously over Holly Street and under Cesar Chavez Street

Under Riverside Drive and Woodland Avenue

The entrance ramps for the HOV managed lanes would be:

- From WB US 290 to I-35 (SB direction)
  - At 40th Street (SB direction)
  - At Woodland Avenue (SB direction)
  - At MLK Jr. Boulevard (NB direction)
  - At 32nd Street (NB direction)

- The HOV managed lane exit ramps would be at:
  - Airport Boulevard (NB direction)
  - Woodland Avenue (NB direction)
  - MLK Jr. Boulevard (SB direction)
  - 32nd Street (SB direction)

Figure 3.6-14 shows bypass lanes and SUP crossings of I-35.
Figure 3.6-14. Shared Use Path Crossings and Bypass Lanes – Build Alternative 2 (Map 1 of 5)
Figure 3.6-14. Shared Use Path Crossings and Bypass Lanes – Build Alternative 2 (Map 2 of 5)
Figure 3.6-14. Shared Use Path Crossings and Bypass Lanes – Build Alternative 2 (Map 3 of 5)
Figure 3.6-14. Shared Use Path Crossings and Bypass Lanes – Build Alternative 2 (Map 4 of 5)
Figure 3.6-14. Shared Use Path Crossings and Bypass Lanes – Build Alternative 2 (Map 5 of 5)
Once complete, Build Alternative 2 would continue to provide frontage roads along the length to access local roads, businesses, and residents. However, the SB frontage road between 32nd Street to just south of MLK Jr. Boulevard would be moved toward the east of the facility and would not be located in the typical SB frontage road location (see schematics and renderings on the project website I-35 Capital Express Central – Capital Express [my35capex.com]). This area generally includes the UT area on the west side of I-35 including athletics fields, the “bubble” indoor practice facility, and the Mike Myers Stadium. Access to these facilities from the frontage roads would be provided at cross streets similar to how these facilities are currently accessed.

Two HOV managed lanes in each direction would be provided. The HOV managed lanes would have limited access and egress through the project corridor. Four to five mainlanes would continue to service the project area with SB mainlane exits at 51st Street, Airport Boulevard, MLK Jr. Boulevard, 12th Street, Cesar Chavez Street, and Woodland Avenue and NB mainlane exits at Woodland Avenue, 5th Street, 15th Street, Manor Road, 38th ½ Street, and US 290. Travelers would be able to use bypass lanes to avoid many signalized intersections through the corridor which is included to reduce travel times and reduce congestion at intersections. With this alternative, the enhanced bridges would be additional crossings of I-35 in the downtown area for vehicles as well as people who walk and bicycle.

3.6.9.2.2 Modified Build Alternative 3

Based on the design dated April 8, 2022, the proposed project would add non-tolled HOV managed lanes in each direction along I-35 from US 290 East to just south of Oltorf Street. The HOV managed lanes would be one lane in each direction between just north of US 290 East to just south of 51st Street. There would be two HOV managed lanes in each direction from just south of 51st Street to just south of Oltorf Street. At Oltorf Street Modified Build Alternative 3 would tie into HOV managed lanes proposed by the CapEx-South Project. The proposed project also includes various operational and safety enhancements, including reconstructing ramps, bridges, and intersections; improving frontage roads; enhancing bicycle and pedestrian paths; and accommodating transit routes. These changes would be expected to decrease travel times along the facility and within the Community Study Area post construction. Methods to minimize construction related impacts would include construction phasing, public involvement activities such as maintaining a project construction website, performing business outreach, and providing detour notifications where appropriate. More information can be found in the Construction Phase Impacts section of the DEIS (Section 3.17). Modified Build Alternative 3 incorporated many changes in response to public meetings held in August 2021. These included minimizing rights-of-way to reduce the number of displacements, removing proposed flyovers at US 290 East, lowering all lanes at Airport Boulevard instead of elevated HOV managed lanes, new bicycle-pedestrian crossings at 3rd, 15th, and 41st Streets, lowering mainlanes and HOV managed lanes at Holly Street with elevated bypass lanes, innovative intersection at Riverside Drive, and moving frontage roads to create a boulevard from Cesar Chavez Street to Dean Keeton Street.

Modified Build Alternative 3 has non-traditional frontage road positioning along a portion of the project length (see schematics in Appendix B). From just south of US 290, frontage roads would consist of two to three lanes in each direction positioned typically outside the freeway lanes on the NB and SB sides to near 32nd Street. From near East 32nd Street to Holly Street the frontage road lanes both move between the east side of the
facility and the west side of the facility. From about 30th Street to 15th Street the SB frontage road would be moved toward the east. This area generally includes the UT area on the west side of I-35 including athletics fields, the “bubble” indoor practice facility, Mike Myers Stadium, and the Frank Erwin Center. Access to these facilities from the frontage roads would be provided at cross streets. No driveways into these facilities would be provided from the frontage roads similar to the current condition. The NB frontage road would be moved toward the west with Modified Build Alternative 3 from just south of Cesar Chavez Street to 15th Street. Driveways would be eliminated in this area along the NB frontage road and vehicular access to businesses on the east side of I-35 in this area would be provided on cross streets. The SUP would be adjacent to these businesses. Connection across I-35 would be maintained at most existing crossings of the facility except at East 8th Street and East 13th Street along this stretch of roadway. South of Holly Street the frontage roads would be located outside the facility on either the NB or SB side to tie into existing frontage roads. The shifted frontage roads would be unique in the area and, initially, this configuration may be confusing to drivers since the expectation for the frontage road would be to parallel the highway. Car travelers wishing to access businesses in the area of shifted frontage road would have to travel longer by car to access these facilities and would not be able to enter/exit directly from the frontage road. Affected businesses would lose driveway access from the frontage road, but access to the parcel would still be provided. Proper signage would be installed and maintained to help drivers manage the alternate frontage road configuration. Vehicular access to residences south of East Cesar Chavez Street would be similar to what is currently provided.

With Modified Build Alternative 3, bicycle and pedestrian SUPs would begin just north of US 290 East with connections under the direct connectors at this location. For most of its length, the SUPs would generally parallel the outer lanes of the facility on both the NB and SB sides to north of Oltorf Street and south of St. Edwards Drive, respectively. SUP crossings of I-35 within the Community Study Area would be provided at the following locations (shown on Figure 3.6-15):

- A bicycle and pedestrian bridge near 55th Street (provides access to and from Capital Plaza) connecting the North Loop NPA to the Windsor Park NPA.
- Crossing at Airport Boulevard connecting the North Loop NPA and the Hancock NPA to the Upper Boggy Creek NPA.
- Adjacent to the CapMetro Red Line (and future Gold Line) tracks, south of Airport Boulevard connecting Hancock NPA to the Upper Boggy Creek NPA.
- Enhanced bridges include buffers between traffic and people who walk and bicycle to enhance the walking or riding experience and increase safety. Enhanced bridges at 41st Street, 38 ½ Street, and 32nd Street (connecting the Hancock NPA to the Upper Boggy Creek NPA), MLK Jr. Boulevard (connecting UT and Downtown to the northern part of the Central East Austin NPA), 12th Street, 11th Street, 7th Street (bridges between 12th and 7th Streets would connect Downtown to the Central East Austin NPA), 6th Street, 5th Street, Cesar Chavez Street (6th through Cesar Chavez Street would connect Downtown to the Cesar Chavez NPA).
- Crosswalks at Dean Keeton Street connecting Hancock NPA and UT to the Upper Boggy Creek NPA.
- Crosswalks at Clyde Littlefield Drive/Manor Road connecting the UT area to the Upper Boggy Creek NPA.
- A SUP crossing just north of MLK Jr. Boulevard connecting UT and Downtown to the northern part of the Central East Austin NPA.
- A SUP crossing at 15th Street connecting Downtown to the Central East Austin NPA.
- A bicycle and pedestrian bridge located adjacent to the Red Line corridor at 4th Street connecting Downtown to the Central East Austin NPA.
- A SUP crossing at 3rd Street connecting Downtown to the Central East Austin NPA.
- A bridge at Holly Street connecting Downtown to the Central East Austin NPA.
- Providing access to the Butler Hike and Bike Trail north and south of Lady Bird Lake.
- A SUP crossing at Riverside Drive and Woodland Avenue (connecting the South River City NPA to the Riverside NPA). With Modified Build Alternative 3, access for vehicular traffic would be removed at Woodland Avenue.
- SUP connections would also be provided under direct connectors at Ben White Boulevard, even though the SUPs parallel to the facility would not extend to the southern project extent. This would allow bicycle and pedestrian connection between St. Edwards NPA and the Parker Lane NPA and between the East Congress and McKinney NPAs.

The Community Study Area would be expected to benefit from the increased SUP connections along the facility. The enhanced bridge design would provide a safe, comfortable, and seamless connection which encourages walking and biking. Businesses, facilities, and residents along I-35 would benefit from increased mobility and safety. Providing safe alternatives to single-occupancy vehicle use within the corridor would be expected to increase access to businesses and facilities for underserved or vulnerable populations, reduce congestion, improve community cohesion, and would include health benefits to the user. Additionally, by depressing the facility through downtown, the proposed project would reduce the barrier and visual intrusion of I-35.

TxDOT is coordinating with CapMetro, a participating agency with the I-35 Capital Express Central Project, to incorporate existing and proposed transit routes in the corridor, and to provide a reliable route for transit in HOV managed lanes of the project. The design for both build alternatives would maintain direct access to transit in the corridor and incorporate existing and proposed transit routes. As a participating agency, CapMetro will continue to be involved with the project. Changes to the locations of bus stops due to Modified Build Alternative 3 either temporarily during construction or permanently. Initial conversations with CapMetro in October 2022 regarding bus stop locations indicated the following concerns: alternate bus stop locations must provide for safe crossings and access to work or neighborhood destinations (sidewalks, crosswalks), the stops need bus landings and appropriate shelter, and it takes considerable time to plan for rerouting buses, moving stops, and providing proper signage for temporary bus stop closures. Of 895 bus stops located within the Community Study Area, the following 15 bus stops were identified as potentially being affected by Modified Build Alternative 3:

- **6444**: Ben White and SB I-35 with access to the new AISD headquarters. This bus stop would be expected to be temporarily relocated during construction. A new bus stop location would potentially be established if safe crossing can be established.
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• **1467**: Oltorf at Schriever/Travis High School. This stop would be relocated to the far side of the intersection to avoid impacts during construction.

• **1188**: Riverside/Kenwood. This stop would likely be permanently consolidated with stop 1187, which is approximately 600 feet west of this stop at Riverside Drive at Travis Heights. Due to proximity of the two stops, this would be expected to cause minor inconvenience.

• **4175**: 700 Cesar Chavez/Red River would be consolidated with stop 1038, which is located approximately 1,000 feet west at Cesar Chavez and Trinity.

• **5209**: 705 11th and Sabine services the Sheraton Austin. Customers would be relocated to stop 657 at 12th Street and Branch.

• **1109**: 12th/I-35 is located in a congested area. This stop would be relocated to 12th Street and Oleander; next stop would be at 11th Street at San Jacinto.

• **1113**: 12th at Branch (EB) would be relocated to the far side of the light.

• **2012**: 1101 38th ½/Robinson. CapMetro is in talks with COA to move this stop closer to I-35, but more planning would be required since this area would be impacted by Modified Build Alternative 3. This stop would need to be relocated.

• **4737**: 38th ½/Hollywood. This stop has high ridership and would need to be relocated. The new location for this stop is to be determined.

• **2312**: 4120 I-35/Clarkson would be permanently closed by the proposed project and would require relocation. The location of the new stop would hinge on access to East 41st Street and access to the HEB at Hancock Center would be maintained.

• **3272**: 4613 Airport/46th would need to be relocated; however, there are non-continuous sidewalks in this area and access to adjacent neighborhoods needs to be maintained. It is anticipated this site would be relocated to the entrance of the shopping plaza.

• **3290**: 4600 Airport/46th would need to be relocated; however, there are non-continuous sidewalks in this area and access to adjacent neighborhoods needs to be maintained. This stop would be relocated approximately 100 feet north of its existing location.

• **3271**: 4335 Airport/Parkwood. This bus stop would be relocated approximately 250 feet west of Rowood Road and would require the construction of a new bus pad.

• **2388**: Cameron/52nd (NB). This stop would be closed for the duration of construction and customers would be pushed to Cameron Road at Broadmoor. Due to the topography at the existing stop, there is no alternative location for a relocated bus stop.

• **6404**: Waller/Flores is the end of the line for Route 322. Relocating this stop is complicated because of neighborhood complaints from the community garden about diesel fumes and the 3 AM start time of this bus route precludes moving the stop to the north near an apartment complex that may be impacted by engine noise. This location is pending, but CapMetro would like to keep this stop at its current location during construction, if possible.
TDOT will continue to coordinate with CapMetro to find the best locations for any bus stops that require relocation to ensure transit users will continue to have access to their stops within a reasonable distance, and will work with CapMetro on rerouting bus stops during construction as necessary. Expected bus stop closures could change as design progresses.

Emergency response times would be anticipated to decrease after construction of the project due to increased access, mobility, and reduced congestion. TDOT will continue to coordinate with emergency responders to develop detour route plans and ensure emergency response times remain consistent during construction of the proposed project. The HOV managed lanes would be reserved for carpools, transit, and emergency responders.

With Modified Build Alternative 3, access and travel patterns would change. The bullets below provide a brief description of travel pattern changes as reviewed on the project schematic dated April 8, 2022:

- Bypass lanes would allow the traveler to bypass signalized intersections. Bypass lanes provided in the SB direction for Modified Build Alternative 3 include:
  - Under 51st Street.
  - Under Airport Boulevard.
  - Under Wilshire/41st Street.
  - Under MLK Jr. Boulevard.
  - Under 15th Street, 12th Street, and 11th Street before reconnecting with the frontage roads in SB direction.
  - Under Cesar Chavez and Holly Streets.
  - Under Riverside Drive before reconnecting with the frontage road or mainlanes.

- Bypass lanes NB direction:
  - Under Airport Boulevard.
  - Under Wilshire/41st Street.
  - Under 11th Street and 12th Street.
  - Over Holly and under Cesar Chavez Street.
  - Under Riverside Drive.

- The entrance ramps for the HOV managed lanes would be:
  - North of Airport Boulevard (SB direction).
  - At Woodland Avenue (SB direction).
  - Near Sunnyvale Street (NB direction).
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- At MLK Jr. Boulevard (NB direction).
- At 32nd Street (NB direction).
- The HOV managed lane exit ramps would be at:
  - North of Airport Boulevard (NB direction).
  - Woodland Avenue (NB direction).
  - Near Sunnyvale Street (NB direction).
  - MLK Jr. Boulevard (SB direction).
  - 32nd Street (SB direction).
  - Remove vehicular crossing of I-35 at 8th Street and Woodland Avenue.

Figure 3.6-15 shows bypass lanes and SUP crossings of I-35. Removing the vehicular crossings of I-35 at 8th Street and Woodland Avenue would force drivers to divert onto neighborhood streets or utilize frontage roads to access the nearest cross streets (11th Street or 7th Street for the 8th Street closure or Riverside to the north or Oltorf Street to the south for Woodland Avenue). A traveler in a car would have to drive approximately 0.5 mile or less to access the next crossing of I-35.
Figure 3.6-15. Shared Use Path Crossings and Bypass Lanes – Modified Build Alternative 3 (Map 1 of 5)
Figure 3.6-15. Shared Use Path Crossings and Bypass Lanes – Modified Build Alternative 3 (Map 2 of 5)
Figure 3.6-15. Shared Use Path Crossings and Bypass Lanes – Modified Build Alternative 3 (Map 3 of 5)
Figure 3.6-15. Shared Use Path Crossings and Bypass Lanes – Modified Build Alternative 3 (Map 4 of 5)
Figure 3.6-15. Shared Use Path Crossings and Bypass Lanes – Modified Build Alternative 3 (Map 5 of 5)
3.6.9.2.3 No Build Alternative

Under the No Build Alternative, there would be no changes to I-35 between US 290 and SH 71/Ben White Boulevard. The No Build Alternative would consist of the existing transportation system as well as any committed highway and transit improvements defined in the 2045 CAMPO Long Range Transportation Plan (CAMPO, 2020), except for the proposed project. Changes to bicycle and pedestrian facilities, transit facilities, and access and travel patterns as a result of the other committed improvements would be determined for each individual project.

3.6.10 Environmental Justice

3.6.10.1 Regulatory Requirements and Methodology

EO 12898, “Federal Action to Address Environmental Justice in Minority Populations and Low-Income Populations,” requires each federal agency to “make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations.” The USDOT has issued DOT 5610.2C (May 2021) to update their strategy for promoting the principles of EJ in all DOT programs, policies, and activities. FHWA has identified three fundamental principles of EJ (FHWA 2015).

The three fundamental principles of EJ are:

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

Disproportionately high and adverse human health or environmental effects are defined as adverse effects that:

- Are predominantly borne by a minority population and/or a low-income population; or
- Will be suffered by the minority population and/or low-income population and are appreciably more severe or greater in magnitude than the adverse effects that will be suffered by the nonminority population and/or non-low-income populations.

EO 12898 and the DOT and FHWA Orders on EJ address people belonging to any of the following groups (FHWA 2012):

- Black: a person having origins in any of the black racial groups of Africa;
- Hispanic or Latino: a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race;
• Asian American: a person having origins in any of the original peoples of the Far East, Southeast Asian, or the Indian subcontinent;

• American Indian and Alaskan Native: a person having origins in any of the original people of North America, South America (including Central America), and who maintains culture identification through tribal affiliation or community recognition; or

• Native Hawaiian and Other Pacific Islander: a person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.

• Low-Income: a person whose MHI is at or below the HHS poverty guideline for a family of four, which is $27,750 for 2022 (HHS, 2022).

A Minority Population means any readily identifiable group of minority persons who live in geographic proximity, and if circumstances warrant, a geographically dispersed/transient persons (such as migrant workers or Native Americans) who would be similarly affected by a proposed program, policy or activity. Minority populations were identified based on the federal CEQ’s guidance document *Environmental Justice: Guidance Under the National Environmental Policy Act* (CEQ 1997a). Based on this guidance:

> “Minority populations should be identified where either: (a) the minority population of the affected area exceeds 50 percent or (b) the minority population percentage of the affected area is meaningfully greater that the minority population percentage in the general population or other appropriate unit of geographic analysis ... “

A Low-Income Population is any readily identifiable group of low-income persons who live in geographic proximity, and if circumstances warrant, geographically dispersed/transient persons (such as migrant workers or Native Americans) who would be similarly affected by a proposed program, policy, or activity. Unlike the CEQ guidance (1997) on minority populations, no guidance document contains a quantitative definition of how many low-income individuals constitute a low-income population. For this analysis, a block group would be determined to have a high concentration of low-income individuals (a low-income population) if: 1) the MHI of a census block group is below the HHS poverty guidelines, and/or 2) there is a meaningfully greater percentage of people in poverty within a census tract (poverty rate data was not available at the block group level) than within the surrounding county area. This more inclusive standard is appropriate for this analysis because the Community Study Area, as well as COA at large, has experienced rapid population growth over the past few decades. This coupled with other factors described more fully in *Section 3.6.4.1* have led to a dramatic rise in housing costs, which has also created affordability issues for many Austin households with low to moderate incomes.

Statistical data sources used in the assessment included the USCB 2020 Decennial census, the USCB ACS 2019 5-year estimates (USCB, 2019), and TxDOT’s Census Screen Report tool. In addition to statistical data, this assessment uses information about the Community Study Area that TxDOT and the project team received during public outreach activities for the project (as described in *Section 4.0*). Public outreach activities for the project helped inform TxDOT about the distribution of EJ and non-EJ populations, about EJ population-specific concerns, and community concerns.
3.6.10.2 Affected Environment

3.6.10.2.1 Race and Ethnicity

Approximately 58 percent of the population within the Community Study Area identifies as a racial or ethnic minority, compared with just under 53 percent for both Travis County and COA, as shown in Table 3.6-8.

<table>
<thead>
<tr>
<th>Geography</th>
<th>Total Population</th>
<th>Minority Population</th>
<th>Percent Minority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Travis County</td>
<td>1,290,188</td>
<td>677,364</td>
<td>52.5%</td>
</tr>
<tr>
<td>COA</td>
<td>961,855</td>
<td>508,861</td>
<td>52.9%</td>
</tr>
<tr>
<td>Overall Census Blocks in Community Study Area</td>
<td>230,541</td>
<td>133,200</td>
<td>57.8%</td>
</tr>
</tbody>
</table>

Source: USCB, 2021. 2020 Decennial Census Table P2.

The Community Study Area included a total of 2,130 populated Census blocks, of which 1,114 included a minority population of 50 percent or greater (Table 1 in Appendix J). Figure 3.6-16 shows the distribution of blocks with a minority population. These blocks are spread out throughout the Community Study Area but are most prevalent near the I-35 and US 290 intersection, along US 183 throughout the project area, east of I-35 east of the downtown area, and south of Lady Bird Lake, especially east of I-35.

3.6.10.2.2 Income

According to the HHS 2022 poverty guidelines, a household is considered low-income if they earn less than $27,750 for a four-person family/household (HHS 2022). The 2019 MHI income in the Community Study Area ranged between $5,500 and $143,650. Seven of the block groups within the study area had a MHI that was below the 2022 poverty guideline of $27,750 (Table 2, Appendix J). Low-income populations were also identified where the poverty rate was meaningfully greater than the poverty rate of Travis County as a whole (10.9 percent). For this analysis, meaningfully greater equaled 21.8 percent which was twice the poverty rate of Travis County. However, this data was only available at the census tract level, a large geographic unit, and was not broken down into lower census block group level. Of 53 Census tracts within the Community Study Area, 19 census tracts had at or greater than 21.8 percent poverty rate as shown on Table 2, Appendix J. Figures 3.6-17 and 3.6-18 show the locations of low-income census block groups and census tracts within the Community Study Area. The census block group and tract identified as low income near UT, west of I-35 and just north of downtown, is likely the result of a high concentration of college students.

The Community Study Area included several encampments of people experiencing homelessness, as well as BN services (port-a-potties, showers, soup kitchen) provided by city and non-governmental organizations. Community facilities within 0.5 mile of the existing facility that provide services to low-income individuals, or those seeking employment or health services, are described in Section 3.6.6 and listed in Appendix J.
Figure 3.6-16. Minority Populations within the Community Study Area (Map 1 of 3)
Figure 3.6-16. Minority Populations within the Community Study Area (Map 2 of 3)
Figure 3.6-16. Minority Populations within the Community Study Area (Map 3 of 3)
Figure 3.6-17. Low-Income Block Groups
Figure 3.6-18. Census Tracts Where Poverty Rate is Twice that of Travis County
3.6.10.2.3 Limited English Proficiency (LEP)

LEP is defined as having “limited ability to read, write, speak or understand English” (67 Federal Register 41459). EO 13166, Improving Access to Services for Persons with LEP, requires federal agencies to examine the services they provide, identify any need for services to LEP persons, and develop and implement a plan to provide those services so that LEP persons can have meaningful access to them. Failure to ensure that LEP persons can effectively participate in or benefit from federally-assisted programs and activities may violate the prohibition under Title VI of the Civil Rights Restoration Act of 1987.

LEP individuals are defined as those who speak English “well,” “not well,” or “not at all.” 2019 Five-year estimates from the ACS were gathered at the census block group level to determine if there were LEP populations that could be affected by the proposed project (Table 2, Appendix J). As Census data is self-reported, an individual’s ability to speak English represents the respondent’s own perception about his/her ability to speak English. Seven of the 134 block groups included no LEP population. The remaining 127 block groups contained a LEP population between 0.45 percent and 51.7 percent. Of the population (age 5 and over) within the Community Study Area, the majority of the LEP population spoke Spanish (15.0 percent), followed by Asian and Pacific languages (0.7 percent), other Indo-European languages (0.5 percent), and other languages (0.3 percent). During the field investigations, signs in Spanish and Asian languages were observed within the Community Study Area confirming the presence of these LEP populations. In addition to the LEP population reflected in the census data, LEP people may also travel from outside the Community Study Area to patronize businesses and services with non-English language signage.

3.6.10.3 Environmental Consequences Related to Environmental Justice

3.6.10.3.1 Build Alternative 2

Environmental Justice (EJ)

As shown in Figures 3.6-16 through 3.6-18, minority and low-income populations are present within the Community Study Area. Census blocks where the percentage of minority persons was 50 percent or greater, Census block groups where the MHI is below the 2022 poverty guideline, or Census tracts where the percentage of people in poverty was meaningfully greater than the percentage of people in poverty for Travis County overall were all considered to contain an EJ population. TxDOT worked with the public to identify community facilities, services, and housing used by EJ populations and to minimize impacts to these as much as possible. Displacements would occur within low-income block groups and Build Alternative 2 would be expected to displace some services utilized by the low-income community including two CommUnityCare Clinics (David Powell Health Center and the Hancock Walk-In Care), which provide services to all including those without health insurance, Green Doors homelessness advocacy, and some BN locations which currently provide services to those experiencing homelessness, as described in Section 3.6.4.1. TxDOT will work with community health providers and COA to minimize the disruption of services to patients, area residents, and to those experiencing homelessness from project-related displacements. TxDOT is currently considering advanced relocation assistance for selected properties to minimize impacts to underserved communities. At this point, communication with the two CommUnityCare facilities and Escuelita del Alma has been initiated. It should be
noted that if the David Powell Health Center is not displaced, then in order to accommodate the design, ROW would be required from the eastern side of I-35, which would result in the displacement of 56 below-market rate housing units at the Abali apartment community.

As noted in Section 3.6.7.3, there would be a total of 131 commercial displacements and 145 residential displacements with Build Alternative 2. Of those, 79 commercial displacements and 93 residential displacements would be located in an EJ area, either containing a minority or low-income population or serving an EJ community. It should be noted that not all individuals or businesses located within a minority or low-income block or block group would be EJ individuals or businesses. Additionally, Build Alternative 2 would displace the 70-unit Aria Grand complex which includes a majority of affordable housing units (61 units). Approximately 60 percent of the commercial displacements and approximately 64 percent of residential displacements would affect EJ communities.

Under USDOT guidance, a “disproportionately high and adverse effect” on EJ populations exists if there is an “adverse effect that is predominantly borne by a minority population and/or a low-income population.” USDOT Order No. 5610.2C (May 16, 2021), at Section 1.g. of the Appendix. Because a majority of the displacements for Build Alternative 2 would necessarily occur in census blocks or block groups that meet EJ thresholds, and applying a conservative assumption that all displacements would in fact be low-income or minority persons, TxDOT conservatively assumes that the displacements would be “predominantly borne by a minority population and/or a low-income population,” and according to USDOT guidance, there would therefore be a “disproportionately high and adverse effect” on EJ populations.

The existing I-35 facility created a barrier to movement and reduces the level of community cohesion between the east and west sides of Austin. Section 3.6.8 is organized by neighborhood and discusses community cohesion, including demographic summary information. Section 3.6.8.2 specifically discusses how Build Alternative 2 would reduce the long-standing barrier effect of I-35 and help to unite neighborhoods east and west of I-35, many of which contain EJ populations.

Minority EJ communities are present in many areas along the existing facility and throughout the Community Study Area and low-income EJ communities are more scattered throughout the Community Study Area, as shown in Figures 3.16-16 to 3.6-18. As described above, TxDOT has initiated contact with proposed displacements and would work to ensure a continuation of service for essential services within the Community Study Area and has proposed advanced relocation assistance for selected properties. EJ communities adjacent to the facility would benefit most from moving the facility below existing grade, construction of enhanced bridges with SUP and buffers, and construction of SUPs along and across I-35. Build Alternative 2 would allow for the placement of deck plazas and/or stitches (funded by others) over the below grade facility, which could create green spaces within the downtown area, if constructed. EJ communities south of the Colorado River would still benefit from SUPs, but the concentration and reconnection of east and west Austin and beneficial community cohesion effects would be most pronounced north of the Colorado River. It is anticipated that all communities, including minority and low-income, would benefit from the access and travel pattern improvements and pedestrian and bicycle access which would be provided with Build Alternative 2. See Section 3.25 for a summary of project benefits and proposed mitigation for Build Alternative 2.
Both EJ and non-EJ communities would experience disruption during construction. Methods to minimize construction related impacts would be employed, such as construction phasing and public involvement activities, including maintaining a project construction website, performing business outreach, and providing detour notifications where appropriate. A detailed traffic plan would be developed to describe how access will be maintained for those driving, bicycling, walking, and on transit. A temporary increase in PM and MSAT emissions would be expected during construction and would be minimized with the use of best management practices (BMPs) to control dust and diesel emissions. Construction would not be expected to have a significant impact on regional air quality. Furthermore, noise impacts during construction would be minimized with work hour controls and proper muffler maintenance. More information can be found in Section 3.17 on Construction Phase Impacts. Both EJ and non-EJ communities are located within the Community Study Area and would experience construction impacts similarly. EJ communities would not be expected to experience construction impacts more severely than non-EJ populations for general construction-related impacts.

An Air Quality Analysis (see Section 3.12) has been completed and concentrations of carbon monoxide (CO) are not expected to exceed National Ambient Air Quality Standards (NAAQS) at any locations through the I-35 corridor, and total mobile source air toxics (MSAT) emissions are expected to decline in the future; therefore, air quality impacts are not anticipated. EJ communities would not be expected to experience disproportionate air quality impacts compared to non-EJ communities.

A Traffic Noise Analysis was completed for the proposed project (see Section 3.14). The analysis showed that of 39 impacted receivers along the corridor approximately 38.5 percent (15 receivers) would be located in EJ Census geographies either containing a minority or low-income population and the remaining 61.5 percent (24 receivers) would be located in non-EJ Census geographies for Build Alternative 2. Noise barriers have been proposed for the project and, of the 13 benefitted receivers, approximately 46 percent (6 receivers) would be located in EJ Census geographies and the other approximately 54 percent would be located in non-EJ Census geographies. Impacts due to noise would not be expected to impact EJ populations within the Community Study Area disproportionately when compared to impacts borne by the non-EJ community. See Appendix R for more information on noise impacts.

A Hazardous Materials ISA has been completed for the proposed project and is included Appendix Q, with discussion in Section 3.13. This analysis addressed hazardous materials impacts as a result of the build alternatives. Impacts would not be expected to affect EJ populations within the Community Study Area disproportionately when compared to the non-EJ community.

As discussed in Sections 2.2.3 and 2.2.4, the proposed project would include drainage system improvements, including multiple bored drainage tunnels. Three drainage tunnel launch sites are proposed as part of the project. Drainage tunnel locations are as follows:

- **Drainage tunnel launch site south of Cesar Chavez Street between Tillery Street and Springdale Road east of Longhorn Dam.** This site is surrounded by residential and commercial land uses. Because the Cesar Chavez tunnel drains the lowest portions of the depressed I-35 roadway through downtown, it is essential that the stormwater outfall be located downstream of the Longhorn Dam, where river flooding elevations are lower. This site also provides direct access to the Colorado River, which will be necessary to construct the...
outfall culvert and headwall structure adjacent to the stream channel. In addition to the tunnel boring
drill machine (TBM) access shaft, the site will accommodate tunnel support infrastructure and materials. The
location, near US 183, will allow deliveries and spoils removal to utilize TxDOT on-system routes to the
greatest extent practicable.

- **Drainage tunnel launch site along the I-35 NB frontage road between Clermont Avenue and Flores Street**
  (surrounded by residential and commercial land uses), also called the North-South (East) tunnel. This
  location allows for the construction of the TBM access shaft north of the limits of the I-35 Colorado River
  bridge construction project. Since the bridge project will be complete when the North-South (East) tunnel is
  constructed, this location is required to avoid a direct conflict with the roadways. Other locations, closer to
  the Colorado River outfall, would require additional ROW within parkland. In addition to the TBM access
  shaft, the site will accommodate tunnel support infrastructure and materials. The site's location along I-35
  will allow deliveries and spoils removal to utilize TxDOT on-system routes.

- **Drainage tunnel launch site located along the I-35 SB frontage road north of E MLK Boulevard** (surrounded
  by commercial land uses), also called the North-South (West) Tunnel. This location allows for the
  construction of the TBM access shaft using available existing ROW, rather than acquiring additional ROW
  west of the roadway. The site also allows for the construction of the necessary stormwater junction boxes
  and connection culverts to link the North-South (West) tunnel to existing Waller Creek stormwater outfalls
  and also provides a critical hydraulic connection to the North-South (East) Tunnels. In addition to the TBM
  access shaft, the site will accommodate tunnel support infrastructure and materials. The site's location
  along I-35 will allow deliveries and spoils removal to utilize TxDOT on-system routes.

Each of the three drainage tunnel launch sites is located within and in the vicinity of EJ communities that may
be subject to construction impacts. The tunnel launch site construction areas are sites where a vertical shaft will
be installed to lower the TBM into the ground and begin its operations. Excavated earth and rock will be moved
from the boring machine back to the launch site for removal and hauled to designated off-site locations for
storage or disposal. These activities are anticipated to operate 24 hours per day for the duration of the tunnel
boring construction period. Impacts due to 24-hour construction noise and lighting, increased truck traffic due
to haul trucks entering and exiting the launch tunnel sites, and construction-related air pollutant emissions would
be expected and would be most harmful to residential, healthcare, or customer service-based commercial land
uses. Noise impacts would be minimized and abated with the use of BMPs; however, noise generated at night
may be associated with more adverse impacts. Air quality impacts during construction include dust generated
from construction activities associated with truck movements and earthmoving operations. These air quality
impacts would be short term and cease once construction is complete. BMPs would be implemented to minimize
the amount of dust caused by construction activities.

The proposed project would include many benefits, including an SUP along the length of the project, additional
crossings of I-35, enhanced bridges which would include a 20-foot buffer and 10-foot SUP in each direction,
bypass lanes under many intersections (access and traffic pattern changes described in Section 4.5) which
would allow unimpeded travel and reduce the need to stop at lights. These benefits would be realized by all
individuals using the corridor, EJ and non-EJ alike. The Transportation Equity and Access Studies in Appendix K
describe the current conditions in and potential benefits to EJ and other disadvantaged communities in detail. See Section 3.25 for a discussion of proposed project-related mitigation.

Limited English Proficiency (LEP)

TxDOT has provided, and will continue to provide, meaningful communications to stakeholders who could be affected by the construction and operation of the proposed project. Meaningful communication includes conveying messages, reports, and other materials in language(s) that the public can understand to the greatest extent practical. All public involvement notices and select vital documents for the project have been provided in English and Spanish, and Spanish speakers have been available at all public encounters. Public meeting notices will continue to be published in English and Spanish, and Spanish speakers will be available to interact with the community. TxDOT will continue to conduct public involvement activities for the proposed project in accordance with EO 13166 to ensure full and fair participation.

3.6.10.3.2 Modified Build Alternative 3

Environmental Justice (EJ)

As shown in Figures 3.6-16 through 3.6-18, minority and low-income populations were present within the Community Study Area. Census blocks where the percentage of minority persons was 50 percent or greater, Census block groups where the MHI is below the 2022 poverty guideline, or Census tracts where the percentage of people in poverty was meaningfully greater than the percentage of people in poverty for Travis County overall were all considered to contain an EJ population. TxDOT worked with the public to identify community facilities, services, and housing used by EJ populations and to minimize impacts to these as much as possible. Displacements would occur within low-income block groups and Modified Build Alternative 3 would be expected to displace some services utilized by the low-income community including two CommUnityCare Clinics (David Powell Health Center and the Hancock Walk-In Care), which provide services to all including those without health insurance, and some BN locations which currently provide services to those experiencing homelessness, as described in Section 3.6.4.1. TxDOT is currently considering advanced relocation assistance for selected properties in order to minimize impacts to underserved communities. At this point, communication with the two CommUnityCare facilities and Escuelita del Alma has been initiated. TxDOT will work community health providers and COA to minimize disruption of services to area residents and to those experiencing homelessness. It should be noted that if the David Powell Health Center was not displaced, then in order to accommodate the design, ROW would be required from the eastern side of I-35, which would result in the displacement of 56 below-market rate housing units at the Abali.

As mentioned in Section 3.6.7.3, there would be a total of 69 commercial displacements and 26 residential displacements with Modified Build Alternative 3. Of those, 65 commercial displacements and 25 residential displacements would be located in an EJ area, either containing a minority or low-income population or serving an EJ community. It should be noted that not all individuals or businesses located within a minority or low-income block or block group would be EJ individuals or businesses. Approximately 94 percent of the commercial displacements and approximately 96 percent of residential displacements would affect EJ communities. TxDOT will continue to work with the displaced community facilities and businesses serving specific populations...
identified in Section 3.6.7.3.2 throughout the acquisition process. TxDOT is committed to working with these critical facilities to find alternate locations near their current locations, when possible. TxDOT is currently looking at providing advanced relocation assistance for selected properties to minimize impacts to underserved communities. In general, TxDOT only provides relocation assistance to building owners, not renters. However, for mitigation to EJ-owned businesses who are renters, TxDOT has agreed to treat these EJ-owned business as property owners and offer relocation assistance to them. Relocation benefits include assistance in finding a new business location and providing additional rent assistance for rental rates over what they are currently paying, within limits, for 42 months.

Under USDOT guidance, a “disproportionately high and adverse effect” on EJ populations exists if there is an “adverse effect that is predominantly borne by a minority population and/or a low-income population.” USDOT Order No. 5610.2C (May 16, 2021), at Section 1.g. of the Appendix. Because a majority of the displacements for Modified Build Alternative 3 would necessarily occur in census blocks that meet EJ thresholds, and applying a conservative assumption that all displacees would in fact be low-income or minority persons, TxDOT conservatively assumes that the displacements would be “predominantly borne by a minority population and/or a low-income population,” and according to USDOT guidance, there would therefore be a “disproportionately high and adverse effect” on EJ populations.

USDOT guidance provides that such a project may nevertheless proceed if (i) a substantial need of the project exists based on the overall public interest, and (ii) alternatives that would have less adverse effects on protected populations (and still satisfy the need for the project) would either have other adverse social, economic, environmental, or human health impacts that are severe or involve increased costs of extraordinary magnitude. USDOT Order No. 5610.2C (May 16, 2021), at Section 9.d. The substantial need for this project is established in Chapter 2 of the DEIS. While a higher percentage of Modified Build Alternative 3’s displacements are located in EJ areas, the number of overall displacements and EJ displacements is much less with Modified Build Alternative 3. Modified Build Alternative 3 overall has approximately 23 percent fewer commercial displacements and 80 percent fewer residential displacements due to modifications made to reduce the ROW in specific areas. Furthermore, Modified Build Alternative 3 has approximately 13 percent fewer EJ commercial displacements and 74 percent fewer EJ residential displacements when compared to Build Alternative 2. Modified Build Alternative 3 has been refined to substantially reduce the number of displacements, particularly for EJ communities by avoiding impacts to the Aria Grand affordable housing complex.

Additionally, this project would provide a number of benefits to EJ populations in the project area. Examples include improved east-west connectivity across I-35, reduced traffic congestion, improved pedestrian and bicycle facilities, and improved transit system efficiency due to reduced congestion. The benefits of Modified Build Alternative 3 are described in this section and summarized in Section 3.25.

The existing I-35 facility created a barrier to movement and reduced the level of community cohesion between the east and west sides of Austin. Section 3.6.8 is organized by neighborhood and discusses community cohesion, including demographic summary information. Section 3.6.8.2 specifically discusses how Build Alternative 2 would reduce the long-standing barrier effect of I-35 and help to unite neighborhoods east and west of I-35, many of which contain EJ populations.
Minority EJ communities were present in many areas along the existing facility and throughout the Community Study Area and low-income EJ communities were more scattered throughout the Community Study Area, as shown in Figures 3.6-16 through 3.6-18. EJ communities adjacent to the facility would benefit most from moving the facility below existing grade, construction of enhanced bridges with SUP and buffers, and construction of SUPs along and across I-35. Modified Build Alternative 3 would allow for the placement of deck plazas and/or stitches (funded by others) over the below grade facility which could create green spaces within the downtown area, if constructed. EJ communities south of the Colorado River would still benefit from SUPs, but the concentration and reconnection of east and west Austin and beneficial community cohesion effects would be most pronounced north of the Colorado River. It would be expected that all communities, including minority and low-income, would benefit from the vehicular access and travel pattern improvements and pedestrian and bicycle access provided by Modified Build Alternative 3.

It would be expected that EJ and non-EJ communities would experience disruption during construction. Methods to minimize construction related impacts would be employed such as construction phasing, public involvement activities such as maintaining a project construction website, performing business outreach, and providing detour notifications where appropriate. A detailed traffic plan will be developed to describe how access would be maintained for those driving, bicycling, walking, and on transit. A temporary increase in PM and MSAT emissions would be expected during construction and would be minimized with the use of BMPs to control dust and diesel emissions. Construction would not be expected to have a significant impact on regional air quality. Furthermore, noise impacts during construction would be minimized with work hour controls and proper muffler maintenance. More information can be found in the Construction Phase Impacts section of the DEIS (Section 3.17). Both EJ and non-EJ communities are located within the Community Study Area and would experience construction impacts similarly. The EJ communities would not be expected to experience construction impacts disproportionately to the rest of the population for general construction-related impacts.

An Air Quality Analysis has been completed (see Section 3.12) and concentrations of CO are not expected to exceed NAAQS at any locations through the I-35 corridor, and total MSAT emissions are expected to decline in the future; therefore, air quality impacts are not anticipated. EJ communities would not be expected to experience disproportionate air quality impacts compared to non-EJ communities.

A Traffic Noise Analysis was completed for the proposed project (Section 3.14). The analysis showed that of 40 impacted receivers along the corridor approximately 35 percent (14 receivers) would be located in EJ Census geographies either containing a minority or low-income population and the remaining 65 percent (26 receivers) would be located in non-EJ Census geographies for Modified Build Alternative 3. Noise barriers have been proposed and, of the 12 benefited receivers, half would be located in EJ Census geographies and the other half would be located in non-EJ Census geographies. Impacts due to noise would not be expected to impact EJ populations within the Community Study Area disproportionately when compared to impacts borne by the non-EJ community. See Appendix R for more information on noise impacts.

A Hazardous Materials ISA has been completed for the proposed project and the analysis can be viewed in Section 3.13 and Appendix Q. This analysis addressed hazardous materials impacts as a result of the build
alternatives. Hazardous materials impacts would not be expected to affect EJ populations within the Community Study Area disproportionately when compared to impacts borne by the non-EJ community.

As discussed in Sections 2.2.3 and 2.2.4, the proposed project would include drainage system improvements, including multiple bored drainage tunnels. Three drainage tunnel launch sites are proposed as part of the project and are the same for Modified Build Alternative 3 as for Build Alternative 2, described in Section 3.10.6.3.1 above. Each of the three drainage tunnel launch sites is located within and in the vicinity of EJ communities that may be subject to construction impacts. The tunnel launch site construction areas are sites where a vertical shaft will be installed to lower the TBM into the ground and begin its operations. Excavated earth and rock will be moved from the boring machine back to the launch site for removal and hauled to designated off-site locations for storage or disposal. These activities are anticipated to operate 24 hours per day for the duration of the tunnel boring construction period. Impacts due to 24-hour construction noise and lighting, increased truck traffic due to haul trucks entering and exiting the launch tunnel sites, and construction-related air pollutant emissions would be expected and would be most harmful to residential, healthcare, or customer service-based commercial land uses. Noise impacts would be minimized and abated with the use of BMPs; however, noise generated at night may be associated with more adverse impacts. Air quality impacts during construction include dust generated from construction activities associated with truck movements and earthmoving operations. These air quality impacts would be short term and cease once construction is complete. BMPs would be implemented to minimize the amount of dust caused by construction activities.

The proposed project would include many benefits, including an SUP along the length of the project, additional crossings of I-35, enhanced bridges which would include a 20-foot buffer and 10-foot SUP in each direction, bypass lanes under many intersections (access and traffic pattern changes described in Section 3.6.9 and Appendix K) which would allow unimpeded travel and reduce the need to stop at lights. These benefits would be realized by all individuals using the corridor, EJ and non-EJ alike. See Section 3.25 for a discussion of proposed project-related mitigation.

Limited English Proficiency (LEP)

TxDOT has provided, and will continue to provide, meaningful communications to stakeholders who could be affected by the construction and operation of the proposed project. Meaningful communication includes conveying messages, reports, and other materials in language(s) that the public can understand to the greatest extent practical. All public communication on the project has been provided in English and Spanish and Spanish speakers have been available at all public encounters. Public meeting notices will continue to be published in English and Spanish and Spanish speakers will be available to interact with the community. TxDOT will continue to conduct public involvement activities for the proposed project in accordance with EO 13166 to ensure full and fair participation.

3.6.10.3.3 No Build Alternative

Under the No Build Alternative, EJ populations would likely benefit from improved transit services compared to what exists today. There would still be bus rapid transit and increased HCT lines proposed with Project Connect. Other planned roadway improvements besides the proposed project would occur; however, the No Build
Alternative would not provide improvements to I-35 through the Community Study Area. As such, the existing transportation challenges as expressed in the Project’s purpose and need (e.g., congestion, lack of east-west connection) would not be addressed. The adverse effects of the No Build Alternative would be experienced by all people who use I-35 between SH 71 and US 290. Since both EJ and non-EJ populations would be affected in the same way, the No Build Alternative would not be expected to result in disproportionately high and adverse impacts to EJ populations.

TxDOT would provide meaningful communications to stakeholders, as needed, for the No Build Alternative. Communications would be in accordance with EO 13166 to ensure stakeholders can participate fully.

3.10.3.4 Environmental Justice (EJ) Summary of Alternatives

The two alternatives have similar footprints and impacts to EJ communities for most resources would be similar. The two alternatives differ most in the number of displacements that would be required, with Modified Build Alternative 3 having many fewer displacements to the EJ community and overall, as shown on Table 3.6-9. Modified Build Alternative 3 was refined based on stakeholder engagement to reduce ROW takes and minimize the number of displacements.

Table 3.6-9. Alternative Comparison for Displacements

<table>
<thead>
<tr>
<th>Proposed Build Alternative</th>
<th>Commercial Displacement</th>
<th>Commercial Displacements in EJ Area</th>
<th>Residential Displacements</th>
<th>Residential Displacements in EJ Area</th>
<th>Total Displacements*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Build Alternative 2</td>
<td>131</td>
<td>79/60.3%</td>
<td>145</td>
<td>93/64.1%</td>
<td>291</td>
</tr>
<tr>
<td>Modified Build Alternative 3</td>
<td>69</td>
<td>65/94.2%</td>
<td>26</td>
<td>25/96.2%</td>
<td>107</td>
</tr>
<tr>
<td>Number / Percent Fewer Displacements with Modified Build Alternative 3 over Build Alternative 2</td>
<td>62/47.3 %</td>
<td>14/17.7%</td>
<td>119/82.1%</td>
<td>68/73.1%</td>
<td>18/63.2%</td>
</tr>
</tbody>
</table>

*Includes parcels that are currently vacant and not included as commercial or residential displacements

As Table 3.6-9 shows, Modified Build Alternative 3 has approximately 18 percent fewer EJ commercial displacements, over 73 percent fewer EJ residential displacements and over 63 percent fewer displacements overall.
3.6.11 Public Involvement

Chapter 4.0 of the DEIS provides an overview of public involvement activities which have occurred to shape the I-35 Capital Express Central Project. This includes extensive efforts to conduct outreach to underserved populations including elderly, minority, geographically dispersed/transient populations, LEP, physically and visually impaired, etc. The demographic information gathered throughout this DEIS helped to inform TxDOT’s outreach, some specific efforts to target EJ communities included:

- Published a newspaper advertisement in a Spanish-language newspaper, with a distribution of 28,000 copies.
- Aired Spanish language sponsored radio announcements on KLZT-FM La Z La Radio de Neta!
- Aired sponsored radio announcements on KAZI, an African American community radio station.
- Distributed postcards to 30,179 households, businesses, and property owners in English and Spanish.
- Initiated a Community Working Group with members from targeted outreach groups including, but not limited to, minority populations, low-income populations, people with LEP, elderly populations, children, and people with disabilities.
- Convening service providers, agencies, and elected leaders since 2017 as part of the agency’s IAH.
- TxDOT is meeting with underserved and diverse groups of Austinites in high-traffic areas through community pop-up events. Tables are set up to provide information about the updated alternatives, gather input and document concerns. In addition, design consultants are available to discuss the project’s aesthetic elements such as shade structures, landscaping, and areas for possible murals or panels. Translators are on hand to share this information with our Spanish-speaking community.

TxDOT incorporated public feedback into the project. Specifically, TxDOT heard that there was a need to minimize ROW take, especially from EJ areas. In March 2022, TxDOT incorporated changes to reduce the ROW take in specific areas for Modified Build Alternative 3 to substantially reduce the overall displacements as well as displacements in EJ Census geographies. Chapter 4.0 includes a more detailed account of Public Involvement for the project and how public and agency comments have helped shape the project footprint.

TxDOT will continue to encourage the participation of minority, low-income, and underserved populations in the project decision-making process through various strategies. These efforts at public involvement are documented to demonstrate compliance with Title VI, EJ and LEP requirements and guidance to ensure full and fair participation by all potentially affected communities. As described in Section 3.6.10.2.3, the vast majority of the LEP population speaks Spanish; other languages only account for a small percentage of the LEP population. All meeting notices have been published in Spanish, and Spanish speakers/and translators are available (however, none have been requested to date). See Chapter 4.0 of the DEIS for a summary of public involvement to date.

3.6.12 Transportation Equity and Access Studies

TxDOT included supplemental studies that are summarized in this section, and can be found in Appendix K. These were conducted to better understand the community study area from a transportation equity perspective.
As an extension of the studies completed for the Community Impacts component of this DEIS, TxDOT undertook a series of investigative tasks, the most significant of which are summarized by the following:

1) Identify a preliminary Transportation Equity and Access Focus Area (Equity Focus Area)

2) Assess the wider pedestrian and transit network in the Equity Focus Area
   a) Compare and discuss the active transportation improvements of the proposed project to this wider existing and proposed network.
   b) This included reviewing an inventory of sidewalks from COA and researching walkability based on the EPAs National Walkability Index (see Section 3.5).

3) Review and present select health conditions available from the EPA in the context of active transportation infrastructure.

4) Conduct StreetLight analyses in order to detail and quantify current travel patterns in both the Equity Focus Area and within the project limits.

5) Consider the equity of improvements within the proposed project by discussing potential links between the Equity Focus Area and the project components.

3.6.12.1 Understanding Equity in Transportation

In addition to the regulatory context provided by EO 12898, EO 13166, and other regulations discussed in Section 3.6.12.1, the following definition from USDOT provided a foundation for this study:

Equity in transportation seeks fairness in mobility and accessibility to meet the needs of all community members. A central goal of transportation is to facilitate social and economic opportunities by providing equitable levels of access to affordable and reliable transportation options based on the needs of the populations being served, particularly populations that are traditionally underserved. 4

With this Transportation Equity and Access study, TxDOT seeks to collectively consider the principles of EJ, Title VI of the Civil Rights Act and other nondiscrimination laws, with the acknowledgement that the communities discussed here will have many diverse needs including and beyond transportation considerations in order to thrive in their communities.

In addition to the ongoing public engagement efforts currently underway, this Transportation Equity and Access study is part of an effort to address and improve the equitable provision of transportation and mobility services in the Community Study Area. TxDOT received several comments concerning equity and health issues during scoping meetings, the public meeting in August 2021, and several CapEx VOICE meetings. In response to this and recent federal directives such as the Justice40 Initiative and EO 13985,5 these additional studies were conducted to more fully understand and quantify the bicycle and pedestrian travel patterns to and from neighborhoods of equity concern throughout the study area. While many government entities are actively working towards a shared understanding of equity and recommended actions, there has been no project-level guidance available for state DOTs at the time of this DEIS. Because many aspects of equity and expanding access fall

4 https://www.planning.dot.gov/planning/topic_transportationequity.aspx
5 https://www.federalregister.gov/d/2021-01753
outside of the purview of the Texas state highway system and its funding constraints, this is a preliminary effort that TxDOT intends to share with key partners, CapMetro and the Austin Transportation Department. Partnering with these agencies with authority over transit and local roadway infrastructure, respectively, is key to the “whole-of-government” approach to furthering equity goals in the transportation system.

A few questions that guided the development of this analysis were:

1. Whether both the current conditions and the proposed design alternatives of I-35 function as a barrier for bicycle and pedestrian activity, and if so, how and where?
2. Would the proposed improvements in the immediate project area benefit or burden disadvantaged communities? If so, how and where are specific disadvantaged communities of concern located?
3. Can TxDOT’s efforts to respond to public comments by updating designs to improve connectivity across and along I-35 for non-drivers be informed by this analysis?

3.6.12.1.1 Community Study Area and Demographics Overview

The initial geographic boundaries were based on the CIA study area established in Section 3.6.2.1 and coupled with supplemental socioeconomic data of specific NPAs. This expansive study area was developed to include the eastern crescent, where considerable demographic shifts have taken place and where involuntary displacement from gentrification pressures have been most intense in recent years. This situation along with Austin’s declining affordability in general have been priority concerns for Austin City Council and staff. Section 3.1 of the DEIS discusses these issues in more detail.

The study area intersects a total of 30 NPAs, which are entities adopted to create a framework for the community to express their values, as well as prioritize and address issues of concern for their community. (Note that Figure 3.6-8 includes a 31st neighborhood, Hyde Park, which is not included in this supplemental analysis). The neighborhoods within the study area vary based on demographics, social history, community facilities, affordable housing, and travel patterns.

U.S. Census data were used to identify potential focus areas based on specific socioeconomic metrics. To analyze the demographics of neighborhoods within the study area, demographic data was gathered at the census block group level and aggregated according to the neighborhoods in which those block groups were located. GIS analysis was used to select census block groups if their geographic centerpoint fell within a particular NPA. The race/ethnicity and percent minority (EJ) data was collected at the block level due to the availability of 2020 census data. Because the other demographic indicators are not currently available from the 2020 census, 2015-2019 ACS 5-year estimates were used at the block group level.

3.6.12.1.2 Data Findings Summary

Data obtained from the USCB helped determine that the most populous neighborhoods in the study area are the Franklin Park, Montopolis, and Windsor Park neighborhoods, although this does not signify that they are necessarily the most densely populated. The predominantly minority neighborhoods in the study area are located east of I-35 with the highest percentages of minority residents in the Franklin Park, Montopolis, and Coronado
Hills neighborhoods. The MLK-183, Montopolis, and Rosewood neighborhoods contain the lowest MHIs of the neighborhoods in the study area, (not including the UT neighborhood, which indicates lower incomes due to high student populations). The neighborhoods with the highest proportion of children (under 18 years old) in the study area are the McKinney, Montopolis, and Rosewood neighborhoods, while the highest proportion of older residents (65 years old and over) in the study area are in the East Cesar Chavez, Johnston Terrace, and Govalle neighborhoods. Outside of UT, the neighborhoods in the study area with the highest proportion of renters are in the Pleasant Valley, Riverside, and St. Edwards neighborhoods. The neighborhoods with the highest proportion of residents with a disability are in the Coronado Hills, MLK-183, and Pecan Springs-Springdale neighborhoods. The Rosewood, East Cesar Chavez, and Coronado Hills neighborhoods contain the highest proportion of zero car households in the study area outside of the UT.

In general, the neighborhoods adjacent to the northern, eastern, and southern edge of the study area contain higher proportions of socioeconomic characteristics that help identify vulnerable or otherwise disadvantaged populations than neighborhoods to the west and in the central portion of the study area. Across multiple measures, Rosewood, Coronado Hills, and Montopolis contain high concentrations of populations demonstrating these socioeconomic characteristics. However, none of these three neighborhoods are adjacent to I-35.

Of the neighborhoods adjacent to I-35, Franklin Park and St. John have the highest percentage of minorities; St. John and St. Edwards have the highest percentage of renters; Riverside and St. John have the lowest MHIs; East Cesar Chavez and St. Edwards have the highest percentages of zero-car households; Parker Lane and East Cesar Chavez have the highest percentages of adults with disabilities; East Cesar Chavez and East Congress have the highest percentage of seniors; and Franklin Park and McKinney have the highest percentage of children.

For additional details of socioeconomic parameters considered, see the complete Transportation Equity and Access Focus Area Identification Memo in Appendix K.

The following paragraphs provide a brief discussion of the data, as well as a chart for the relative percentages of each parameter by neighborhood, and GIS graphics. Summarized below are the data for minority, low-income, zero car households, and the composite graphic which considers these parameters in addition to data for disabled adults, homeowners versus renter, minors, and seniors. Additional data, charts, graphics, and tables are included in Appendix K.
3.6.12.1.3 Minority Demographics

2020 Census block level data was utilized to determine the percentage of each neighborhood’s population that self-identifies as belonging to a minority group. The bar chart below is ordered north-to-south with the northernmost neighborhood on the left and the southernmost neighborhood on the right. This chart shows that minority concentrations are somewhat higher in neighborhoods in the northern and southern sections of the community study area. While dense concentrations of minority populations are found in eastern neighborhoods such as Montopolis and Pecan Springs-Springdale, the neighborhoods adjacent to I-35 with particularly high concentrations of minority populations are Franklin Park in the southern end of the study area and St. John and Coronado Hills in the northern portion of the study area. See Figure 3.6-19.

![Minority Percentage by Neighborhood](image)

**Figure 3.6-19. Minority Percentage by Neighborhood**

Source: USCB, 2020 Decennial Census, Table P9.

GIS maps are included at the block level as well as the block group level (for use in the composite graphic to be discussed later in this study). See Figures 3.6-20 and 3.6-21 below.
Figure 3.6-20. Minority Population by Block
Figure 3.6-21. Minority Population by Block Group
3.6.12.1.4 Income Characteristics

The ACS gathers data on MHI. As with all ACS tables, the smallest geography available is the Census Block Group. Some participants of the ACS withhold their income information. When an insufficient number of participants within a block group provide their income, the ACS will report the MHI of that area as a null value. This is the case for the Coronado Hills NPA. UT did have a sufficient number of respondents, but it remains an outlier most likely because the UT area is predominantly populated by students with a lower percentage of income-earning residents. Rosewood has a particularly low MHI relative to adjacent neighborhoods of Chestnut and to some degree, Central East Austin. Another area of concern is the group of neighborhoods along East Riverside Drive and east of I-35 (Riverside, Pleasant Valley, and Montopolis). These neighborhoods have below average MHIs. Other than UT, none of the neighborhoods within the study area has a median income below the current (2022) HHS poverty guideline for a family of four ($27,750). However, there are individual block groups in Pleasant Valley, St. Edwards, Windsor Park, Montopolis, Parker Lane, and Riverside that have MHIs below the HHS threshold. See Figure 3.6-22 and Figure 3.6-23 below.

![Median Household Income By Neighborhood](image-url)

**Figure 3.6-22. Median Household Income by Neighborhood**

Figure 3.6-23. Median Household Income by Block Group
3.6.12.1.5 Zero-Car Households

The ACS gathers data on the number of vehicles kept at home for use by members of a household. Access to vehicles reflects the relative need for transportation alternatives in a given block group. If a person does not have access to a personal vehicle, they will need to walk, bicycle, scooter, rideshare, or take transit to access nearby destinations. UT is an outlier again because students are less likely to need a car and because parking passes at the university are both limited and expensive. Rosewood and East Cesar Chavez are the two other neighborhoods with relatively high percentages of zero-car households. See Figure 3.6-24 and Figure 3.6-25 below.

Figure 3.6-24. Percent Zero Car by Neighborhood

Source: USCB, 2015-2019 ACS. Table B25044.
Figure 3.6-25. Percent Zero-Car Households by Block Group
3.6.12.1.6 Composite Data Graphic

The following GIS graphic depicts key demographic characteristics superimposed upon each other. While the various data parameters cannot be mathematically combined in any way, this visualization helps reveal areas with high concentrations of a number of parameters that highlight areas with a need for additional focus from an equity-in-transportation perspective (more vulnerable transportation modes, disadvantaged communities, etc.). Neighborhoods that stand out in this visualization include western Windsor Park, Coronado Hills, Rosewood, the southern portion of East Cesar Chavez, a central portion of Parker Lane, and the eastern portion of Franklin Park. This preliminary Focus Area was used to inform subsequent tasks that contributed to the selection of the equity focus area, referred to as Priority NPAs as discussed later in this analysis. See Figure 3.6-26 below.
Figure 3.6-26. Composite Demographic Map
3.6.12.2 Active Transportation

Considerable planning and engineering efforts have gone into the development of the current proposed build alternatives, and many of these efforts preceding the Capital Express process have prioritized vehicular movements on the mainlanes and frontage roads. Specific bicycle, pedestrian, and transit considerations were included in both the project’s purpose and need, and as criteria used to evaluate the current alternatives, in order to consider all transportation modes available within the context of an interstate corridor. The Transportation Equity and Access studies focus on non-automobile modes and movements in order to provide the type of quantitative research that has historically been reserved for vehicular travel.

Active transportation trips are often supplemented with micromobility trips. Micromobility incorporates electric bicycles and scooters that are available for rent and are not required to be returned to a central location. Since COA began collecting data on micromobility use in 2019, over 10 million trips have been recorded, at an average of approximately 9,000 trips per day. These trips are usually less than ten minutes long and between a half-mile and a mile in distance (Ride Report, 2022).

An active transportation and transit profile of the 30 NPAs within the study area was developed. The existing sidewalks and bicycle lanes are discussed at the neighborhood level, along with transit routes and stops. Attention is also given to the connectivity between neighborhoods. These existing conditions are displayed in figures found in the Active Transportation Memo in Appendix K. Other figures display active transportation improvements that are proposed by the Austin Strategic Mobility Plan to be constructed in 2022. These current and future projects are discussed in the detailed neighborhood profiles in order to anticipate how the existing conditions could change. See Appendix K, Active Transportation Memo.

A key component of the memo on active transportation was establishing the EPA National Walkability Index for each neighborhood. The quantitative analysis used to establish the EPA National Walkability Index for each neighborhood and a summary of the findings are described in Figure 3.6-27 and Figure 3.5-1. This walkability analysis discussion was also folded into Section 3.5 of the community impacts analysis section of this document. Based on the findings, a subset of neighborhoods were carried into a more detailed analysis utilizing the StreetLight modeling program. See Section 3.6.12.4.

3.6.12.2.1 Active Transportation Findings

Various general patterns can be seen in the figures below. Generally, walkability decreases the further one is from downtown Austin. Neighborhoods and block groups closer to I-35 have better walkability scores than block groups closer to US-183. This is a reflection only of the factors that contribute to the EPA National Walkability Index. Areas close to I-35 have more transit stops than those on the eastern crescent. It is important to note that the EPA National Walkability Index does not measure safety or pedestrian infrastructure such as sidewalks and crosswalks. The maps of existing infrastructure cover some of the EPA National Walkability Index’s data gaps. An area like Upper Boggy Creek with a high EPA National Walkability Index score actually has large areas with hardly any sidewalks. Conversely, Franklin Park has mediocre Walkability Index scores, but actually has sidewalks on both sides of every residential street. Some neighborhoods show strong pedestrian accessibility in both maps. These include Mueller (formerly the Robert Mueller Municipal Airport/RMMA neighborhood),
Downtown, Holly, Central East Austin, and Chestnut. Likewise, some neighborhoods reveal a lack of infrastructure in both maps, including Coronado Hills, University Hills, Pecan Springs-Springdale, MLK, Pleasant Valley, and East Congress.

Although this analysis does not delve into the subject, it is possible that some of the areas with high EPA National Walkability Index scores are unpleasant places to walk. It is also possible that some of the neighborhoods with many bicycle lanes are uncomfortable places to bicycle.

Qualitative information on whether pedestrians and cyclists feel safe or comfortable along a stretch of road are not included. However, several neighborhoods that were considered to have low walkability were carried forward into the screening for consideration in the StreetLight analysis (Section 3.6.6.4). Assessing origin and destination information for certain NPAs provided additional understanding of where crossing locations were facilitating or potentially discouraging bicycle and pedestrian activity across I-35, due to design shortcomings or lack of accommodations.

Across all maps included in this analysis, certain neighborhoods consistently indicate poor walkability and poor bikeability. These include St. John, Coronado Hills, Pecan Springs-Springdale, MLK, MLK-183, Pleasant Valley, McKinney, and East Congress. Figure 3.6-27 and Figure 3.5-1 show the various walkability scores in the NPAs.

Figure 3.6-27. Average EPA National Walkability Index

3.6.12.3 Qualitative Health Conditions

The purpose of the Qualitative Assessment of Active Transportation and Public Health Memo (referred to as the Qualitative Health Memo; see Appendix K) was to discuss the benefits of transportation improvements related to public health as well as to provide health information available from EPA’s EJ Screening and Mapping Tool (EJScreen) (EPA, 2022d) for the study area. As discussed in more detail in the Qualitative Health Memo, physical activity has been scientifically proven to improve public health and improve general wellness. The built environment has a direct connection in facilitating physical activity. Although it is up to the individual to make
the decision to exercise or commute using non-automobile methods, improvements to the built environment can “set the stage” for a healthier community. The implementation of pedestrian and bicycle facilities that improve user safety, accessibility, support utilization of transit, and connectivity can encourage physical activity.

The Centers for Disease Control (CDC) stresses the importance of physical activity for adults and children as a key method in managing disease prevention and wellness. According to the Physical Activity Guidelines for Americans, “physical activity fosters normal growth and development and can make people feel better, function better, sleep better, and reduce the risk of a large number of chronic diseases” (CDC, 2018). In addition to physical ailments, mental health conditions have also been shown to be alleviated through exercise (American Psychological Association, 2020).

An active lifestyle depends on a safe environment where one can exercise without potential injury. The CDC highlights the need for physical separations between motor vehicles and individuals (i.e., sidewalks, pathways, protected bicycle lanes), neighborhoods that utilize traffic-calming measures (i.e., road diets, speed bumps/humps, crosswalks), and well-lit areas to reduce instances of crime and injury (i.e., streetlights, lamp posts) (CDC, 2022a). The combination of these environmental factors can determine one’s desire to exercise in addition to one’s safety. The aesthetic appearance may actively or passively inhibit physical activity (American Heart Association, 2022). An active barrier includes structural barriers like missing sidewalks or no presence of bicycle lanes. Passive barriers may include pedestrian unfriendly areas and areas without people present, causing concern for one’s safety. The limitations of infrastructure can affect how and when people exercise.

Transportation improvements, specifically pedestrian and bicycle facilities, have been shown to yield public health benefits to communities. These improvements typically include SUPs, sidewalk connections, bicycle lanes, and other infrastructure related to first and last mile connections to transit stops. It is important to note that physical activity does not have to be completed through purposeful exercise (Hexagon, 2015). Last mile connections (i.e., bicycle storage, bicycle lanes, sidewalks, paths) provide an essential link for commuters to transit stops from their homes. This form of active transportation not only reduces one’s carbon footprint, but also improves physical health and wellbeing without the added activity of purposeful exercise.

In Austin, health benefits from transportation infrastructure has already been investigated in the 2015 COA South Lamar Corridor Health Impact Assessment (HIA). Spanning from Lady Bird Lake to Ben White Boulevard (SH 71), the HIA focused on the South Lamar Boulevard corridor and adjacent neighborhoods. As a public transit and mixed-use corridor, South Lamar Boulevard needed last mile improvements in addition to general pedestrian and bicyclist infrastructure. These targeted improvements would improve access to transit as well as the various land uses, resulting in a walkable community. Coupled with essential improvements, the HIA recommended implementation of new greenspace areas to improve the aesthetic of South Lamar Boulevard. All in all, the HIA found that “built environment elements such as accessibility and street connectivity, greenery, street scale pedestrian design and mixed land use all had positive effects on physical health, including body mass index. These and other findings make it clear that the built environment is a key component to healthy community” (Hexagon, 2015).
The EJScreen tool was used to calculate and analyze the existing public health of the study area. Three datasets were used to measure health disparity based on percentage of the population: low life expectancy, heart disease, and asthma.

Within the interactive mapping tool, the health data was calculated based on census tracts as well as the total study area boundary. The Qualitative Health Memo included discussions on various health disparity categories along with an analysis of the geographic distribution of the data recorded in EJScreen. NPAs of concern were identified for asthma, heart disease, and low life expectancy. Those carried forward for further analysis are discussed in the following section.

3.6.12.4 StreetLight Data Analysis

Pedestrian counts and surveys are central components to understanding pedestrian infrastructure and how a given community interacts with the built environment. Given the size of the study area, it would not have been feasible to conduct counts at the number of I-35 crossings identified and within various bicycle and pedestrian routes utilized by the priority NPAs. Therefore, TxDOT used StreetLight, a location-based services (LBS) data vendor, to analyze this trip data for key locations. StreetLight offers information on multi-modal mobility patterns that includes origin-destination (O-D), traveler demographics and more. For this study, the focus is looking at average daily trips for the period of November 2020 to October 2021 as a representative snapshot of relatively current bicycle and pedestrian travel patterns. This analysis does not depend on the traveler demographic data available on the StreetLight platform. Rather, the previous studies found in Appendix K, including socioeconomic information, were used as a screening tool to prioritize NPAs within the overall study area and to understand how they are similar or different from each other. The process for prioritizing the NPAs is described further in the StreetLight Data Analysis and Findings Memo in Appendix K.

Separately, StreetLight data was used to analyze travel by bicycles and pedestrians across I-35 to better understand how intersections compare with each other in terms of recent crossing activity. This information can also shed light on where people are traveling in order to help direct resources to those users in the future, with some prioritization to meet equity goals.

3.6.12.4.1 Prioritization of Neighborhood Planning Areas for Equity Focus

As discussed in more detail in Appendix K, the studies helped identify priority NPAs for StreetLight analysis as discussed below.

Composite Socioeconomic Data Graphic

Inputs for composite demographic include median MHI, percent renters versus homeowners, percent seniors, percent children, percent disabled adults, zero car households, and minority populations. This data led to the prioritization of the following NPAs from an equity focus perspective:

- Windsor Park
- Coronado Hills
• Rosewood
• East Cesar Chavez
• Parker Lane
• Franklin Park

**Active Transportation and EPA National Walkability Index Score**

Poor walkability and poor bikeability across all mapped data were highest in the following NPAs:
• St. John
• Coronado Hills
• Pecan Springs-Springdale
• Martin Luther King (MLK)
• MLK-183
• Pleasant Valley
• McKinney
• East Congress

**EPA Health Conditions Screening**

The EPA EJScreen tool provided information on how NPAs compare to each other. This screening process highlighted several NPAs for various health indicators.

• Areas of concern for asthma:
  ◦ Pleasant Valley
  ◦ Central East Austin
  ◦ Rosewood
  ◦ University Hills
  ◦ Pecan Springs-Springdale
  ◦ Windsor Park
  ◦ Franklin Park
  ◦ McKinney

• Areas of concern for heart disease:
  ◦ Govalle
  ◦ MLK
Areas of concern for low life expectancy:

- Rosewood
- Chestnut
- MLK
- Govalle
- Johnson Terrace
- Parker Lane
- McKinney
- Franklin Park

To finalize the priority NPAs selected for more detailed StreetLight analysis from a transportation equity focus, the following table was developed. All NPAs with a score of at least two (meaning the NPA was a priority for at least two factors – composite socioeconomic data, lack of active transportation infrastructure, or health concerns) were carried forward for additional analysis with StreetLight data.

Table 3.6-10. Priority NPAs – Equity Focus Areas for StreetLight Analysis

<table>
<thead>
<tr>
<th>NPAs prioritized through at least one screening task</th>
<th>Task 4: Composite Socioeconomic</th>
<th>Task 5: Active Transportation</th>
<th>Task 6: At Least 1 Health Indicator</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central East Austin</td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Chestnut</td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Coronado Hills</td>
<td>1</td>
<td>1</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>East Cesar Chavez</td>
<td>1</td>
<td>1</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>East Congress</td>
<td></td>
<td>1</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Franklin Park</td>
<td>1</td>
<td>1</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Govalle</td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Johnson Terrace</td>
<td>1</td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>McKinney</td>
<td>1</td>
<td>1</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>MLK</td>
<td>1</td>
<td>1</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>MLK-183</td>
<td>1</td>
<td>1</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Parker Lane</td>
<td>1</td>
<td>1</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Pecan Springs-Springdale</td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>
Table 3.6-10. Priority NPAs – Equity Focus Areas for StreetLight Analysis

<table>
<thead>
<tr>
<th>NPAs prioritized through at least one screening task</th>
<th>Task 4: Composite Socioeconomic</th>
<th>Task 5: Active Transportation</th>
<th>Task 6: At Least 1 Health Indicator</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pleasant Valley</td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Rosewood</td>
<td>1</td>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>St. John</td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>University Hills</td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Windsor Park</td>
<td>1</td>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>TOTAL</td>
<td>6</td>
<td>8</td>
<td>16</td>
<td>30</td>
</tr>
</tbody>
</table>

1. Note that the same StreetLight analysis could be conducted for additional NPAs in the Community Study Area. The selection of certain NPAs does not mean the other NPAs are without socioeconomic, active transportation, or health concerns or opportunities.

2. Priority NPAs

As discussed above, the NPAs listed here are a subset of NPAs in the Community Study Area after various screening tools were applied. The neighborhoods included in the StreetLight analysis are as follows, listed generally from north to south:

- Coronado Hills
- Windsor Park
- MLK
- MLK-183
- Rosewood
- East Cesar Chavez
- Pleasant Valley
- Parker Lane
- East Congress
- McKinney
- Franklin Park

3.6.12.4.2 Identification of Key Crossings for Analysis

Analysts selected geographically representative I-35 crossing locations to run StreetLight queries for comparative O-D trip indices. Average trip length was also collected to compare how far to or from I-35 bicyclists and pedestrians were traveling during the data collection period.

Additional crossings were identified at US-290 North (East Koenig Lane), Hancock Drive, and US-290 South (East Ben White Boulevard/SH-71). It was subsequently determined that the StreetLight zone for US-290/SH-71 was inconclusive (labeled as such in the model, due to the multi-level complex structure of the intersection) and so it was dropped from this analysis. Again, the StreetLight analysis could be utilized to investigate any of these crossing locations; the team made selections given the practical constraints of completing this analysis and the
direction to identify areas for transportation equity focus. This analysis is not fully comprehensive or exhaustive but highlights considerations in the Community Study Area in alignment with the goals of the Justice40 Initiative to collect data and enhance understanding of the distribution of benefits and burdens for disadvantaged communities.

The crossings selected for the StreetLight analysis are a subset of all the crossings along the I-35 project corridor that represent various existing conditions. The crossings included in the StreetLight analysis are listed below generally from north to south:

- US-290/East Koenig Lane
- East 51st Street
- Airport Boulevard
- Hancock Drive
- East 38th ½ Street (also shown as East 38th Street)
- East Dean Keeton Street
- Manor Road
- East MLK Jr. Boulevard
- East 11th Street
- East 7th Street
- East 4th Street
- East Cesar Chavez Street
- East Riverside Drive
- Woodland Avenue
- East Oltorf Street
- Woodward Street

3.6.12.4.3 Streetlight: Origin-Destination Zone Data Approach and Analysis

The methodology developed for the purpose of this study was intended to help environmental planners better understand the study area from the neighborhood perspective, rather than to obtain specific granular detail about particular trips for neighborhood level infrastructure design. While the StreetLight data can be utilized for many different purposes, analysts decided to use it to prepare a snapshot of activity over one year within the Community Study Area. This analysis acknowledges platform bias. Specifically, LBS data will inherently not be reflective of all active transportation users. Utilitarian and recreational pedestrians and bicyclists alike may not bring cell phones with them (or may not own them). In particular, this study area contains populations of individuals experiencing homelessness who walk along and/or cross I-35. These individuals may not be included in the StreetLight numbers.
A more detailed discussion of the methodology for understanding StreetLight O-D analysis data outputs is included in the StreetLight Data Analysis and Findings Memo in Appendix K. The tables and charts below show the output data from StreetLight. The columns with arrows above are the ones shown in the charts. The color coding in the table shows the longest weighted average trip in green and the shortest weighted average trip length in red.

The tables and charts below show the output data from StreetLight. The columns with arrows above are the ones shown in the charts. The color coding in the table shows the longest weighted average trip in green and the shortest weighted average trip length in red.

- **Table 3.6-11** shows bicycle O-D in priority NPAs. **Figure 3.6-28** shows the percent share of bicycle O-D, so the NPA with the highest percent share of trips contrasts the priority NPA with the lowest percentage of trips. The bicycle trip length comparison in **Figure 3.6-29** shows the farthest trips from the priority NPA compared to other priority NPAs.

- **Table 3.6-12** shows pedestrian O-D in priority NPAs. **Figure 3.6-30** shows the percent share of pedestrian O-D, so the NPA with the highest percent share of trips contrasts the priority NPA with the lowest percentage of trips. The pedestrian trip length comparison in **Figure 3.6-31** shows the farthest trips from the priority NPA compared to other priority NPAs.

- **Table 3.6-13** shows bicycle O-D representative crossings. **Figure 3.6-32** shows the percent share of bicycle O-D, so the crossing with the highest percent share of trips contrasts the priority NPA with the lowest percentage of trips. The bicycle trip length comparison in **Figure 3.6-33** shows the farthest trips from the crossings compared to other crossings.

- **Table 3.6-14** shows pedestrian O-D representative crossings. **Figure 3.6-34** shows the percent share of pedestrian O-D, so the crossing with the highest percent share of trips contrasts the crossing with the lowest percentage of trips. The pedestrian trip length comparison in **Figure 3.6-35** shows the farthest trips from the crossings compared to other crossings.

**GIS Graphics for Representative Crossings**

In addition to the information above, GIS analysts have provided a graphic depiction of bicycle and pedestrian crossings of I-35. The share of trips are shown in comparison to each other. The heaviest line widths show higher shares of trips, while the narrow line widths show the lowest percentage share of trips for either bicycles or pedestrians. To some degree, these illustrations are logical such as where access is provided to the Butler Hike and Bike Trail (also locally known as the Lady Bird Lake Hike and Bike Trail) from East Riverside Drive. Other areas where the activity is very low may indicate a very bicycle or pedestrian unfriendly area, such as on Hancock Drive. These graphics both illustrate data from StreetLight and possible opportunities to provide improved bicycle and pedestrian accommodations, which is a central goal of the overall proposed project. See **Figure 3.6-36** and **Figure 3.6-37**.
Data Tables, Charts and Observations

Table 3.6-11. Priority Neighborhood Planning Areas – Bicycle Origin-Destination: Share of Trips and Weighted Average Trip Length

<table>
<thead>
<tr>
<th>Priority Neighborhood Planning Area</th>
<th>Daily Origins</th>
<th>Share of Trips</th>
<th>Origin Rank</th>
<th>Weighted Avg Trip Length (mi)</th>
<th>Daily Destination Trips</th>
<th>Share of Trips</th>
<th>Destination Rank</th>
<th>Weighted Avg Trip Length (mi)</th>
<th>Total O-D</th>
<th>Share of Trips</th>
<th>Total Rank</th>
<th>Weighted Avg Trip Length (mi)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coronado Hills</td>
<td>154</td>
<td>2%</td>
<td>11</td>
<td>2.37</td>
<td>148</td>
<td>2%</td>
<td>11</td>
<td>2.19</td>
<td>302</td>
<td>2%</td>
<td>11</td>
<td>2.28</td>
</tr>
<tr>
<td>Windsor Park</td>
<td>1,423</td>
<td>21%</td>
<td>1</td>
<td>2.71</td>
<td>1,362</td>
<td>21%</td>
<td>1</td>
<td>2.60</td>
<td>2,785</td>
<td>21%</td>
<td>1</td>
<td>2.65</td>
</tr>
<tr>
<td>MLK</td>
<td>717</td>
<td>11%</td>
<td>3</td>
<td>3.22</td>
<td>784</td>
<td>12%</td>
<td>3</td>
<td>3.27</td>
<td>1,501</td>
<td>11%</td>
<td>3</td>
<td>3.25</td>
</tr>
<tr>
<td>MLK-183</td>
<td>509</td>
<td>8%</td>
<td>6</td>
<td>3.76</td>
<td>453</td>
<td>7%</td>
<td>7</td>
<td>3.89</td>
<td>962</td>
<td>7%</td>
<td>6</td>
<td>3.82</td>
</tr>
<tr>
<td>Rosewood</td>
<td>444</td>
<td>7%</td>
<td>7</td>
<td>2.68</td>
<td>495</td>
<td>8%</td>
<td>6</td>
<td>2.83</td>
<td>939</td>
<td>7%</td>
<td>7</td>
<td>2.76</td>
</tr>
<tr>
<td>East Cesar Chavez</td>
<td>1,055</td>
<td>16%</td>
<td>2</td>
<td>2.27</td>
<td>987</td>
<td>15%</td>
<td>2</td>
<td>2.34</td>
<td>2,042</td>
<td>15%</td>
<td>2</td>
<td>2.36</td>
</tr>
<tr>
<td>Pleasant Valley</td>
<td>677</td>
<td>10%</td>
<td>5</td>
<td>2.89</td>
<td>680</td>
<td>10%</td>
<td>4</td>
<td>2.79</td>
<td>1,357</td>
<td>10%</td>
<td>5</td>
<td>2.84</td>
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<tr>
<td>Parker Lane</td>
<td>714</td>
<td>11%</td>
<td>4</td>
<td>2.91</td>
<td>670</td>
<td>10%</td>
<td>5</td>
<td>2.91</td>
<td>1,384</td>
<td>10%</td>
<td>4</td>
<td>2.91</td>
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<tr>
<td>East Congress</td>
<td>323</td>
<td>5%</td>
<td>10</td>
<td>2.60</td>
<td>325</td>
<td>5%</td>
<td>10</td>
<td>2.96</td>
<td>648</td>
<td>5%</td>
<td>10</td>
<td>2.78</td>
</tr>
<tr>
<td>McKinney</td>
<td>325</td>
<td>5%</td>
<td>9</td>
<td>3.29</td>
<td>340</td>
<td>5%</td>
<td>9</td>
<td>3.60</td>
<td>665</td>
<td>5%</td>
<td>9</td>
<td>3.46</td>
</tr>
<tr>
<td>Franklin Park</td>
<td>384</td>
<td>6%</td>
<td>8</td>
<td>3.29</td>
<td>350</td>
<td>5%</td>
<td>8</td>
<td>3.30</td>
<td>734</td>
<td>6%</td>
<td>8</td>
<td>3.29</td>
</tr>
</tbody>
</table>

Source for 3.6–11 to 3.6-14: StreetLight 2022; analysis by Stantec.

Note: Daily O-Ds are a StreetLight index and do NOT represent actual volumes.

Observations:
- Windsor Park NPA has the highest share of bicycle O-Ds (21%) - followed by East Cesar Chavez (15%) and MLK (11%)
- Coronado Hills has the lowest share of bicycle O-Ds (2%)
- Weighted average bicycle trip length for all NPAs is 2.9 miles
- MLK-183 NPA has the highest weighted average trip lengths (3.8 miles)
- Coronado Hills NPA has the lowest weighted average trip lengths (2.3 miles)
### Table 3.6-12. Priority Neighborhood Planning Areas – Pedestrian Origin-Destination: Share of Trips and Weighted Average Trip Length

<table>
<thead>
<tr>
<th>Priority Neighborhood Planning Area</th>
<th>Daily Origins</th>
<th>Share of Trips</th>
<th>Origin Rank</th>
<th>Weighted Avg Trip Length (mi)</th>
<th>Daily Destinations</th>
<th>Share of Trips</th>
<th>Destination Rank</th>
<th>Weighted Avg Trip Length (mi)</th>
<th>Total O-D Share of Trips</th>
<th>Total Rank</th>
<th>Weighted Avg Trip Length (mi)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coronado Hills</td>
<td>8,235</td>
<td>4%</td>
<td>11</td>
<td>0.46</td>
<td>8,116</td>
<td>4%</td>
<td>11</td>
<td>0.46</td>
<td>16,351</td>
<td>4%</td>
<td>11</td>
</tr>
<tr>
<td>Windsor Park</td>
<td>34,621</td>
<td>15%</td>
<td>1</td>
<td>0.51</td>
<td>34,790</td>
<td>15%</td>
<td>1</td>
<td>0.51</td>
<td>69,411</td>
<td>15%</td>
<td>1</td>
</tr>
<tr>
<td>MLK</td>
<td>12,255</td>
<td>5%</td>
<td>9</td>
<td>0.67</td>
<td>12,591</td>
<td>6%</td>
<td>9</td>
<td>0.67</td>
<td>24,846</td>
<td>6%</td>
<td>9</td>
</tr>
<tr>
<td>MLK-183</td>
<td>15,370</td>
<td>7%</td>
<td>8</td>
<td>0.54</td>
<td>15,426</td>
<td>7%</td>
<td>7</td>
<td>0.54</td>
<td>30,796</td>
<td>7%</td>
<td>7</td>
</tr>
<tr>
<td>Rosewood</td>
<td>11,853</td>
<td>5%</td>
<td>10</td>
<td>0.55</td>
<td>11,919</td>
<td>5%</td>
<td>10</td>
<td>0.55</td>
<td>23,772</td>
<td>5%</td>
<td>10</td>
</tr>
<tr>
<td>East Cesar Chavez</td>
<td>24,581</td>
<td>11%</td>
<td>4</td>
<td>0.53</td>
<td>24,340</td>
<td>11%</td>
<td>4</td>
<td>0.53</td>
<td>48,921</td>
<td>11%</td>
<td>4</td>
</tr>
<tr>
<td>Pleasant Valley</td>
<td>28,582</td>
<td>13%</td>
<td>2</td>
<td>0.56</td>
<td>28,928</td>
<td>13%</td>
<td>2</td>
<td>0.56</td>
<td>57,510</td>
<td>13%</td>
<td>2</td>
</tr>
<tr>
<td>Parker Lane</td>
<td>24,572</td>
<td>11%</td>
<td>5</td>
<td>0.49</td>
<td>24,337</td>
<td>11%</td>
<td>5</td>
<td>0.50</td>
<td>48,909</td>
<td>11%</td>
<td>5</td>
</tr>
<tr>
<td>East Congress</td>
<td>15,396</td>
<td>7%</td>
<td>7</td>
<td>0.47</td>
<td>14,943</td>
<td>7%</td>
<td>8</td>
<td>0.46</td>
<td>30,339</td>
<td>7%</td>
<td>8</td>
</tr>
<tr>
<td>McKinney</td>
<td>27,312</td>
<td>12%</td>
<td>3</td>
<td>0.40</td>
<td>27,174</td>
<td>12%</td>
<td>3</td>
<td>0.40</td>
<td>54,486</td>
<td>12%</td>
<td>3</td>
</tr>
<tr>
<td>Franklin Park</td>
<td>22,130</td>
<td>10%</td>
<td>6</td>
<td>0.52</td>
<td>22,128</td>
<td>10%</td>
<td>6</td>
<td>0.51</td>
<td>44,258</td>
<td>10%</td>
<td>6</td>
</tr>
</tbody>
</table>

**Observations:**

- Windsor Park NPA has the highest share of pedestrian O-Ds (15% - may be related to large geography and population) - followed by Pleasant Valley (13%) and McKinney (12%);
- Coronado Hills has the lowest share of pedestrian O-Ds (4%); also highest disabled population, highest seniors
- Average pedestrian trip length for all NPAs is 0.5-mile
- MLK NPA has the highest average trip lengths (0.7-mile)
- McKinney NPA has the lowest average trip lengths (0.4-mile); much of the neighborhood is industrial; relatively small portion of residential near McKinney Falls State Park; closest crossing is US-290; highest percentage of minorities (out of small number)
- Pleasant Valley –UT, Roy G. Guerrero Colorado River Metro Park, Morris Williams Golf Course, Austin Community College

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![Share of Pedestrian Origin-Destination by NPA - North to South](image1)

![Weighted Avg Pedestrian Trip Length (mi) by NPA - North to South](image2)
### Table 3.6-13. Representative Crossings – Bicycle Origin-Destination: Share of Trips and Weighted Average Trip Length

<table>
<thead>
<tr>
<th>Representative Crossing Name</th>
<th>Daily Origins</th>
<th>Share of Trips</th>
<th>Share of Destinations</th>
<th>Weighted Avg Trip Length (mi)</th>
<th>Weighted Avg Trip Length (mi)</th>
<th>Total O-D</th>
<th>Share of Trips</th>
<th>Total Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>US-290/East Koenig Lane</td>
<td>85</td>
<td>3%</td>
<td>14</td>
<td>2.4</td>
<td>2.4</td>
<td>14</td>
<td>2%</td>
<td>14</td>
</tr>
<tr>
<td>East 51st Street/Cameron Road</td>
<td>334</td>
<td>10%</td>
<td>5</td>
<td>2.4</td>
<td>332</td>
<td>5</td>
<td>10%</td>
<td>5</td>
</tr>
<tr>
<td>Airport Boulevard</td>
<td>141</td>
<td>4%</td>
<td>11</td>
<td>3.0</td>
<td>137</td>
<td>11</td>
<td>4%</td>
<td>11</td>
</tr>
<tr>
<td>Hancock Drive</td>
<td>15</td>
<td>0%</td>
<td>18</td>
<td>1.5</td>
<td>18</td>
<td>18</td>
<td>0%</td>
<td>18</td>
</tr>
<tr>
<td>East 38th Street</td>
<td>147</td>
<td>4%</td>
<td>10</td>
<td>2.5</td>
<td>157</td>
<td>10</td>
<td>5%</td>
<td>10</td>
</tr>
<tr>
<td>East Dean Keeton Street</td>
<td>167</td>
<td>5%</td>
<td>9</td>
<td>2.6</td>
<td>152</td>
<td>9</td>
<td>5%</td>
<td>9</td>
</tr>
<tr>
<td>Manor Road</td>
<td>173</td>
<td>5%</td>
<td>8</td>
<td>2.6</td>
<td>152</td>
<td>8</td>
<td>5%</td>
<td>8</td>
</tr>
<tr>
<td>East MLK Jr. Boulevard</td>
<td>119</td>
<td>4%</td>
<td>12</td>
<td>2.3</td>
<td>120</td>
<td>12</td>
<td>4%</td>
<td>12</td>
</tr>
<tr>
<td>East 11th Street</td>
<td>357</td>
<td>11%</td>
<td>3</td>
<td>2.0</td>
<td>350</td>
<td>3</td>
<td>10%</td>
<td>3</td>
</tr>
<tr>
<td>East 7th Street</td>
<td>195</td>
<td>6%</td>
<td>7</td>
<td>1.5</td>
<td>192</td>
<td>7</td>
<td>6%</td>
<td>7</td>
</tr>
<tr>
<td>East 4th Street</td>
<td>342</td>
<td>10%</td>
<td>4</td>
<td>2.6</td>
<td>347</td>
<td>4</td>
<td>10%</td>
<td>4</td>
</tr>
<tr>
<td>East Cesar Chavez Street</td>
<td>411</td>
<td>12%</td>
<td>2</td>
<td>1.8</td>
<td>408</td>
<td>2</td>
<td>12%</td>
<td>2</td>
</tr>
<tr>
<td>East Riverside Drive</td>
<td>423</td>
<td>13%</td>
<td>1</td>
<td>3.4</td>
<td>423</td>
<td>1</td>
<td>13%</td>
<td>1</td>
</tr>
<tr>
<td>Woodland Avenue</td>
<td>96</td>
<td>3%</td>
<td>13</td>
<td>2.2</td>
<td>99</td>
<td>13</td>
<td>3%</td>
<td>13</td>
</tr>
<tr>
<td>East Oltorf Street</td>
<td>263</td>
<td>0%</td>
<td>6</td>
<td>2.7</td>
<td>282</td>
<td>6</td>
<td>8%</td>
<td>6</td>
</tr>
<tr>
<td>Woodward Street</td>
<td>66</td>
<td>2%</td>
<td>15</td>
<td>2.1</td>
<td>71</td>
<td>15</td>
<td>2%</td>
<td>15</td>
</tr>
</tbody>
</table>

**Observations:**
- East Riverside Drive has the highest share of bicycle crossings (13%) - Lady Bird Lake and boardwalk
- Riverside is followed by Cesar Chavez (12%) – north side of Ladybird Lake
- East 11th Street is third (11%) – location of Texas State Capitol
- Hancock Drive has the lowest share of bicycle crossings (<1%) – unsafe existing conditions under elevated structure adjacent to railroad
- Average bicycle trip length for all crossings is 2.4 miles
- East Riverside Drive crossing has the highest average trip lengths (3.5 miles) – Lady Bird Lake and access to trails
- Hancock Drive and East 7th Street have the lowest average trip lengths (1.5 miles)
### Table 3.6-14. Representative Crossings – Pedestrian Origin-Destination: Share of Trips and Weighted Average Trip Length

<table>
<thead>
<tr>
<th>Representative Crossing Name</th>
<th>Daily Origins</th>
<th>Share of Trips</th>
<th>Origin Rank</th>
<th>Weighted Avg Trip Length (mi)</th>
<th>Daily Destinations</th>
<th>Share of Trips</th>
<th>Destination Rank</th>
<th>Weighted Avg Trip Length (mi)</th>
<th>Total O-D</th>
<th>Share of Trips</th>
<th>Total Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>US-290/East Koenig Lane</td>
<td>85</td>
<td>3%</td>
<td>14</td>
<td>2.4</td>
<td>79</td>
<td>2%</td>
<td>14</td>
<td>2.3</td>
<td>164</td>
<td>2%</td>
<td>14</td>
</tr>
<tr>
<td>East 51st Street/Cameron Road</td>
<td>334</td>
<td>10%</td>
<td>5</td>
<td>2.4</td>
<td>332</td>
<td>10%</td>
<td>5</td>
<td>2.5</td>
<td>666</td>
<td>10%</td>
<td>5</td>
</tr>
<tr>
<td>Airport Boulevard</td>
<td>141</td>
<td>4%</td>
<td>11</td>
<td>3.0</td>
<td>137</td>
<td>4%</td>
<td>11</td>
<td>3.0</td>
<td>278</td>
<td>4%</td>
<td>11</td>
</tr>
<tr>
<td>Hancock Drive</td>
<td>15</td>
<td>0%</td>
<td>16</td>
<td>1.5</td>
<td>18</td>
<td>1%</td>
<td>16</td>
<td>1.5</td>
<td>33</td>
<td>0%</td>
<td>16</td>
</tr>
<tr>
<td>East 38th Street</td>
<td>147</td>
<td>4%</td>
<td>10</td>
<td>2.6</td>
<td>157</td>
<td>5%</td>
<td>10</td>
<td>2.5</td>
<td>304</td>
<td>5%</td>
<td>10</td>
</tr>
<tr>
<td>East Dean Keeton Street</td>
<td>167</td>
<td>5%</td>
<td>9</td>
<td>2.6</td>
<td>161</td>
<td>5%</td>
<td>9</td>
<td>2.5</td>
<td>328</td>
<td>5%</td>
<td>9</td>
</tr>
<tr>
<td>Manor Road</td>
<td>173</td>
<td>5%</td>
<td>8</td>
<td>2.6</td>
<td>182</td>
<td>5%</td>
<td>8</td>
<td>2.0</td>
<td>355</td>
<td>5%</td>
<td>8</td>
</tr>
<tr>
<td>East MLK Jr Boulevard</td>
<td>119</td>
<td>4%</td>
<td>12</td>
<td>2.3</td>
<td>120</td>
<td>4%</td>
<td>12</td>
<td>1.8</td>
<td>239</td>
<td>4%</td>
<td>12</td>
</tr>
<tr>
<td>East 11st Street</td>
<td>357</td>
<td>11%</td>
<td>3</td>
<td>2.0</td>
<td>350</td>
<td>10%</td>
<td>3</td>
<td>1.9</td>
<td>767</td>
<td>11%</td>
<td>3</td>
</tr>
<tr>
<td>East 7th Street</td>
<td>195</td>
<td>6%</td>
<td>7</td>
<td>1.5</td>
<td>192</td>
<td>6%</td>
<td>7</td>
<td>1.6</td>
<td>387</td>
<td>6%</td>
<td>7</td>
</tr>
<tr>
<td>East 4th Street</td>
<td>342</td>
<td>10%</td>
<td>4</td>
<td>2.6</td>
<td>347</td>
<td>10%</td>
<td>4</td>
<td>2.9</td>
<td>689</td>
<td>10%</td>
<td>4</td>
</tr>
<tr>
<td>East Cesar Chavez Street</td>
<td>411</td>
<td>12%</td>
<td>2</td>
<td>1.8</td>
<td>408</td>
<td>12%</td>
<td>2</td>
<td>1.9</td>
<td>819</td>
<td>12%</td>
<td>2</td>
</tr>
<tr>
<td>East Riverside Drive</td>
<td>423</td>
<td>13%</td>
<td>1</td>
<td>3.4</td>
<td>423</td>
<td>13%</td>
<td>1</td>
<td>3.5</td>
<td>846</td>
<td>13%</td>
<td>1</td>
</tr>
<tr>
<td>Woodland Avenue</td>
<td>96</td>
<td>3%</td>
<td>13</td>
<td>2.2</td>
<td>99</td>
<td>3%</td>
<td>13</td>
<td>2.4</td>
<td>195</td>
<td>3%</td>
<td>13</td>
</tr>
<tr>
<td>East Oltorf Street</td>
<td>263</td>
<td>9%</td>
<td>6</td>
<td>2.7</td>
<td>262</td>
<td>8%</td>
<td>6</td>
<td>2.4</td>
<td>575</td>
<td>9%</td>
<td>6</td>
</tr>
<tr>
<td>Woodward Street</td>
<td>66</td>
<td>2%</td>
<td>15</td>
<td>2.1</td>
<td>71</td>
<td>2%</td>
<td>15</td>
<td>2.1</td>
<td>137</td>
<td>2%</td>
<td>15</td>
</tr>
</tbody>
</table>

**Observations:**

- Manor Road has the highest share of pedestrian crossings (15%) – UT has major sports facilities on both sides of I-35
- Second is East Oltorf Street (13%) - Newly improved pedestrian accommodations; Travis High School in the southwest quadrant of East Oltorf Street and I-35
- Third is East 11th Street (11%) – Texas State Capitol Street
- Hancock Drive has the lowest share of pedestrian crossings (<1%) – note short street under elevated section of highway near Hancock Center
- Average pedestrian trip length for all crossings is 0.6-mile
- East Riverside Drive crossing has the highest average trip lengths (1 mile) – may be attributable to Lady Bird Lake, Ann and Roy Butler Hike and Bike trail (“Town Lake trail”), and Boardwalk
- East 7th Street has the lowest average trip lengths (0.4-mile) – closest to 6th Street entertainment district; COA police office

**Figure 3.6-34. Share of Pedestrian Origin-Destination by Crossing – North to South**

**Figure 3.6-35. Weighted Average Pedestrian Trip Length (mi) by Crossing – North to South**
Figure 3.6-36. Representative Crossings Bicycle Origins and Destinations: Share of Trips and Weighted Average Trip Length
Figure 3.6-37. Representative Crossings Bicycle Origins and Destinations: Share of Trips and Weighted Average Trip Length
An additional GIS graphic has been created depicting average trip length by bicycles and pedestrians at each crossing. Note that these distances are “as the crow flies” and do not represent actual routes. However, they do show the approximate distance with respect to geography and the location of the NPAs. They can help analysts see if bicycle and pedestrian improvements are particular locations could potentially benefit NPAs that are not located adjacent to I-35. See Appendix K, StreetLight Data Analysis and Findings Memo for further details.

3.6.12.4.4 StreetLight: Bicycle and Pedestrian Heat Map Data

Bicycle and Pedestrian Heat Map Data and COA Infrastructure – by Priority NPA

Whereas the O-D analysis focused on select NPAs and the index of trips occurring through those NPAs relative to each other, the heat map prepared by StreetLight gathered all bicycle and pedestrian O-D for the full Community Study Area. The StreetLight Data Analysis and Findings Memo includes a discussion of each NPA from the pedestrian and bicycle perspective, along with a specific GIS graphic for each NPA for both bicycle and pedestrian activity against the backdrop of COA infrastructure. These detailed maps along with the discussion that follows this section can assist planners in ensuring that priority NPAs are proactively included in public involvement activities, consistent with the goals that underpin the Justice40 initiative. An overview map for these graphics is shown in Figure 3.6-38 and Figure 3.6-39. See the StreetLight Data Analysis and Findings Memo in Appendix K, for a series of detailed maps by NPA.
Figure 3.6-38. Overview Average Daily Bicycle Traffic and Bicycle Facilities
Figure 3.6-39. Overview Average Daily Pedestrian Traffic and Sidewalk Facilities
3.6.12.5 Public Involvement, Design Responses, and Access Observations

This section briefly describes public involvement that highlighted opportunities for enhancing east-west crossings of I-35 during design. It connects the previously provided data about the priority NPAs and how that information can further inform design refinements with additional potential benefits. During extensive public involvement including Volunteer Opportunity In Community Engagement or “VOICE” meetings, the public expressed numerous desires for “cap and stitch” opportunities, enhanced cross street bridges, and improved facilities for bicycle and pedestrian accommodations. The January 2022 VOICE meeting presentation included the following summary slide:

The various design options were depicted as side view elevations in the slide below. Project designers have actively worked to enhance mobility options for non-drivers, including various accommodations and protections for pedestrians and bicyclists for both Build Alternative 2 and Modified Build Alternative 3.
The following slide lists the various key crossings of I-35 both north and south of Lady Bird Lake. Project analysts selected representative crossings (a subset of the crossings shown below) to analyze using StreetLight data. As previously discussed, each selected crossing was the subject of a query for both bicycle and pedestrian activity.

The slide below shows bicycle and pedestrian accommodations that have continued to be developed by designers to address public concerns about these accommodations. Both Build Alternative 2 and Modified Build Alternative 3 address bicycle and pedestrian accommodations. There are some key areas where Modified Build Alternative 3 addresses community needs more than Build Alternative 2, specifically because displacements are avoided (at Woodland Avenue).

However, this specific location is not a priority NPA but that crossing is discussed below.

The overall goal of Transportation Equity and Access analysis is to provide data about the larger study area to better equip TxDOT and stakeholders to address needs within the priority NPAs as project development continues, further explained in Section 3.6.12.6.
3.6.12.5.1 Bicycle And Pedestrian Considerations Where I-35 Central And I-35 South Connect

Additional discussion is warranted for proposed improvements at US-290/SH-71 and south along I-35, since the I-35 CapEx and the I-35 South projects meet at this juncture. Unfortunately, the StreetLight data for this intersection was labeled as inconclusive in the model outputs so data are not available for this intersection. Improvements to the US-290/SH-71 crossing that are proposed as part of the I-35 CapEx project include SUPs connections under direct connectors at US-290/SH-71.

Technically, the east-west and north-south SUPs would allow bicycle and pedestrian connections between priority NPAs of Parker Lane, East Congress, McKinney, and Franklin Park just south of East St. Elmo Road. However, the interchange is complex and despite some sidewalks and ramps, this area does not include bicycle or pedestrian amenities that make crossings through this interchange particularly attractive. This area is also a location COA is working to address challenges for the unhoused population. The next location south of US-290/SH-71 where crossings are possible for bicycles and pedestrians are at East Stassney Lane and East William Canon Drive.

The I-35 South project includes a less than 8-foot-wide SUP on the NB side of I-35, sections of 8-foot-wide SUPs, sections of 10 foot-12 foot-side SUPs, and some existing SUPs on both sides of I-35 continuing south to East William Canon Drive which forms the southern boundary of the Community Study Area for this analysis. Upon ultimate buildout of the CapEx South project, SUPs would be connected throughout the project limits, enabling north-south multimodal travel between US 290/Koenig Lane, through the terminus for the CapEx Central project at US 290/SH-71, continuing south to FM 1327/SH 45.

3.6.12.6 Storyboard of Key Analysis Findings

**Figure 3.6-40** through **Figure 3.6-43** shows priority NPAs and representative crossings together. The goal of this graphic “storyboard” is to demonstrate where the priority NPAs are located with respect to the representative crossings. Based on the prior discussions of how active the various crossings are, this storyboard shows that some crossings are active likely due to decent design and accommodations of bicycle and pedestrian activity, as well as proximity of activity centers or land uses that motivate O-D trips. Conversely, some crossings are not active likely due to limited or absent safety considerations, a lack of activity centers or attractive destinations for bicyclists and pedestrians, or NPAs that have low walkability scores or limited bicycle accommodations. The observations in this graphic show a range of existing conditions, needs, and opportunities that could potentially increase active transportation activities or at least improve connectivity to priority NPAs.

In these graphics, text labels are shown where a representative crossing is either in the top three or bottom three out of 16 crossings assessed for bicycle and/or pedestrian trip share per the StreetLight data results. Where renderings are available from the public involvement efforts, select renderings are shown in proximity to the representative crossings or the priority NPAs. There are numerous bicycle and pedestrian enhancements proposed for crossings along I-35 between East 8th Street and East 38th ½ Streets. This area includes UT, the Dell Medical Center, a developing entertainment district including Waterloo Greenway, and the Texas State Capitol west of I-35 on East 11th Street. There is ample public involvement for the “cap and “stitch” design ideas in these areas. Improvements that would benefit COA as a whole, including all NPAs in the Community Study Area, would also benefit the equity priority NPAs so long as connectivity to
these resources is considered from a higher vantage point, beyond just the NPAs that immediately border I-35. The discussion below draws attention to high activity crossings or low activity crossings.

### 3.6.12.7 Observations and Potential Benefits to Priority NPAs

**Table 3.6-14** describes the priority NPAs from north to south and includes observations, such as nearest crossing improvements. The table discusses potential benefits that could occur in the NPA by identifying representative community facilities and connecting the NPA with nearest crossings or other opportunities to improve the experience for bicyclists or pedestrians. This list is not comprehensive but identifies opportunities recognized as a result of this analysis.

**Table 3.6-14. Priority NPAs – Observations and Potential Benefits**

<table>
<thead>
<tr>
<th>Priority NPA (north to south)</th>
<th>Observations</th>
<th>Potential Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coronado Hills</td>
<td>Ranked 14th out of 16 representative crossings for both bicycle and pedestrian trip shares. Coronado Hills is not adjacent to I-35 and is surrounded by major transportation arterials.</td>
<td>NPA hosts Nelson Field - soccer, football, and marching band activities take place for area public schools. Improvements to US-290/East Koenig Lane could potentially benefit Coronado Hills if there are connections to I-35 for bicycles and pedestrians.</td>
</tr>
<tr>
<td>Windsor</td>
<td>Borders US-290/East Koenig Lane and I-35 NPA which has comparatively strong bicycle and pedestrian activity.</td>
<td>Bartholomew District Park and Blanton Elementary School are two of the community facilities in the NPA. Would directly benefit from bicycle and pedestrian accommodations at US-290/East Koenig Lane and East 51st Street.</td>
</tr>
<tr>
<td>MLK</td>
<td>Does not border I-35. The northern portion of the MLK NPA is closest to the East 51st Street crossing. The closest representative crossing is at East 38th ½ Street.</td>
<td>Morris Williams Golf Course is a large community facility in this NPA. Any improved connectivity between the MLK NPA, through the RMMA NPA with its excellent walkability, along Manor Road, and west toward I-35 could potentially improve active transportation in the MLK NPA.</td>
</tr>
<tr>
<td>MLK-183</td>
<td>The farthest priority NPA away from the representative crossings along I-35.</td>
<td>Any infrastructure improvements along East MLK Boulevard or along Springdale Road could potentially improve access from the MLK-183 NPA</td>
</tr>
</tbody>
</table>
**Table 3.6-14. Priority NPAs – Observations and Potential Benefits**

<table>
<thead>
<tr>
<th>Priority NPA (north to south)</th>
<th>Observations</th>
<th>Potential Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rosewood</strong></td>
<td>Moderately close to several of the proposed deck plazas and “cap and stitch” amenities under consideration along I-35. Rosewood NPA has borders along Manor Road, East MLK Boulevard, East 12th Street, Rosewood Street, Airport Boulevard, and Boggy Creek Drive.</td>
<td>The Rosewood NPA is home to large affordable housing developments and is located just east of Kealing Middle School. Eastside Early College High School is in the Rosewood NPA. Ensuring that the Boggy Creek Greenbelt Trail has strong connectivity for people living in Rosewood NPA could further improve active transportation in this priority NPA. Improvements to crossings at Manor Drive, East MLK Boulevard, and East 11th Street could potentially benefit residents of the Rosewood NPA, particularly if there is connectivity along these key roadways for bicycles and pedestrians.</td>
</tr>
<tr>
<td><strong>East Cesar Chavez</strong></td>
<td>Adjacent to I-35 and Lady Bird Lake. Dense neighborhood borders East 7th Street; is traversed by East 4th Street and the Lance Armstrong Bikeway (Crosstown Greenway). CapMetro Red Line originates on East 4th Street just west of I-35, crosses I-35 and East Cesar Chavez NPA. Represents established historical neighborhoods in east Austin.</td>
<td>Sanchez Elementary School, Martin Middle School, and nearby Edward Rendon Park and Holly Shores are community facilities in and abutting this NPA. Plaza Saltillo is a TOD that has been pursued for revitalization by CapMetro and developers for more than a decade. This TOD brings both economic development and gentrification pressures to East Cesar Chavez NPA. Any improvements to East 7th Street, East 4th Street, and East Cesar Chavez Street crossings could potentially improve active transportation for people living in the East Cesar Chavez NPA.</td>
</tr>
</tbody>
</table>
Table 3.6-14. Priority NPAs – Observations and Potential Benefits

<table>
<thead>
<tr>
<th>Priority NPA (north to south)</th>
<th>Observations</th>
<th>Potential Benefits</th>
</tr>
</thead>
</table>
| **Pleasant Valley**                      | Large NPA bordered by Pleasant Valley Drive to the west, US-183 to the east, and East Oltorf Street to the south.  
East Riverside Drive ranks 1st of 16 crossings for trip share for bicycles.  
Roy Guerrero Park is a large regional park that abuts Lady Bird Lake to the north forming the northern border of the NPA. | Austin Community College has a large campus within this NPA, and historically numerous students live in this neighborhood where UT has dedicated bus shuttle services.  
Any connectivity to the Butler Hike and Bike Trail and Boardwalk at Lady Bird Lake via South Lakeshore Drive and East Riverside Drive would contribute to active transportation options in this NPA.  
Crossings at Woodland Avenue and East Oltorf Drive could potentially benefit the NPA as long as sidewalk and bicycle routes continue into points in the Pleasant Valley NPA.  
East Riverside Drive traverses this NPA, and connectivity between I-35 and the CapMetro Blue Line could facilitate both bus and light rail transit access for Pleasant Valley NPA residents. |
| **Woodland Avenue Crossing [not an NPA; not adjacent to an NPA]** | Woodland Avenue ranked 15th out of 16 crossings in trip share for pedestrians.  
Between the two design alternatives for Woodland Avenue, the proposed Modified Build Alternative 3 that provides bicycle and pedestrian only accommodations over I-35 avoids displacements at Aria Grand Apartments, which provides much needed affordable housing in the area. | This crossing was designed specifically to avoid direct displacements. The bicycle and pedestrian only crossing would benefit communities west and east of I-35. Priority NPAs Pleasant Valley and Parker Lane representatives should be included in public involvement workshops related to detailed design and connectivity decisions for the Woodland Avenue and East Oltorf Street crossings when those events occur. |
| **Parker Lane**                          | Borders East Oltorf Street to the north, I-35 to the west, and US-290/SH-71 to the south.  
East Oltorf Street crossing ranked 2nd out of 16 for trip share for pedestrians. | CapMetro has a bus stop at Travis High School.  
Additional aesthetic and comfort improvements such as shade structures or benches would improve the experience for pedestrians crossing I-35 at this location. |
Table 3.6-14. Priority NPAs – Observations and Potential Benefits

<table>
<thead>
<tr>
<th>Priority NPA (north to south)</th>
<th>Observations</th>
<th>Potential Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The I-35 and East Oltorf Street crossing was improved between 2017 and 2020 and includes sidewalks. The Parker Lane NPA is east of I-35 and Travis High School is just west of I-35 and south of East Oltorf Street. Woodward Street ranked 15th out of 16 crossings in trip share for bicycles. The Woodward Street crossing connects Parker Lane NPA to areas west of I-35, including St. Edwards University on Woodward Street and Assumption Cemetery that borders I-35.</td>
<td>Linder Elementary School and Mabel Davis District Park are two community facilities in Parker Lane NPA that would benefit from connectivity within Parker Lane NPA and across I-35.</td>
</tr>
<tr>
<td>McKinney</td>
<td>Small border along I-35 between US-290/SH-71 and East St. Elmo Road. The portion of this NPA closest to the highways is predominantly industrial land uses. The residential portion of the McKinney NPA is bordered by Nuckols Crossing Road and Williamson Creek Drive to the east.</td>
<td>If pedestrian or bicycle connectivity could be improved in this area, the resources might serve a priority NPA; McKinney NPA is home to Widen Elementary School and Dove Springs District Park. It is adjacent to McKinney Falls State Park.</td>
</tr>
<tr>
<td>East Congress</td>
<td>Bordered by US-290/SH-71 to the north, I-35 to the east, South Congress Avenue to the west, and West Stassney Lane to the south. The only places to cross I-35 are at US-290/SH-71 and along West Stassney Lane. Williamson Creek Drive traverses this neighborhood, but it is unclear if there are hike and bicycle trails that allow safe passage under I-35.</td>
<td>The area of East Congress NPA that abut the highways are primarily developed for commercial or industrial uses. The residential areas are embedded within the central portions of the NPA. Near this NPA, the only potential improve bicycle and pedestrian facilities would be along I-35 frontage roads through additional and improved SUPs.</td>
</tr>
</tbody>
</table>
Table 3.6-14. Priority NPAs – Observations and Potential Benefits

<table>
<thead>
<tr>
<th>Priority NPA (north to south)</th>
<th>Observations</th>
<th>Potential Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Franklin Park</td>
<td>Bordered on the west by I-35, on the north by East St. Elmo Road, and on the south by East Stassney Lane and Williamson Creek Drive. Land uses are primarily industrial along the highways. Residential areas are a few blocks away from the highways.</td>
<td>Rodriguez Elementary School, Josephine Houston Elementary School, Mendez Middle School, KIPP Texas-Austin Public Schools, and Uphaus Early Childhood Center are located in this NPA. The sidewalk network appears to be strong within this NPA, while bicycle lanes are limited. There appears to be some potential to improve bicycle and pedestrian connections across East Stassney Lane since it is the second location south of US-290/SH-71 that allows crossings of I-35 within the Community Study Area.</td>
</tr>
</tbody>
</table>

3.6.12.8 Other Relevant Studies

Reference is made to the I-35 South Environmental Justice Assessment completed by UT Center for Transportation Research (I-35 Capital Express South – Capital Express (my35capex.com)). The assessment investigated historical development patterns south of US-290/SH-71 to determine whether the historical construction of I-35 or proposed mobility improvements would result in disproportionate adverse effects to minority or low-income populations in that project’s community study area. For reasons documented in that assessment, it was determined that disproportionate adverse effects to EJ populations would not occur.

3.6.12.9 Transportation Equity and Access Conclusion

Since this section aimed to highlight priority NPAs seen through an equity lens, it is helpful to reference back to previous sections. As discussed in Sections 3.6.10.3.2 and 3.6.10.3.4, fewer adverse impacts would occur to EJ communities from Modified Build Alternative 3 compared to Build Alternative 2 due to design efforts to reduce adverse impacts. Benefits would occur to EJ communities including construction of enhanced bridges with SUP and buffers, construction of SUPs along and across I-35, and accommodation of deck plazas and stitches funded by others especially north of Ladybird Lake. These benefits are summarized in Table 3.25.1.

As acknowledged in Section 3.6.10.3.2, the concentration and reconnection of east and west Austin and beneficial community cohesion effects would be most pronounced north of the Colorado River given the removal of the elevated lanes. In contrast, there is an apparent historical lack of connectivity between priority NPAs on either side of I-35 south of US-290/SH-71. The current proposed projects (both I-35 Capital Express and I-35 South) offer limited opportunities to improve that connectivity. Especially for priority NPAs south of Lady Bird Lake, recognizing opportunities to support bicycle
and pedestrian connectivity improvements within these priority NPAs would demonstrate forward progress toward improved active transportation which has the potential to benefit community members within these particular NPAs. At a minimum, representatives from all priority NPAs should be included in continuing public involvement efforts for both I-35 Capital Express and I-35 South so that local needs can be addressed proactively in the spirit of Justice40 and achieving Transportation Equity and Access for drivers and non-drivers alike. As mentioned previously, this would include coordinating with agency stakeholders (such as the Austin Transportation Department and CapMetro) with the appropriate jurisdiction over these local improvements who could most directly work to provide these infrastructure improvements to priority NPAs.

See Figure 3.6-40 through Figure 3.6-43 below, showing priority NPAs, representative crossings, and select information about bicycle and pedestrian trip share from StreetLight analysis. This “storyboard” graphic helps illustrate the observations from Table 3.6-14.
Figure 3.6-40. Priority Neighborhood Planning Areas and Representative Crossings (Top 3 and Bottom 3)
Figure 3.6-41. Priority Neighborhood Planning Areas and Representative Crossings (Top 3 and Bottom 3)
Figure 3.6-42. Priority Neighborhood Planning Areas and Representative Crossings (Top 3 and Bottom 3)
Figure 3.6-43. Priority Neighborhood Planning Areas and Representative Crossings (Top 3 and Bottom 3)
3.7 Visual/Aesthetic Impacts

3.7.1 Background

Highways and major transit facilities can affect the visual and aesthetic character of surrounding landscapes and the perceptions of the individuals who live within and visit these environments. I-35 is a well-established interstate highway, and the project corridor is located within a developed/urban area of Austin. The FHWA Guidelines for the Visual Impact Assessment of Highway Projects (January 2015) provides a framework for evaluating impacts to visual and aesthetic resources for vehicular highway projects. Following the guidance established by the FHWA, this section discusses potential visual impacts associated with the proposed project. This section also includes a qualitative analysis of changes in visual resources and viewer response to determine potential visual impacts of the proposed project Build Alternatives and the No Build Alternative.

Section 136 of the Federal Aid Highway Act of 1970 (Public Law 91-605) requires consideration of aesthetic values in the highway planning process. Aerial imagery and virtual field visits were used to assess visual and aesthetics impacts within the project area. The information from field visits was used to assess views of the project area and analyzed to determine the existing visual character. The overall general landscape can be characterized as urban land uses consisting of mixed small, medium, and large retail, commercial, office, hotel, residential, highway ROW, and other transportation facilities. The existing viewshed includes the I-35 Upper Decks that are composed of two, approximately 60-foot-tall bridge structures, each with two mainlanes that run from Airport Boulevard to MLK Jr. Boulevard. I-35 is also elevated above grade through most of downtown Austin. The proposed project would generally follow the alignment of the existing I-35 highway. The existing viewshed includes the I-35 upper decks and elevated mainlanes through downtown, which also dominate the existing visual and aesthetic environment, acting as a physical, visual, and psychological barrier that inhibits the east-west connection of Austin across the I-35 corridor. However, because of their elevation, the upper decks provide viewpoints of the historic Texas State Capitol Building as well as downtown east and west Austin. Views of the historic Texas Capitol Building are protected via ordinance legislation from both COA and legislation from the Texas State Legislature.

To preserve the views of the Capitol State Building, a series of studies and approved Capitol View Corridor (CVC) have been implemented through COA Ordinances (by the City Council) and through the Texas Legislature codified in the State Government Code, which impose height restrictions within the CVCs. Several previous reports and reference documents have been written:

- 1984 Capitol View Preservation Study – describes the original methodology used by the planning department staff evaluating the initial 60 potential view corridors weighing three factors: view type, view frame, and viewpoint.
- 2007 Downtown Development and Capitol View Corridors – includes an inventory of the 30 state-identified CVCs with evaluation and differences against COA list of CVCs. Eleven of 30 views were recommended to be modified.
• 2017 - Resolution Number 20170216-032 – describes history and timeline, references ordinance number 19840419-K for the original unobstructed views of the Capitol, as well as views identified by community members, plus proposes five new CVCs based on a report from Bowman Consulting in 2015.

Regulations and restrictions that preserve the views to the Capitol State Building and govern construction within the Austin area, include:

• COA Ordinance Chapter 25-2-162 and 25-2-642 CVC: Twenty-six view locations, or CVCs, are described within Appendix A of COA ordinance as “boundaries of the Capitol view corridors.” A structure height within the CVC plane cannot exceed the elevation of the plane delineating the corridor which is restricted by the lessor of the base district maximum height or the maximum height provided within the section.

• Texas State Government Code Chapter 3151 (77th Leg. Session of 2001): Chapter 3151 “Preservation of view of state Capitol,” indicates the center of the Capitol Dome is at 653 feet above sea level. Defines 30 view locations or CVCs as described in sec. 3151.002 which include the 26 CVCs in COA ordinance.

• Chapter 3151 Section 051 Prohibited Construction; CVC: A person may not begin, in a CVC, construction of a structure that would exceed the maximum permissible height computed in accordance with the following formula:

\[
h = \frac{((653 - eVP) \times (b'))}{b} - (eS - eVP)
\]

where:

- \(h\) = is the maximum permissible height of the structure.
- \(b\) = is the distance between the selected viewpoint and the center of the Capitol Dome.
- \(b'\) = is the distance between the viewpoint and the structure.
- \(eS\) = is the elevation of the structure.
- \(eVP\) = is the elevation of the viewpoint.

Note: For this formula to work as intended, the “eS” is referring to the elevation of the “base” of the proposed structure.

Chapter 3151 does not apply to construction, renovation, or equipment of the Darrell K Royal-Texas Memorial Stadium, nor construction, redevelopment or improvement of East 11th and 12th Street redevelopment program and for the Robert Mueller Municipal Airport under the redevelopment and reuse plan adopted by COA. Each of these do have a restriction in height not to exceed 666 feet (higher than the 653-foot center of Capitol Dome) and 600 feet, respectively. There is no height described as a restriction for the Robert Mueller Municipal Airport.

3.7.2 Environmental Consequences

3.7.2.1 Build Alternatives

The proposed project would generally follow the existing alignment of I-35. The primary changes to the visual environment in the project corridor consist of the addition of HOV managed lanes, modified frontage roads, bicycle and pedestrian facilities, and bypass lanes. The existing viewshed includes the Texas State Capitol, retail
and commercial developments, residential housing, and highway ROW. The primary viewers would include motorists and people visiting developments in the project area. The sensitivity of the primary viewers was determined by viewer type (neighbor or traveler) and their exposure (frequency and duration) to potential views and the visual resources in each landscape unit. The visual effects assessment is based on two factors: evaluating the visual effect of the proposed project and how it relates to the surrounding environment (views of the road [i.e., neighbors]); and evaluating the potential visual effect viewers would experience while traveling along the proposed project (the views from the road [i.e., travelers]).

Representative viewpoints were selected and analyzed to determine the visual effects resulting from implementing the proposed project. To facilitate this discussion, the project was evaluated in three sections:

- Section 1: From US 290 E, the northern project terminus, through downtown to Holly Street represented by the I-35 upper decks and an overall elevated section through downtown Austin;
- Section 2: From Holly Street across Lady Bird Lake to Riverside Drive representing views of downtown Austin, Lady Bird Lake, and south Austin; and
- Section 3: From Riverside Drive to SH 71, the southern project terminus, representing views across Austin from a currently at-grade section.

3.7.2.1.1 Section 1

The representative viewpoints of the project corridor are Viewpoint 1 located on the I-35 upper decks, between Airport Boulevard and MLK Jr. Boulevard looking toward COA’s east and west sides (included in this viewpoint are the CVCs of the Texas State Capitol); and Viewpoint 2 looking toward the I-35 upper decks from the ground surface, including surrounding neighborhoods, businesses, frontage roads, lowered mainlanes, sidewalks, and cross-streets. Both Build Alternative 2 and Modified Build Alternative 3 would remove CVC vantage points that are located on the upper decks and elevated section of the existing I-35 facility. The removal of the upper decks and the elevated sections of I-35 through downtown Austin would remove a physical, visual, audio, and psychological barrier represented by the existing I-35 structures. Furthermore, the removal of the existing structures, as described, would assist in making the views across Austin far more accessible to COA residents including drivers, people who walk and bicycle, business owners, and residents.

Build Alternative 2 would differ slightly from Modified Build Alternative 3 in that it would add direct connector ramps between I-35 and US 290 East. These ramps would be added to an already elevated environment with existing ramps, so they would not add substantial additional impacts. These ramps were not required for Modified Build Alternative 3 and would not be added to the project in this area.

The deck plazas, if funded by others, would occlude all views of downtown from the mainlanes and HOV managed lanes. However, views from the frontage roads, and deck plazas would provide views of the surrounding areas, limited or no views of the mainlanes or HOV managed lanes. These areas are also projected to provide much lower traffic noise, which is anticipated to be captured in the capped areas.
3.7.2.1.2 Section 2

Both Build Alternative 2 and Modified Build Alternative 3 would largely remain unchanged from the existing facility as a result of build alternative implementation. In this section both build alternatives would come back to ground level to provide views of park and recreation areas surrounding Lady Bird Lake and the I-35 bridge over Lady Bird Lake.

3.7.2.1.3 Section 3

Both Build Alternative 2 and Modified Build Alternative 3 mainlanes and HOV managed lanes transition into a lowered section after traveling south under Riverside Drive until transitioning into an at-grade section south of Oltorf Street. Views across the proposed project would no longer include the visual impact of the main and managed HOV lanes when looking across I-35 and would be presented with views of the frontage roads and east and west Austin. Views from the lowered mainlanes and HOV managed lanes would be limited; however, it is anticipated that some views of downtown Austin, when traveling NB would be possible from selected viewpoints.

3.7.2.2 No Build Alternative

Under the No Build Alternative, there would be no visual/aesthetic changes along the existing corridor, as the proposed improvements would not be constructed, and the upper decks would remain in place.

3.7.2.3 Aesthetics Outreach

TxDOT initiated a series of meetings with the public and targeted outreach to residents of neighborhoods surrounding the proposed project and members of the public who have taken part in public involvement events. In these meetings TxDOT discussed the potential to incorporate aesthetic concepts, such as textured form liners, retaining wall art, and other options proposed by the public and neighborhood stakeholders.

3.8 Cultural Resources

Evaluation of impacts to cultural resources has been conducted under Section 106 of the National Historic Preservation Act (NHPA) in accordance with the Programmatic Agreement (PA) among FHWA, TxDOT, the Texas SHPO and the Advisory Council on Historic Preservation (ACHP) Regarding the Implementation of Transportation Undertakings (Programmatic Agreement for Transportation Undertakings [PA-TU]). Cultural resources were also evaluated under Chapter 191 of the Texas Natural Resources Code, also known as the Antiquities Code of Texas (ACT), which dictates that projects must notify the THC and adhere to the ACT and its accompanying Rules of Practice and Procedure (TAC Title 13 Chapter 26) when it involves state agencies initiating projects on public land or when political subdivisions of the state commence projects on public land involving five or more acres of ground disturbance, five thousand or more cubic yards of earthmoving, potential impact to previously recorded archaeological sites, or occurs in a historic district or other designated historic sites. TxDOT initiated project-specific consultation under Section 106 of the NHPA Act with federally-recognized tribes on June 2, 2020. On July 1, 2020, the Cherokee Nation of Oklahoma responded that the project would have no effect on sites of
cultural or religious significance to them. No other tribe has objected or otherwise responded. Consultation has continued with design changes. No additional comments have been received.

3.8.1 Archeology and Cemeteries

TxDOT conducted an archeological background study of the proposed APE. A review of the THC's Historic Sites Atlas (Atlas) was conducted to identify previous cultural resources surveys that have been performed within the area of potential effect (APE), and to locate known cultural resources that have been recorded within the APE. The majority of the APE has been previously disturbed by construction and therefore, it is unlikely intact archeological deposits occur within the APE.

3.8.1.1 Build Alternative 2

Build Alternative 2 has no potential to impact archaeological resources as the majority of the project area has been previously disturbed.

3.8.1.2 Modified Build Alternative 3

Modified Build Alternative 3 has no potential to impact archaeological resources as the majority of the project area has been previously disturbed.

3.8.1.3 No Build Alternative

Under the No Build Alternative, there would be no impact to archaeological or historic archaeological sites.

3.8.1.4 Conclusion

Project-specific coordination and consultation with the THC in compliance with the ACT and Section 106 of the NHPA is not required for archeological historic properties, because the project would have no effect on these properties.

3.8.2 Historic Properties

In compliance with the PA-TU, as executed among FHWA, TxDOT, the SHPO, and the ACHP, historic resources surveys and focused public involvement activities were conducted for the proposed I-35 Capital Express Central Project.

TxDOT historians determined that the project’s APE for historic resources is any parcel within, or partially within, 150 feet of the Environmental Study Area for parcels along the I-35 corridor. The Environmental Study Area represents the maximum potential ROW acquisition for build alternatives and additional areas for study and analysis. The APE was determined based on the types of project activities; prior TxDOT experience with effects to historic properties from this project type; the project location along an existing limited-access urban freeway; and parameters for APE delineation specified in the PA-TU. For the proposed drainage tunnel and outfall along East Cesar Chavez Street, the APE is defined as parcels that adjoin East Cesar Chavez Street between I-35 and 0.5 mile east of Pleasant Valley Road. After delineation of the historic resources APE, the project’s Environmental
Study Area was slightly enlarged at some cross-street intersections. Activities at these locations are limited to restriping, resurfacing, and curbing to taper into existing COA roadway sections. There would be no ROW acquisition at locations associated with the refined Environmental Study Area. In all cases, historic resources APE remained at 150 feet or greater from the ROW for both project build alternatives.

To account for an anticipated 2025 construction date, TxDOT determined that historic-age resources are those resources built in or before 1980.

3.8.2.1 Existing Conditions

Most historic-age resources in the project APE have been previously evaluated through National Register of Historic Places (NRHP) nominations and historic resources surveys prepared for COA and TxDOT:

- 1985 “Historic Resources of East Austin” Multiple Resource Area NRHP nomination. ([https://npgallery.nps.gov/GetAsset/ae795ed3-9ae7-41a5-bedd-9474ae3b75](https://npgallery.nps.gov/GetAsset/ae795ed3-9ae7-41a5-bedd-9474ae3b75)).
- COA’s 2000 Historic Resources Survey of East Austin ([https://www.austintexas.gov/edims/document.cfm?id=242864](https://www.austintexas.gov/edims/document.cfm?id=242864)) inventoried pre-1955 resources in an area roughly bounded by East 14th Street on the north; Coleto Street on the east; an irregular line along Pennsylvania, Cotton, Rosewood/East 11th, and East 9th Streets on the south; and San Marcos Street and I-35 frontage road on the west.
- In 2003–2004 several intensive-level surveys were prepared for TxDOT along I-35 between Reinli Street (near US 290 East) on the north and the Colorado River on the south. These surveys documented and evaluated pre-1961 resources within an APE that varied between 150 and 500 feet beyond the I-35 ROW. The surveys also identified and evaluated potential historic districts for NRHP eligibility, with a focus on comprehensive developmental analysis for residential areas in a study area extending 500 feet beyond the I-35 ROW.
- COA North Loop, Hancock, and Upper Boggy Creek historic resources survey (Cox McLain Environmental Consulting, 2020). The survey area includes properties on the west side of I-35 from US 290 East to East Dean Keeton Street and properties on the east side of I-35 from north of Airport Boulevard to East Dean Keeton Street. The survey materials have not been finalized at the time of report preparation, but COA provided TxDOT with draft survey, context, and evaluation materials to assist in identification and evaluation of resources in the I-35 Capital Express Central Project APE, including potential historic districts. Draft materials used for historic resource identification and evaluation were provided to TxDOT in December 2021.
and March 2022 and may differ from subsequent draft and final versions of the survey. The COA expects the survey to be finalized in spring 2023.

In addition to these historic resources surveys, NRHP nominations cover several areas of the APE.

Historians and GIS specialists reviewed data from the Atlas (https://atlas.thc.texas.gov/Map), TxDOT Historic Resources of Texas Aggregator (https://txdot.maps.arcgis.com/apps/webappviewer/index.html?id=e13ba0aa78bf4548a8e98758177a8dd5), and COA Historic Landmark GIS layers (https://data.austintexas.gov/Locations-and-Maps/Historical-Landmarks/vvuz-m3y4) to identify previously evaluated historic properties within the APE. This review included examination of properties listed in the NRHP, listed as a State Antiquities Landmark (SAL), designated as a Recorded Texas Historic Landmark (RTHL), or designated as a COA historic district or historic landmark. Table 3.8-1 provides a list of previously evaluated historic properties and districts within the APE.

<table>
<thead>
<tr>
<th>Resource ID No.</th>
<th>Name</th>
<th>Address</th>
<th>Previous Designations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonextant</td>
<td>Residence</td>
<td>813 East 13th Street</td>
<td>NRHP eligible (building no longer extant)</td>
</tr>
<tr>
<td>Nonextant</td>
<td>Service Station</td>
<td>5357 North I-35</td>
<td>NRHP eligible (building no longer extant)</td>
</tr>
<tr>
<td>Nonextant</td>
<td>Walter Schulze House and Industrial Structure</td>
<td>102 Chicon Street</td>
<td>NRHP listed (buildings no longer extant)</td>
</tr>
<tr>
<td>165</td>
<td>Residence</td>
<td>4141 North I-35/4206 Bradwood Road</td>
<td>NRHP eligible</td>
</tr>
<tr>
<td>179</td>
<td>Commercial Building</td>
<td>4000 North I-35</td>
<td>NRHP eligible</td>
</tr>
<tr>
<td>245</td>
<td>Bungalow</td>
<td>3502 Robinson Avenue</td>
<td>NRHP eligible</td>
</tr>
<tr>
<td>271A</td>
<td>Duplex</td>
<td>3300 Robinson Avenue</td>
<td>NRHP eligible</td>
</tr>
<tr>
<td>281A</td>
<td>Damon-Brown-Pierce House</td>
<td>1110 East 32nd Street</td>
<td>City historic landmark</td>
</tr>
<tr>
<td>321A-C</td>
<td>City Cemetery (Oakwood Cemetery)</td>
<td>1601 Navasota Street</td>
<td>NRHP listed</td>
</tr>
<tr>
<td>339</td>
<td>Limerick-Frasier House</td>
<td>810 East 13th Street</td>
<td>NRHP listed</td>
</tr>
<tr>
<td>344</td>
<td>Bridge</td>
<td>East 12th Street EB at Waller Creek</td>
<td>NRHP eligible</td>
</tr>
<tr>
<td>349</td>
<td>Bridge</td>
<td>East 12th Street WB at Waller Creek</td>
<td>NRHP eligible</td>
</tr>
</tbody>
</table>
### Table 3.8-1. Previously Evaluated Historic Properties in APE

<table>
<thead>
<tr>
<th>Resource ID No.</th>
<th>Name</th>
<th>Address</th>
<th>Previous Designations</th>
</tr>
</thead>
<tbody>
<tr>
<td>350</td>
<td>Chapman House</td>
<td>901 East 12th Street</td>
<td>NRHP listed, City historic landmark</td>
</tr>
<tr>
<td>356</td>
<td>Dedrick-Hamilton House</td>
<td>908 East 11th Street</td>
<td>City historic landmark</td>
</tr>
<tr>
<td>360</td>
<td>Routon-Alvarez-Lopez House</td>
<td>809 East 9th Street</td>
<td>City historic landmark</td>
</tr>
<tr>
<td>361A-D</td>
<td>French Legation</td>
<td>802 San Marcos Street, 801 Embassy Drive</td>
<td>NRHP listed, SAL, RTHL, City historic landmark</td>
</tr>
<tr>
<td>372</td>
<td>Bridge</td>
<td>East 7th Street at Waller Creek</td>
<td>NRHP eligible</td>
</tr>
<tr>
<td>377</td>
<td>Bridge</td>
<td>East 6th Street at Waller Creek</td>
<td>NRHP eligible</td>
</tr>
<tr>
<td>378</td>
<td>Walton-Joseph Building</td>
<td>708 East 6th Street</td>
<td>City historic landmark</td>
</tr>
<tr>
<td>382</td>
<td>Randerson-Lundell Building</td>
<td>701 East 6th Street</td>
<td>RTHL, City historic landmark</td>
</tr>
<tr>
<td>392</td>
<td>Robinson Brothers Warehouse</td>
<td>501 North I-35</td>
<td>City historic landmark</td>
</tr>
<tr>
<td>397A-B</td>
<td>Texaco Depot</td>
<td>1300 East 4th Street</td>
<td>City historic landmark</td>
</tr>
<tr>
<td>398</td>
<td>Waterloo Compound Wedding House</td>
<td>604 East 3rd Street</td>
<td>City historic landmark</td>
</tr>
<tr>
<td>408</td>
<td>Palm School</td>
<td>109 Sabine Street/700 East Cesar Chavez Street</td>
<td>City historic landmark</td>
</tr>
<tr>
<td>437A</td>
<td>Bonugli Grocery Store</td>
<td>78 San Marcos Street</td>
<td>City historic landmark</td>
</tr>
<tr>
<td>465</td>
<td>Norwood House</td>
<td>1012 Edgecliff Terrace</td>
<td>City historic landmark</td>
</tr>
<tr>
<td>1001</td>
<td>Evans-Morris-Hiesler House</td>
<td>1000 East Cesar Chavez Street</td>
<td>City historic landmark</td>
</tr>
<tr>
<td>1026</td>
<td>Charles B. Moreland House</td>
<td>1301 East Cesar Chavez Street</td>
<td>NRHP listed, City historic landmark</td>
</tr>
<tr>
<td>1032</td>
<td>Stavely-Kunz-Johnson House</td>
<td>1402 East Cesar Chavez Street</td>
<td>NRHP listed, City historic landmark</td>
</tr>
<tr>
<td>1038</td>
<td>Owings-Allen-Miller House</td>
<td>1405 East Cesar Chavez Street</td>
<td>City historic landmark</td>
</tr>
</tbody>
</table>
Table 3.8-1. Previously Evaluated Historic Properties in APE

<table>
<thead>
<tr>
<th>Resource ID No.</th>
<th>Name</th>
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<th>Previous Designations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1041</td>
<td>Wolf House</td>
<td>1602 East Cesar Chavez Street</td>
<td>City historic landmark</td>
</tr>
<tr>
<td>1057</td>
<td>Berner-Clark-Mercado House</td>
<td>1807 East Cesar Chavez Street</td>
<td>City historic landmark</td>
</tr>
<tr>
<td>1100</td>
<td>Freeman-Whiteside-Tuke-Gamboa House</td>
<td>2205 East Cesar Chavez Street</td>
<td>City historic landmark</td>
</tr>
<tr>
<td>N/A</td>
<td>Little Campus Historic District</td>
<td>Bounded by East 18th Street, Oldham Street, East MLK Jr. Boulevard, and Red River Street</td>
<td>NRHP listed</td>
</tr>
<tr>
<td>N/A</td>
<td>Delwood Duplex Historic District</td>
<td>Roughly bounded by Maplewood Avenue and Kirkwood, Ashwood, and Wrightwood Roads</td>
<td>NRHP listed</td>
</tr>
<tr>
<td>N/A</td>
<td>Rainey Street Historic District</td>
<td>70 Rainey Street–97 Rainey Street</td>
<td>NRHP listed</td>
</tr>
<tr>
<td>N/A</td>
<td>Sixth Street Historic District</td>
<td>Roughly bounded by I-35, East and West 5th, East and West 7th, and Lavaca Streets</td>
<td>NRHP listed</td>
</tr>
<tr>
<td>N/A</td>
<td>Swedish Hill Historic District</td>
<td>Roughly bounded by I-35, East 14th, East 15th, and Waller Streets</td>
<td>NRHP listed</td>
</tr>
<tr>
<td>N/A</td>
<td>Travis Heights-Fairview Park Historic District</td>
<td>Roughly bounded by rear property lines of properties adjoining Edgecliff Terrace, East Live Oak Street, Kenwood Avenue, and South Congress Avenue</td>
<td>NRHP listed</td>
</tr>
<tr>
<td>N/A</td>
<td>Willow-Spence Streets Historic District</td>
<td>Roughly bounded by I-35 and rear property lines of properties adjoining Spence, Waller, and Willow Streets</td>
<td>NRHP listed</td>
</tr>
<tr>
<td>N/A</td>
<td>Wilshire Historic District</td>
<td>Bounded by CapMetro RR, Ardenwood Road, Wilshire Boulevard, and Delwood III subdivision</td>
<td>NRHP listed</td>
</tr>
</tbody>
</table>

3.8.2.2 Survey Findings

TxDOT-qualified historians performed a non-archeological cultural resources reconnaissance survey of properties within the I-35 Capital Express Central Project APE, along the I-35 corridor and along US 290 East between I-35 and Berkman Drive, between November 2021 and February 2022. TxDOT-qualified historians performed a reconnaissance survey of properties along the proposed East Cesar Chavez drainage tunnel/outfall APE in April and May 2022. In addition to the reconnaissance surveys, TxDOT-qualified historians completed intensive surveys for eight properties in the project’s APE. TxDOT identified these properties as having a high potential for historical or design significance and for being affected by project activities.
A total of 714 properties containing 953 resources were documented as part of the reconnaissance survey and intensive surveys. Of these, a total of 245 properties are individually listed or recommended eligible for listing in the NRHP, or are contributing resources to historic districts that are listed or recommended eligible for listing in the NRHP:

- Resources 7A–7H: 7104 Berkman Drive (Northeast Early College High School)
- Resources 103–110; 116-123; 134-137: Delwood II Historic District (22 contributing resources in APE)
- Resources 144–156: Delwood I Historic District (14 contributing resources in APE)
- Resources 163A–163G: 4301 North I-35 (St. George’s Episcopal Church and School)
- Resources 166–178: Wilshire Historic District (10 contributing resources in APE)
- Resource 179: 4001 North I-35
- Resources 180–181: Delwood Duplex Historic District (2 contributing resources in APE)
- Resource 200: 3810 North I-35
- Resources 235A–235B: 3509 North I-35
- Resource 295: 3009 North I-35
- Resources 316A–316B: 2300-2313 Red River Street (Sid Richardson Hall; Thompson Conference Center)
- Resource 316C: 2405 Robert Dedman Drive (LBJ Library)
- Resource 317: East side 2600–2700 blocks North I-35 (Mount Calvary Cemetery)
- Resources 320A–320B: Little Campus Historic District (2 contributing resources in APE)
- Resources 321A–321C: 1601 Navasota Street (Oakwood Cemetery/City Cemetery)
- Resources 327–335: Swedish Hill Historic District (9 contributing resources in APE)
- Resource 336: Swedish Hill Extension Historic District (1 contributing resource in APE)
- Resource 339: 810 East 13th Street (Limerick-Frazier House)
- Resource 344: East 12th Street WB at Waller Creek Bridge
- Resource 349: East 12th Street EB at Waller Creek Bridge
- Resource 350: 901 East 12th Street
- Resource 356: 912 East 11th Street
- Resources 358A–358C: 801 Red River Street
- Resource 360: 809 East 9th Street
- Resource 361A: 802 San Marcos Street (French Legation)
- Resource 367: 902 East 7th Street
- Resource 372: East 7th Street at Waller Creek Bridge
1. Resources 376–378; 382-389: Sixth Street Historic District (11 contributing resources in APE)

2. Resource 377: East 6th Street at Waller Creek Bridge (individually NRHP eligible and contributing resource to Sixth Street Historic District)

3. Resource 382: 701 East 6th Street (individually NRHP eligible and contributing resource to Sixth Street Historic District)


5. Resources 397A–397B: 1300–1302 East 4th Street

6. Resource 398: 604 East 3rd Street

7. Resource 399A: 606 East 6th Street

8. Resource 399B: 608 East 3rd Street

9. Resource 400: 807 East 4th Street

10. Resource 402: 900 East 3rd Street

11. Resources 403A–403C: 300 Medina Street

12. Resources 404A–404E: 200 North I-35 (Palm Park)

13. Resources 405A–405C: 200 Brushy Street

14. Resources 406–413: East 2nd and 3rd Streets Historic District (6 contributing resources in APE)

15. Resources 412A–412B: 905 East 2nd Street (Resource 412A is individually NRHP eligible; both resources are contributing to East 2nd and 3rd Streets Historic District)

16. Resource 413: 907 East 2nd Street (individually NRHP eligible and contributing resource to East 2nd and 3rd Streets Historic District)

17. Resources 417–426; 433–437: Willow-Spence Historic District (12 contributing resources are in APE)

18. Resources 427–432, 444–446: Rainey Street Historic District (5 contributing resources in project APE)

19. Resource 437A: 78 San Marcos Street (individually NRHP eligible and contributing resource to Willow-Spence Historic District)

20. Resources 439–443: Willow-Spence Historic District Extension (6 contributing resources in project APE)

21. Resources 462A–C, D–E: Town Lake Park System section from Waller Creek to Fiesta Gardens

22. Resources 468–473: Travis Heights-Fairview Park Historic District (4 contributing resources in project APE)

23. Resource 496: 1601 Elmhurst Drive

24. Resource 513: 1304 Mariposa Drive

25. Resources 1001–1148: East 1st Street Historic District (147 contributing resources in project APE)

26. Resource 1001: 1000 East Cesar Chavez Street (individually NRHP eligible and contributing to East 1st Street Historic District)
3.0 Affected Environment and Environmental Consequences

- Resource 1004A: 1010 East Cesar Chavez Street (individually NRHP eligible and contributing to East 1st Street Historic District)
- Resource 1022: 1304 East Cesar Chavez Street (individually NRHP eligible and contributing to East 1st Street Historic District)
- Resource 1026: 1301 East Cesar Chavez Street (NRHP listed and contributing to East 1st Street Historic District)
- Resources 1030A–1030B: 1311 East Cesar Chavez Street and 94 Navasota Street (individually NRHP eligible and contributing to East 1st Street Historic District)
- Resource 1032: 1402 East Cesar Chavez Street (NRHP listed and contributing to East 1st Street Historic District)
- Resource 1037: 1403 East Cesar Chavez Street (individually NRHP eligible and contributing to East 1st Street Historic District)
- Resource 1038: 1405 East Cesar Chavez Street (individually NRHP eligible and contributing to East 1st Street Historic District)
- Resources 1041A, C–E: 1602 East Cesar Chavez Street and 94 Navasota Street (individually NRHP eligible and contributing to East 1st Street Historic District)
- Resource 1046: 1615 East Cesar Chavez Street (individually NRHP eligible and contributing to East 1st Street Historic District)
- Resource 1049A: 1808 East Cesar Chavez Street (individually NRHP eligible and contributing to East 1st Street Historic District)

3.8.2.3 Section 106 Public Involvement

The proposed project includes ongoing focused Section 106 public involvement outreach, as well as incorporation of historic resources as part of the NEPA public involvement process. The following groups and individuals have committed to be Section 106 consulting parties for the I-35 Capital Express Central Project:

- THC/Texas SHPO
- COA Historic Landmark Commission (HLC)/Historic Preservation Office
- COA PARD
- Travis County Historical Commission
- Preservation Austin
- Preservation Texas
- Wilshire Wood/Delwood I Neighborhood Association
- Cherrywood Neighborhood Association
- East Cesar Chavez Neighborhood Contact Team (Willow-Spence Historic District)
Six Square Cultural District

TxDOT held a virtual Section 106 consulting parties meeting on October 6, 2021, to provide an overview of the project, cultural resources management as part of TxDOT’s project development process, consulting party opportunities and roles in the Section 106 process, and historic resources survey tasks and schedule. TxDOT provided reconnaissance-level and intensive-level HRSRs to consulting parties and other stakeholders for review and comment. The HRSRs were posted to the project website for public review. TxDOT held a second Section 106-focused public involvement meeting for consulting parties and interested stakeholders on June 10, 2022, to provide an update on project activities related to historic resources, present findings from historic resources surveys, and solicit input and discussion on the findings. A third Section 106 consulting party meeting was held with Section 106 consulting parties on October 13, 2022, to discuss effects of the project to historic properties and potential mitigation activities.

3.8.2.4 Environmental Consequences

TxDOT examined the potential for direct and indirect effects to historic properties in the project’s APE.

3.8.2.4.1 Build Alternative 2

Build Alternative 2 would impact seven historic properties within the project APE, including adverse effects under Section 106 (36 CFR §800) to six properties and uses under Section 4(f) regulatory requirements (23 CFR §774) of seven historic properties. Build Alternative 2 is anticipated to result in the following impacts to historic properties:

- Delwood II Historic District: This residential historic district is eligible for NRHP listing at the local level of significance under Criterion A in the area of Community Planning and Development and under Criterion C in the area of Architecture. Build Alternative 2 would require about 0.13 acre of additional ROW, or about 0.29 percent of the total area of the historic district. Build Alternative 2 would remove two contributing resources and one noncontributing resource from the Delwood II Historic District. Information regarding impacts to contributing resources is described below.

  - Resource 119: The residence at 4505 North I-35 is a contributing resource to the NRHP-eligible Delwood II Historic District. Build Alternative 2 would displace and remove the building at 4505 North I-35 and would require acquisition of 0.04 acre, or about 20 percent of the property parcel. Build Alternative 2 would have an adverse effect to the 4505 North I-35 property under Section 106 and therefore would result in a Section 4(f) use of the property.

  - Resource 121: The residential building (now converted to commercial use) at 4503 North I-35 is a contributing resource to the NRHP-eligible Delwood II Historic District. Build Alternative 2 would displace and remove the historic building at 4505 North I-35 and would require acquisition of 0.04 acre, or about 12 percent of the property parcel. Build Alternative 2 would have an adverse effect to the 4503 North I-35 property under Section 106 and therefore would result in a Section 4(f) use of the property.

- Resource 179: EBBC Main Office (Austin Chronicle) at 4001 North I-35 is recommended eligible for listing in the NRHP at the local level under Criterion A in the area of Commerce and Criterion C in the area of...
Architecture. Build Alternative 2 would displace and remove the EBBC Main Office (Austin Chronicle) building and would require acquisition of 0.26 acre, or approximately 85 percent, of the property parcel. Build Alternative 2 would have an adverse effect to the EBBC Main Office (Austin Chronicle) property under Section 106 and therefore would result in a Section 4(f) use of the property.

- Resource 200: Dura Tune Service Station at 3810 North I-35 is recommended eligible for listing in the NRHP at the local level under Criterion A in the area of Transportation and Criterion C in the area of Architecture. Build Alternative 2 would displace and remove the former Dura Tune Service Station building and would require acquisition of 0.19 acre, or approximately 64 percent, of the property parcel. Build Alternative 2 would have an adverse effect to the Dura Tune Service Station property under Section 106 and therefore would result in a Section 4(f) use of the property.

- Resource 235: The Robert and Rose Roberts (Roberts) House and its associated garage at 3509 North I-35 are recommended eligible for listing in the NRHP at the local level of significance under Criterion A in the area of Community Planning and Development. Build Alternative 2 would displace and remove the Roberts House and associated garage, TxDOT would acquire the full 0.25-acre Roberts House property parcel to provide a buffer for residential properties to the east of the Roberts House. Build Alternative 2 would result in an adverse effect to the Roberts House property under Section 106 and therefore would result in a Section 4(f) use of the property.

- Resource 295: The Alfred and Jacqueline Haster (Haster) House at 3009 North I-35 is recommended eligible for listing in the NRHP at the local level of significance under Criterion A in the area of Community Planning and Development and Criterion C in the area of Architecture. Build Alternative 2 would displace the Haster House and a small shed to the east of the house. TxDOT would acquire the full 0.18-acre Haster House property parcel to provide a buffer for residential properties to the east of the Haster House. Build Alternative 2 would result in an adverse effect to the Haster House property under Section 106 and therefore would result in a Section 4(f) use of the property.

- Resource 462: A section of the Town Lake Park System from Waller Creek to Fiesta Gardens is recommended eligible for listing in the NRHP at the local level under Criterion A in the areas of Entertainment/Recreation, Community Planning and Development, and Social History, and under Criterion C in the area of Landscape Architecture. The property includes portions of the Butler Hike and Bike Trail, Edward Rendon Park, and Waller Beach. Under Build Alternative 2, TxDOT would require acquisition from the NRHP-eligible properties at Edward Rendon Park and Waller Beach for staging and other activities during construction. The acquisition of ROW and potential for tree removal in the easement area under Build Alternative 2 would constitute a Section 4(f) use of the historic property. However, the project would have no adverse effect under Section 106. Waller Beach, Edward Rendon Park, and the Butler Hike and Bike Trail are also subject to individual Section 4(f) evaluation as parkland/recreation areas. The Section 4(f) evaluation addresses alternatives in light of the property’s status both as parkland and as a historic site. Impacts to these park/recreation areas are described in Section 3.9.1.

In addition to the direct effects described above, Build Alternative 2 may result in additional indirect or cumulative effects such as noise impacts; visual impacts including noise barriers; vibratory impacts and foundation settling; and access and circulation issues. Analyses for these potential effects to historic properties
are ongoing. Results of the analyses will be included in Section 106 consultation with the Texas SHPO and other consulting parties prior to the FEIS. Results of the Section 106 consultation will be included in the FEIS.

3.8.2.4.2 Modified Build Alternative 3

Modified Build Alternative 3 would impact five historic properties within the project APE, including adverse effects under Section 106 to four properties and uses under Section 4(f) of five historic properties. Modified Build Alternative 3 is anticipated to result in the following impacts to historic properties:

- Resource 179: EBBC Main Office (*Austin Chronicle*), 4001 North I-35. Modified Build Alternative 3 would displace and remove the EBBC Main Office building. TxDOT would acquire the entire 0.33-acre EBBC Main Office (*Austin Chronicle*) property parcel. Modified Build Alternative 3 would have an adverse effect to the EBBC Main Office (*Austin Chronicle*) property and therefore would result in a Section 4(f) use of the property.

- Resource 200: Dura Tune Service Station, 3810 North I-35. Modified Build Alternative 3 would displace and remove the former Dura Tune Service Station building and would require acquisition of about 0.20 acre, or approximately 65 percent, of the property parcel. Modified Build Alternative 3 would have an adverse effect to the Dura Tune Service Station property and therefore would result in a Section 4(f) use of the property.

- Resource 235: Roberts House, 3509 North I-35. Impacts under Modified Build Alternative 3 would be identical to those described under Build Alternative 2. Modified Build Alternative 3 would result in an adverse effect to the Roberts House property under Section 106 and therefore would result in a Section 4(f) use of the property.

- Resource 295: Haster House, 3009 North I-35. Impacts under Modified Build Alternative 3 would be identical to those described under Build Alternative 2. Modified Build Alternative 3 would have an adverse effect to the Haster House property and therefore would result in a Section 4(f) use of the property.

- Resource 462: Section of the Town Lake Park System from Waller Creek to Fiesta Gardens. Impacts under Modified Build Alternative 3 would be identical to those described under Build Alternative 2. The acquisition of ROW and potential for tree removal in the easement area under Modified Build Alternative 3 would constitute a Section 4(f) use of the historic property. However, the project would have no adverse effect under Section 106.

In addition to the direct effects described above, Modified Build Alternative 3 may result in additional indirect or cumulative effects such as noise impacts; visual impacts including noise barriers; vibratory impacts and foundation settling; and access and circulation issues. Analyses for these potential effects to historic properties are ongoing. Results of the analyses will be included in Section 106 consultation with the Texas SHPO and other consulting parties prior to the FEIS. Results of the Section 106 consultation will be included in the FEIS.

3.8.2.4.3 No Build Alternative

The No Build Alternative would include only routine ongoing maintenance to I-35 with no construction of the I-35 Capital Express Central Project. There would be no project-related effects to historic properties under the No Build Alternative.
3.8.2.5 Coordination/Mitigation

TxDOT initiated consultation with the THC/Texas SHPO and other Section 106 consulting parties through an invitation to participate in identification of potentially historic properties and through opportunities to review and comment on the findings of historic resources surveys. Information on consulting party meetings and review opportunities is provided earlier in this section. Mitigation measures for the build alternatives are included in Section 3.25.

On November 10, 2022, TxDOT formally transmitted the final reconnaissance and intensive HRSRs to the SHPO requesting concurrence with TxDOT’s determinations of NRHP eligibility and preliminary findings of project effects to historic properties. The SHPO responded on November 30, 2022, providing concurrence on NRHP eligibility determinations of individual properties and districts in the project’s APE. The SHPO also concurred with TxDOT’s evaluation of contributing/non-contributing resources to historic districts. The SHPO agreed with TxDOT’s preliminary findings of effect summarized in the November 10, 2022, TxDOT letter, with further consultation expected regarding finalization of effect findings as design plans are refined, technical studies are prepared, and the project-level PA is developed. Refer to Appendix D for the coordination letter.

On November 18, 2022, TxDOT notified ACHP of the project’s potential to adversely affect historic properties and invited the ACHP to participate in the Section 106 consultation. The ACHP responded on November 28, 2022, declining to participate in Section 106 consultation for the project. Refer to Appendix D for the coordination letter. Results of Section 106 consultation will be included in the FEIS. TxDOT will enter into a PA with the Texas SHPO and other consulting parties. The PA will specify procedures for:

- Consultation and coordination with consulting parties for design changes that expand the project’s APE or otherwise have the potential to adversely affect historic properties.
- Consultation and coordination with consulting parties regarding noise abatement measures, streetscape features, and aesthetic treatments as these elements are finalized during the project development process.
- Monitoring of activities with the potential to adversely affect historic properties during construction.
- Best practices to protect historic resources during construction activities.
- Mitigation and other commitments that apply to historic properties.

3.9 Protected Lands

3.9.1 Section 4(f) of the Department of Transportation Act of 1966

An Individual Section 4(f) Evaluation was prepared documenting potential impacts to resources protected under Section 4(f) of the Department of Transportation Act of 1966 for each reasonable alternative identified in Section 2.2. For the No Build Alternative, there would be no impacts to Section 4(f) resources. This evaluation will be coordinated with COA, the Trail Foundation, the THC, and the U.S. Department of the Interior (USDOI). The draft Individual Section 4(f) Evaluation is included in Appendix M. Below is a summary of the evaluation.
3.9.1.1 Descriptions of Section 4(f) Properties

This section describes the various Section 4(f) properties in the proposed project area that would be used by the build alternatives, including six public parks/recreation areas and seven historic sites. A seventh park, Roy G. Guerrero Colorado River Metro Park (Roy Guerrero Park), was evaluated to determine whether it would be subject to a use under Section 4(f), but as explained in Appendix M, it was determined that neither of the build alternatives would use Roy Guerrero Park. Build Alternative 2 would displace six historic resources—Dura Tune Service Station, EBBC Main Office (Austin Chronicle), the Haster House, the Roberts House, and two residences in the Delwood II Historic District—and would implement a temporary construction staging area within the historic Town Lake Park System, which would not be an adverse effect. Modified Build Alternative 3 would displace four historic resources; the two residences in the Delwood II Historic District would not be required. Section 3.8.2 contains more information on historic resources. As explained in the Individual Section 4(f) Evaluation, for both build alternatives, there is no feasible and prudent avoidance alternative, as defined in 23 CFR §774.14, to the use of land from these properties; and the project includes all possible planning, as defined in 23 CFR §774.17, to minimize harm to the properties resulting from such use. Appendix M contains maps showing detailed impacts to Section 4(f) resources.

3.9.1.1.1 Parks/Recreation Areas

Butler Hike and Bike Trail. The Butler Hike and Bike Trail is a 15-mile trail system that circles Lady Bird Lake. According to COA PARD Interactive Map, the trail extends as far west as the MoPac Expressway and as far east as South Pleasant Valley Road. The trail is owned by COA while managed by both COA and Trail Foundation and is used both recreationally and as an alternative transportation route for the urban core. The trail sees 4.9 million visitors per year and is Austin’s most popular recreational area. Users of the trail pass by neighborhoods, skyscrapers, cultural attractions, and parks all while surrounded by beautiful scenery and a natural habitat. The trail has many access points throughout COA and can be accessed by foot, bicycle, car, and transit. A portion of the Butler Hike and Bike Trail is also a historic site, as part of an NRHP-eligible segment of the Town Lake Park System between Waller Creek and Fiesta Gardens. Additional information regarding the property’s significance as a historic site is provided in Section 3.9.1.1.2 and Appendix M. For Build Alternative 2, the proposed construction staging areas and construction activities in the lake would result in approximately 1,255 feet of temporary occupancy. An additional approximately 603 feet would require permanent incorporation as a result of proposed ROW and Section 4(f) use and Section 6(f) conversion in Waller Beach Park. For Modified Build Alternative 3, the proposed construction staging areas and construction activities in the lake would result in approximately 1,207 feet of temporary occupancy and approximately 652 feet would require permanent incorporation due to proposed ROW and Section 4(f) use and Section 6(f) conversion in Waller Beach Park.

The pedestrian facilities within the study area include off-street urban trails, sidewalks along roadways, pedestrian signals, curb ramps, and crosswalks. Urban trails are wide paved trails which are often separated from on-street traffic and are built to connect with the existing sidewalk and bicycle facilities. The existing I-35 frontage road bridges over Lady Bird Lake each include a sidewalk that is separated from vehicular traffic with a barrier. The NB sidewalk is approximately 758 feet and the SB sidewalk is approximately 695 feet. While used by the public to support recreational activities, these sidewalks, bikeways, and SUPs are primarily used for
transportation and are integral parts of the local transportation system; therefore, the requirements of Section 4(f) do not apply to them as they are not recreational areas (see FHWA Policy Paper at Question 15A). As discussed in the Section 4(f) Evaluation (Appendix M) and according to 23 CFR Section 774.14 a Section 4(f) property as “publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance, or land of an historic site of national, State, or local significance.” FHWA interprets this definition as follows: “Publicly owned land is considered to be a park, recreation area or wildlife and waterfowl refuge when the land has been officially designated as such by a Federal, State, or local agency, and the officials with jurisdiction over the land determine that its primary purpose is as a park, recreation area, or refuge.” However, recognizing that these sidewalks, bikeways, and SUPs provide connectivity to the Butler Hike and Bike Trail on both sides of the lake, the fact that COA has included these sidewalks in its map of the Butler Hike and Bike Trail (see https://www.austintexas.gov/sites/default/files/files/Parks/GIS/AnnRoyButlerTrailUpdate.pdf), the exceptional recreational importance, and heavy public use of the Butler Hike and Bike Trail (4.9 million visitors per year), TxDOT decided to include sidewalks in the Section 4(f) evaluation, as if they were subject to Section 4(f) regulations.

**International Shores_3**. Located at 1300 East Riverside Drive, Austin, International Shores_3 is an approximately 1.33-acre COA easement located on the southeast side of the I-35 bridge over Lady Bird Lake within the Berkshire Riverview Apartments private property. According to COA’s PARD Interactive Map, this easement extends as far west as the I-35 bridge and as far east as the Berkshire Riverview Apartments. The principal purpose of this park is to provide an access point to and from the Butler Hike and Bike Trail loop along Lady Bird Lake from the portion of the trail along the I-35 NB frontage road. For Build Alternative 2, an additional 0.01 acre of ROW would be required from International Shores_3 and 0.70 acre would be required for a construction staging area. For Modified Build Alternative 3, an additional 0.10 acre of ROW would be required from International Shores_3 and 0.60 acre would be required for a construction staging area.

**Waller Beach**. Located at 30 East Avenue, Austin, Texas, Waller Beach is an approximately 28-acre park situated on the northwest side of the I-35 bridge over Lady Bird Lake, south of downtown Austin. Owned by COA, Waller Beach Park follows along the north side of Lady Bird Lake and extends as far west as South Congress Avenue and as far east as I-35. The I-35 bridge passes over the easternmost side of the park. The park is well used by joggers, kayakers, cyclists, and wildlife watchers. The park is connected to several others through the Butler Hike and Bike Trail. A portion of Waller Beach is also a historic site, as part of an NRHP-eligible segment of the Town Lake Park System between Waller Creek and Fiesta Gardens. Additional information regarding the property’s significance as a historic site is provided in Section 3.9.1.1.2. Since a construction staging area would be in place for six years, it would require a conversion of the property under Section 6(f). For both build alternatives, 1.20 acres of permanent incorporation would constitute a use of Waller Beach Park under Section 4(f). Under both build alternatives, the 1.20-acre area would be used for TxDOT ROW for future maintenance operations for the I-35 bridge over Lady Bird Lake. An additional 0.20 acre of temporary occupancy would occur as a result of trail detour in the park. Temporary impacts within the park would occur to one boat ramp, a picnic table, two parking areas, East Avenue, and a trail in the park during the 6-year construction duration as a result of the construction staging area. Other impacted amenities include one trail sign, one wayfinding sign that identifies wheelchair-accessible locations, three recycle/trash bins, and a rainwater collection system. All temporarily impacted facilities and amenities would be restored to their pre-construction condition following the
6-year construction duration (subject to future maintenance operations on the I-35 bridge). A boat dock would be constructed to aid in the construction of the proposed new Lady Bird Lake Bridge. At the completion of construction, this boat dock would be converted to recreational use and turned over to COA for future recreational use. Additionally, improvements required to the boat ramp as part of the proposed construction would also remain in place for future public recreational use. Permanent impacts would occur at the parking area within TxDOT ROW under the I-35 bridge.

**Edward Rendon Park.** Edward Rendon Park is an approximately 73-acre park located at 2101 Jesse E. Segovia Street, Austin, on the northeast side of the I-35 bridge over Lady Bird Lake. According to COA’s PARD Interactive Map, Edward Rendon Park follows along the north side of Lady Bird Lake from I-35 to the Holly Street Power Plant at 2401 Holly Street. The park is owned by COA and is used for events, picnics, fishing, and for its trails. The park is connected to several other parks along Lady Bird Lake through the Butler Hike and Bike Trail. A portion of Edward Rendon Park is also a historic site, as part of an NRHP-eligible segment of the Town Lake Park System between Waller Creek and Fiesta Gardens. Additional information regarding the property’s significance as a historic site is provided in Section 3.9.1.1.2. For both build alternatives, 0.70 acre of temporary construction staging would constitute a use of Edward Rendon Park under Section 4(f).

**Norwood Park.** Located at 1012 Edgecliff Terrace, Austin, Norwood Park is an approximately 10-acre park located on the southwest side of the I-35 bridge over Lady Bird Lake. The park is owned by COA and offers an off-leash dog park and is home to the Norwood House. The park has unique views over the Colorado River and of Austin’s cityscape. For both build alternatives, 0.57 acre of temporary construction staging would constitute a use of Norwood Park under Section 4(f). The duration of the proposed staging area is estimated to last six months to one year. No additional ROW would be required from Norwood Park as a result of the proposed project; therefore, no permanent incorporation of park property would occur.

**Lady Bird Lake.** Lady Bird Lake is an approximately 485-acre artificial lake on the Colorado River that stretches through the south side of Austin’s downtown. The lake is primarily used for flood control, stormwater management, industrial water supply, and recreational purposes. Therefore, the Lady Bird Lake is being treated as a recreational area protected by Section 4(f). No other parcels are on the lake. Lady Bird Lake is owned by COA and is used for its surrounding trail system, kayaking, canoeing, and stand up paddleboarding. For both build alternatives, approximately 25 acres of temporary construction staging as well as restricted recreational access on the open water, would constitute a temporary occupancy of Lady Bird Lake under Section 4(f). Permanent impacts would include drill shafts and columns required for the proposed bridge structure. For both Build Alternatives, an additional 0.29 acre of permanent incorporation of Lady Bird Lake would result from a boat dock that would be constructed within the lake in the vicinity of construction activities.

**3.9.1.1.2 Historic Properties**

**Town Lake Park System – Waller Creek to Fiesta Gardens section (includes portions of Butler Hike and Bike Trail, Waller Beach, and Edward Rendon Park).** This property is a one-mile section of Austin’s Town Lake Park System along Lady Bird Lake between Waller Creek and Fiesta Gardens. The Town Lake Park System includes a series of interconnected COA-owned parks surrounding Lady Bird Lake in central Austin, roughly between the MoPac Expressway in the west and the Longhorn Dam in the east. The parks are unified by the Town Lake Hike and Bike
Trail (later renamed the Ann and Roy Butler Hike and Bike Trail). A section of the Town Lake Park System from Waller Creek to Fiesta Gardens is recommended eligible for listing in the NRHP at the local level under Criterion A in the areas of Entertainment/Recreation, Community Planning and Development, and Social History, and under Criterion C in the area of Landscape Architecture. The property includes portions of the Butler Hike and Bike Trail, Edward Rendon Park, and Waller Beach Park. Impacts to these park/recreation areas are described in Section 3.9.1.1.

Dura Tune Service Station. Dura Tune Service Station at 3810 North I-35 is recommended eligible for listing in the NRHP at the local level under Criterion A in the area of Transportation and Criterion C in the area of Architecture. Build Alternative 2 would displace and remove the former Dura Tune Service Station building and would require acquisition of about 0.19 acre, or approximately 64 percent, of the property parcel. Modified Alternative 3 would displace and remove the former Dura Tune Service Station building and would require acquisition of about 0.20 acre, or approximately 65 percent, of the property parcel.

EBBC Main Office (Austin Chronicle). The EBBC Main Office (Austin Chronicle) at 4001 North I-35 is recommended eligible for listing in the NRHP at the local level under Criterion A in the area of Commerce and Criterion C in the area of Architecture. Build Alternative 2 would displace and remove the EBBC Main Office (Austin Chronicle) building and would require acquisition of 0.26 acre, or approximately 85 percent, of the property parcel. Modified Build Alternative 3 would also displace and remove the EBBC Main Office (Austin Chronicle) building, and would acquire the entire 0.33-acre property parcel.

Haster House. The Alfred and Jacqueline Haster (Haster) House at 3009 North I-35 is recommended eligible for listing in the NRHP at the local level under Criterion A in the area of Community Planning and Development and Criterion C in the area of Architecture. Both build alternatives would displace the Haster House and a small shed to the east of the house. The east portion of the property, now occupied by a small, paved parking area and a fenced area, would remain beyond the proposed roadway and SUP. However, TxDOT would acquire the full 0.18-acre Haster House property parcel to provide a buffer for residential properties to the east of the Haster House. In addition, depending on final engineering design and other considerations, the remaining portion of the Haster House property could potentially be considered an uneconomic remainder, meaning it could not be adequately accessed and/or redeveloped.

Delwood II Historic District (Delwood II). Delwood II is a residential subdivision, roughly bounded by I-35 to the west, Norwood Road to the north, Rowood Road to the east, and Airport Boulevard to the south. Delwood II is eligible for NRHP listing at the local level of significance under Criterion A in the area of Community Planning and Development as representative of early post-World War II residential development patterns in Austin, and under Criterion C in the area of Architecture as an intact collection of Midcentury residential architecture designed for affordability in the early postwar era. Build Alternative 2 would require about 0.13 acre of additional ROW, or about 0.29 percent of the total area of the historic district. Build Alternative 2 would remove two contributing resources and one noncontributing resource from the Delwood II Historic District. Effects to contributing resources are described below:

- 4505 North I-35: Build Alternative 2 would remove the former residence at 4505 North I-35 and would require acquisition of about 0.04 acre, or about 20 percent of the property parcel. Build Alternative 2 would
have an adverse effect to the 4505 North I-35 property under Section 106 and therefore would result in a Section 4(f) use of the property.

- 4503 North I-35: Build Alternative 2 would remove the former residence at 4503 North I-35 and would require acquisition of about 0.04 acre, or about 12 percent of the property parcel. Build Alternative 2 would have an adverse effect to the 4503 North I-35 property under Section 106 and therefore would result in a Section 4(f) use of the property.

Modified Build Alternative 3 would not require ROW from the Delwood II Historic District and would not result in a Section 4(f) use of the historic district or contributing resources to the district.

Two residences (residence at 4505 North I-35 and residence at 4503 North I-35) are both contributing resources to the NRHP-eligible Delwood II Historic District. Build Alternative 2 would displace and remove the former residence at 4505 North I-35 and would require acquisition of about 0.04 acre, or approximately 20 percent, of the property parcel. Build Alternative 2 would displace and remove the former residence at 4503 North I-35 and would require acquisition of about 0.04 acre, or approximately 12 percent, of the property parcel.

Roberts House. The Roberts House at 3509 North I-35 was built c. 1930. The Roberts House and associated garage are eligible for NRHP listing under Criterion A in the area of Community Planning and Development at the local level of significance. Both build alternatives would displace and remove the Roberts House and an associated garage. TxDOT would acquire the full 0.25-acre Roberts House property parcel to provide a buffer for residential properties to the east of the Roberts House property.

### 3.9.1.2 Summary of Potential Impacts

Impacts to Section 4(f) parks, recreation areas, and historic properties are similar under both design alternatives; however, some minor differences occur. Impacts to Section 4(f) parks and recreation areas are similar under both build alternatives except for two minor differences in International Shores_3: The construction staging area under Build Alternative 2 spans 0.70 acre of International Shores_3, whereas this number is 0.60 acre under Modified Build Alternative 3. This amounts to a difference of 0.10 acre. An additional 0.01 acre of ROW is required from International Shores_3 under Build Alternative 2, whereas this number is 0.10 acre under Modified Build Alternative 3. This amounts to a difference of 0.09 acre between the two alternatives.

Impacts to historic properties would occur for both build alternatives. Both build alternatives would displace NRHP-eligible buildings and result in use of four historic properties—the former Dura Tune Service Station, EBBC Main Office (*Austin Chronicle*), the Haster House and the Roberts House. Build Alternative 2 would displace two additional historic properties in the Delwood II Historic District, (residences at 4505 and 4503 North I-35). Both build alternatives would require the same amount of temporary construction staging easements to the portions of Edward Rendon Park, Waller Beach Park, and the Butler Hike and Bike Trail, which are eligible for listing in the NRHP.

All other impacts to parks are similar between the two build alternatives. In the context of the overall project, Build Alternative 2 would impact two additional historic resources or approximately 0.08 acre (in the Delwood II Historic District).
3.9.1.3 Avoidance Alternatives

TXDOT examined alternatives and design concepts that would avoid use of some or all Section 4(f) property: No Build Alternative, Alternative 1, Redesignation of SH 130, Transit-Only, and TDM/ITS. TXDOT also evaluated whether use of Section 4(f) resources could be avoided by alignment shifts, design changes or other project modifications. TXDOT’s avoidance alternatives analysis is contained in the Individual Section 4(f) Evaluation at Appendix M. As explained in Appendix M, for both Build Alternative 2 and Modified Build Alternative 3, there is no feasible and prudent avoidance alternative to the use of land. Build Alternative 2 would use 13 Section 4(f) properties. Modified Build Alternative 3 would use 11 Section 4(f) properties. As explained in Appendix M, use/adverse effects cannot be avoided for any of the properties as a result of alignment shifts, design changes, or other project modifications. Design changes allowed the avoidance of Mt. Cavalry Cemetery and Palm Park.

3.9.1.4 Least Overall Harm Analysis

The analysis in Appendix M indicates that each of the reasonable build alternatives would use the Section 4(f) properties, and that there is no feasible and prudent alternative that would avoid use of the Section 4(f) properties. FHWA’s rules at 23 CFR §774.3(c) provide that if there is no feasible and prudent avoidance alternative, the agency may approve, from among the remaining alternatives that use Section 4(f) property, only the alternative that causes the least overall harm in light of the statute’s preservation purpose, which is determined by balancing the following factors:

- The ability to mitigate adverse impacts to the Section 4(f) property, including any measures resulting in benefits to the property.
- The relative severity of the remaining harm, after mitigation, to the protected activities, attributes, or features qualifying the Section 4(f) property for protection.
- The relative significance of the Section 4(f) property.
- The views of the official(s) with jurisdiction over the Section 4(f) property.
- The degree to which each alternative meets the purpose and need of the project.
- After reasonable mitigation, the magnitude of any adverse impacts to resources not protected by Section 4(f).
- Substantial differences in costs among the alternatives.

FHWA’s Section 4(f) Policy Paper explains that the first four factors relate to the net harm that each alternative would cause to Section 4(f) property, and that the remaining three factors enable the lead federal agency to take into account any substantial problem with any of the alternatives remaining under consideration on issues beyond Section 4(f).

Table 3.9-1 compares least overall harm evaluation factors between Build Alternative 2 and Modified Build Alternative 3.
### Table 3.9-1. Least Overall Harm Evaluation Factors

<table>
<thead>
<tr>
<th>Evaluation Factors</th>
<th>Build Alternative 2</th>
<th>Modified Build Alternative 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Section 4(f) properties that would have a Section 4(f) use</td>
<td>13</td>
<td>11</td>
</tr>
<tr>
<td>Section 4(f) properties that would be subject to a “use”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Butler Hike and Bike Trail (Park)</td>
<td>• Butler Hike and Bike Trail (Park)</td>
<td></td>
</tr>
<tr>
<td>• International Shores_3</td>
<td>• International Shores_3</td>
<td></td>
</tr>
<tr>
<td>• Waller Beach Park</td>
<td>• Waller Beach Park</td>
<td></td>
</tr>
<tr>
<td>• Edward Rendon Park</td>
<td>• Edward Rendon Park</td>
<td></td>
</tr>
<tr>
<td>• Norwood Park</td>
<td>• Norwood Park</td>
<td></td>
</tr>
<tr>
<td>• Lady Bird Lake</td>
<td>• Lady Bird Lake</td>
<td></td>
</tr>
<tr>
<td>• Town Lake Park System (Historic)</td>
<td>• Town Lake Park System (Historic)</td>
<td></td>
</tr>
<tr>
<td>• Dura Tune Service</td>
<td>• Dura Tune Service</td>
<td></td>
</tr>
<tr>
<td>• EBBC Main Office (Austin Chronicle)</td>
<td>• EBBC Main Office (Austin Chronicle)</td>
<td></td>
</tr>
<tr>
<td>• Haster House</td>
<td>• Haster House</td>
<td></td>
</tr>
<tr>
<td>• Delwood II Historic District</td>
<td>• Roberts House</td>
<td></td>
</tr>
<tr>
<td>• Residence at 4505 North I-35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Residence at 4503 North I-35</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| 1) Ability to mitigate adverse impacts | | |
| • Due to minimization during design, the main functionality of the Butler Hike and Bike (Park), Waller Beach Park, Edward Rendon Park, Norwood Park, and Lady Bird Lake properties would not be impaired, nor would the parks be entirely unusable because of the temporary loss of space. Examples of the minimization during design include the Lady Bird Lake Bridge construction sequencing and the | • Due to minimization during design, the main functionality of the Butler Hike and Bike (Park), Waller Beach Park, Edward Rendon Park, Norwood Park, and Lady Bird Lake properties would not be impaired, nor would the parks be entirely unusable because of the temporary loss of space. Examples of the minimization during design include the Lady Bird Lake Bridge construction sequencing and the |
Table 3.9-1. Least Overall Harm Evaluation Factors

<table>
<thead>
<tr>
<th>Evaluation Factors</th>
<th>Build Alternative 2</th>
<th>Modified Build Alternative 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>use of construction easements rather than acquiring ROW.</td>
<td>use of construction easements rather than acquiring ROW.</td>
</tr>
<tr>
<td></td>
<td>• For International Shores_3, a temporary construction easement would be utilized to minimize the amount of proposed ROW (0.01 acre).</td>
<td>• For International Shores_3, a temporary construction easement would be utilized to minimize the amount of proposed ROW (0.10 acre).</td>
</tr>
<tr>
<td></td>
<td>• The project has been designed to minimize harm to historic properties (design changes allowed the avoidance of Mt. Cavalry Cemetery and Palm Park). TxDOT has incorporated numerous design modifications to narrow the ROW section and reduce ROW acquisition.</td>
<td>• The project has been designed to minimize harm to historic properties (design changes allowed the avoidance of Mt. Cavalry Cemetery and Palm Park). TxDOT has incorporated numerous design modifications to narrow the ROW section and reduce ROW acquisition.</td>
</tr>
<tr>
<td>2) Relative severity of harm, after mitigation</td>
<td>• Butler Hike and Bike Trail (Park), Waller Beach Park, Edward Rendon Park, Norwood Park, and Lady Bird Lake would be temporarily used for construction staging areas.</td>
<td>• Butler Hike and Bike Trail (Park), Waller Beach Park, Edward Rendon Park, Norwood Park, and Lady Bird Lake would be temporarily used for construction staging areas.</td>
</tr>
<tr>
<td></td>
<td>• Waller Beach Park (1.20 acres) will become a permanent impact once construction is completed. This area will be used for maintenance of the I-35 bridge over Lady Bird Lake.</td>
<td>• Waller Beach Park (1.20 acres) will become a permanent impact once construction is completed. This area will be used for maintenance of the I-35 bridge over Lady Bird Lake.</td>
</tr>
<tr>
<td></td>
<td>• Butler Hike and Bike Trail would have 603.3 feet of permanent incorporation.</td>
<td>• Butler Hike and Bike Trail would have 651.5 feet of permanent incorporation.</td>
</tr>
<tr>
<td></td>
<td>• The NB I-35 sidewalk is 758 feet and the SB I-35 sidewalk is 695 feet. They will be temporarily impacted during construction.</td>
<td>• The NB I-35 sidewalk is 758 feet and the SB I-35 sidewalk is 695 feet. They will be temporarily impacted during construction.</td>
</tr>
<tr>
<td></td>
<td>• International Shores_3 would contain a construction area (0.70 acre) within the property. Also, additional ROW (0.01 acre) would be acquired.</td>
<td>• International Shores_3 would contain a construction area (0.60 acre) within the property. Also, additional ROW (0.10 acre) would be acquired.</td>
</tr>
</tbody>
</table>
### Table 3.9-1. Least Overall Harm Evaluation Factors

<table>
<thead>
<tr>
<th>Evaluation Factors</th>
<th>Build Alternative 2</th>
<th>Modified Build Alternative 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Six historic resources would be displaced: Dura Tune Service (0.19 acre), EBBC Building (0.26 acre), the Haster House (the full 0.18-acre parcel), 4505 North I-35 (0.04 acre), 4503 North I-35 (0.04 acre), and the Roberts House (the full 0.25-acre parcel) would require acquisition.</td>
<td>• Four historic resources would be displaced: Dura Tune Service (0.20 acre), EBBC Building (the entire 0.33-acre parcel), the Haster House (the full 0.18-acre parcel), and the Roberts House (the full 0.25-acre parcel) would require acquisition.</td>
</tr>
<tr>
<td></td>
<td>• Analysis is ongoing and coordination with OWJ and SHPO is in progress. Mitigation plans have not been determined and will be coordinated in an MUA or PA.</td>
<td>• Analysis is ongoing and coordination with OWJ and SHPO is in progress. Mitigation plans have not been determined and will be coordinated in an MUA or PA.</td>
</tr>
<tr>
<td>3) Relative significance of each Section 4(f) property</td>
<td>After consultation, all historic properties and parks are anticipated to have equal significance. All historic properties with Section 4(f) use are eligible for the NRHP at the local level of significance. While this region is known for outdoor recreation, historic sites and districts have been avoided through design. In coordination with the officials with jurisdiction, additional minimization would be used for both historic and park properties.</td>
<td>After consultation, all historic properties and parks are anticipated to have equal significance. All historic properties with Section 4(f) use are eligible for the NRHP at the local level of significance. While this region is known for outdoor recreation, historic sites and districts have been avoided through design. In coordination with the officials with jurisdiction, additional minimization would be used for both historic and park properties.</td>
</tr>
<tr>
<td>4) Views of officials with jurisdiction</td>
<td>Coordination would occur with SHPO for historic properties and COA PARD and the Trail Foundation for park properties. As of current, TxDOT and COA PARD have started the coordination process for parks and TPWD for the two Section 6(f) resources. TxDOT began the Section 106 process in October 2021 and has initiated consultation with SHPO regarding NRHP eligibility and project effects to historic properties. Resolution of NRHP eligibility</td>
<td>Coordination would occur with SHPO for historic properties and COA PARD and the Trail Foundation for park properties. As of current, TxDOT and COA PARD have started the coordination process for parks and TPWD for the two Section 6(f) resources. TxDOT began the Section 106 process in October 2021 and has initiated consultation with SHPO regarding NRHP eligibility and project effects to historic properties. SHPO has concurred with</td>
</tr>
</tbody>
</table>
### Table 3.9-1. Least Overall Harm Evaluation Factors

<table>
<thead>
<tr>
<th>Evaluation Factors</th>
<th>Build Alternative 2</th>
<th>Modified Build Alternative 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>5) Degree to which each Alternative meets the purpose and need for the project</td>
<td>Build Alternative 2 meets the purpose and need of the project providing a highway that meets current design standards, relieving congestion during peak period times, enhancing safety, improving operational efficiency, and creating a more dependable and consistent route for the traveling public including people who walk and bicycle, emergency responders, and transit.</td>
<td>Modified Build Alternative 3 is expected to meet the project purpose and need by providing a highway that meets current design standards, relieving congestion during peak period times, enhancing safety, improving operational efficiency, and creating a more dependable and consistent route for the traveling public including people who walk and bicycle, emergency responders, and transit. Modified Build Alternative 3 was refined to reflect elements of the community concepts but was derived from Build Alternative 3. Modified Build Alternative 3 better improves east-west connectivity by providing more vehicular, bicycle and pedestrian crossings (not including local enhancements) with 26 total over 23 for Build Alternative 2. Modified Build Alternative 3 would accommodate the CapMetro Blue Line at Riverside Drive.</td>
</tr>
<tr>
<td>6) Magnitude of adverse impacts to non-Section 4(f) properties after mitigation</td>
<td>• Community Facilities/Services: Displaced community facilities would include two FQHCs, CommUnityCare – David Powell Health Center and CommUnityCare – Hancock Walk-In Care; The Austin Veteran Affairs (VA) Center; Pathways Youth and Family Services, Texas State Independent Living Council,</td>
<td>• Community Facilities/Services: Displaced community facilities would include two FQHCs, CommUnityCare – David Powell Health Center and CommUnityCare – Hancock Walk-In Care; and one early childhood center, Escuelita de Alma. Several BN service locations currently provided by COA for those</td>
</tr>
</tbody>
</table>
### Table 3.9-1. Least Overall Harm Evaluation Factors

<table>
<thead>
<tr>
<th>Evaluation Factors</th>
<th>Build Alternative 2</th>
<th>Modified Build Alternative 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Green Doors, and three early childhood centers. Several BN service locations currently provided by COA for those experiencing homelessness would be displaced (not permanent facilities) including under existing bridges of I-35 at Airport Blvd. and 7th Street. Minor ROW acquisition would be required from other community facilities that would not be expected to change the function of the facilities. This alternative rates high for improving facilities for disabled populations.</td>
<td>experiencing homelessness would be displaced (not permanent facilities) including under existing bridges of I-35 at Airport Blvd. and 7th Street. Minor ROW acquisition would be required from other community facilities that would not be expected to change the function of the facilities. This alternative rates high for improving facilities for disabled populations.</td>
</tr>
<tr>
<td></td>
<td>• Displacements: It would be expected to displace 131 commercial properties and 145 residences (including multifamily units), and 15 vacant buildings.</td>
<td>• Displacements: It would be expected to displace 69 commercial properties and 26 residences (including multifamily units), and 12 vacant buildings.</td>
</tr>
<tr>
<td></td>
<td>• Environmental Justice (EJ): Of the 291 total displacements, 172 would be in EJ Census geographies.</td>
<td>• Environmental Justice (EJ): Of the 107 total displacements, 90 would be in EJ Census geographies.</td>
</tr>
<tr>
<td></td>
<td>• Noise Impacts: 95 receivers modeled for Build Alternative 2, 53 would be impacted, and eight noise barriers would be feasible and reasonable.</td>
<td>• Noise Impacts: Of the 90 receivers modeled for Modified Build Alternative 3, 51 would be impacted, and nine noise barriers would be feasible and reasonable.</td>
</tr>
</tbody>
</table>

7) Substantial differences in costs

|                | $4.45 Billion | $4.50 Billion |

---

1 Build Alternative 2 would use 13 Section 4(f) properties while Modified Build Alternative 3 would use 11 Section 4(f) properties. For Build Alternative 2, there would be temporary occupancy of five Section 4(f) properties and permanent impacts to eight Section 4(f) properties. Under Build Alternative 2, the eight Section 4(f) properties that would be displaced due to ROW acquisition are (1) Dura Tune Service Station building, (2) EBBC Main Office, (3) Haster House and a small shed, (4) 4505 North I-35 in the Delwood II Historic district, (5) 4503 North I-35 in the Delwood II Historic district, (6) the Roberts House, (7) Waller Beach Park, and (8) International Shores_3. In
contrast, Modified Build Alternative 3 would have temporary occupancy of five Section 4(f) properties and
permanent impacts to only six Section 4(f) properties. Under Modified Build Alternative 3, the six Section 4(f)
properties that would be displaced due to ROW acquisition are (1) Dura Tune Service Station building, (2) EBBC
Main Office, (3) Haster House and a small shed, (4) the Roberts House, (5) Waller Beach Park, and (6)
International Shores.

Mitigation development and coordination efforts are ongoing. A PA with THC is in development to address and
mitigate adverse effects to historic resources; revisions or updates to MUAs with COA (PARD, OWJ, and Trail
Foundation) are currently being drafted to mitigate park impacts. Because Modified Alternative 3 would use two
fewer historic properties than Build Alternative 2, and because it is preferable under Evaluation Factor 6 above
(magnitude of adverse impacts to non-Section 4(f) properties after mitigation), Modified Build Alternative 3 is
identified as the least overall harm alternative.

3.9.1.5 All Possible Planning to Minimize Harm or Mitigate Adverse Impacts to Section 4(f)
Property

Throughout the design process, TxDOT has limited ROW acquired from the Section 4(f) properties. As discussed
in the Individual Evaluation Avoidance Alternatives section in Appendix M, there are no feasible and prudent
avoidance alternatives. Since the two build alternatives (Build Alternative 2 and Modified Build Alternative 3)
have a Section 4(f) use of the resources that results in greater than a de minimis impact, an evaluation should
explain how each alternative incorporates all possible planning to minimize harm or mitigate adverse impacts or
effects to the Section 4(f) property. Every effort would be made to restore areas of temporary use after the facility
is constructed. This could include replacement of any displaced amenities (such as picnic tables) and replanting
non-invasive vegetation removed during construction. Additional details regarding how TxDOT plans to minimize
harm or mitigate adverse impacts or effects to each of the nine Section 4(f) properties are provided in Appendix
M.

3.9.2 Section 6(f) of the Land and Water Conservation Fund Act

Section 6(f) of the Land and Water Conservation Fund (LWCF) Act prohibits the conversion of property acquired
or developed with a grant under the LWCF Act, as allocated by the TPWD, to a non-recreational site without the
approval of the USDOI’s National Park Service (NPS). Section 6(f) directs NPS to ensure that replacement lands
of equal value, location, and usefulness are provided as conditions to such conversion. TPWD is the state liaison
for the LWCF program in Texas.

Two parks in the project area are Section 6(f)-protected resources and would be impacted by the proposed
project: Edward Rendon Park and Waller Beach. At Edward Rendon Park, the project would require approximately
0.7 acres for construction access for a duration of less than six months. At Waller Beach, TxDOT is proposing a
conversion of approximately 1.2 acres of land which are needed for construction staging and water access for
the duration of construction, or approximately six years. TxDOT is coordinating with TPWD regarding both
properties, as indicated in Appendix D of the DEIS.
3.9.2.1 Edward Rendon Park

A temporary non-conforming use is needed from Edward Rendon Park to construct the I-35 bridges over Lady Bird Lake, as well as to construct a separate bicycle and pedestrian bridge (NB I-35) to connect the existing Butler Hike and Bike Trail on the north bank of Lady Bird Lake to the boardwalk trail on the south bank of the lake. The proposed project would require a total of approximately 0.7 acre of the 73-acre Edward Rendon Park for staging large construction equipment such as cranes, drilling equipment, manlifts, and excavators. Equipment would use the space to access Lady Bird Lake and would also be parked in the allotted area. Estimated duration of time for this temporary non-conforming use is less than six months; however, the trail detour connecting Edward Rendon Park (east of I-35) to Waller Beach Park (west of I-35) would remain in place for the full duration of construction, or approximately six years. The area needed within Edward Rendon Park for this temporary non-conforming use for construction staging and access, is approximately 1 percent of the overall park parcel, so it is sufficiently small to restrict its impact on the remainder of this Section 6(f)-protected park. A temporary non-conforming use form has been submitted to TPWD for review and will be attached to the FEIS in Appendix M. If TPWD and the NPS approve TxDOT's request, then this less-than-six-month use will not be considered a conversion requiring acquisition of a replacement property.

3.9.2.1.1 Environmental Consequences

Build Alternative 2. The proposed construction staging area under Build Alternative 2 would result in permanent and temporary impacts to Edward Rendon Park. Permanent impacts would occur to six trees and other vegetation in the area; no permanent impacts to facilities or amenities would occur as a result of the staging area. Temporary impacts would occur to the picnic tables, benches, East Avenue, and the trail in the park during the six-month construction duration. Specifically, eight picnic tables are permanent fixtures and cannot be moved to another location outside the staging area; therefore, those picnic tables would need to be dismantled. East Avenue would remain open but the on-street parking and parking underneath the I-35 bridge would be removed. All the temporarily impacted facilities and amenities would be restored to their pre-construction condition following the six-month construction duration.

Portions of the construction staging area are not visible from the roadway; therefore, it is anticipated that motorists on I-35 and its frontage roads would not have any visual impacts as a result of the proposed staging area. However, it is likely that people who walk and bicycle utilizing the Butler Hike and Bike Trail in the park area would experience an impact to their visual environment due to the construction staging area.

Other indirect impacts under Build Alternative 2 include noise levels which are predicted to increase by 1 dB at the park from roadway traffic noise. A noise barrier would be feasible and reasonable at abating noise levels for the park and has been proposed for incorporation into the project.

In summary, the approximately 0.7 acre of temporary construction staging would constitute a temporary non-conforming use of Edward Rendon Park under Section 6(f). The main functionality of the overall park property would not be impaired, nor would the park be completely unusable as a result of the temporary loss of space. All impacts from the staging area would be temporary and would be restored to pre-construction conditions following the project’s approximate six-month construction duration.
**Modified Build Alternative 3.** Edward Rendon Park would experience a minor increase in noise levels (2-dB increase) under Modified Build Alternative 3 when compared to Build Alternative 2. A noise barrier would be feasible and reasonable at abating noise levels for the park under this alternative and has been proposed for incorporation into the project. Apart from this change, the impacts to Edward Rendon Park under Modified Build Alternative 3 would be identical to those under Build Alternative 2.

**3.0 Affected Environment and Environmental Consequences**

**3.9.2.1.2 Mitigation**

After the temporary non-conforming use is concluded (6 months), the park land would be restored for public recreation use without substantial residual impacts to the site. The detoured portions of the Butler Hike and Bike Trail and associated with the ADA parking spot would be maintained for the duration of construction and returned to their original location and condition after the completion of the proposed I-35 bridge at Lady Bird Lake (~6 years). Damage caused by construction equipment during construction to the existing trails would be repaired and all trails would be returned to their original condition after the full duration of construction (~6 years). All detour routes would be removed and grounds would be returned to their original condition unless COA requests that the detour trail routes remain in place.

Eight picnic tables would be replaced and returned to their original locations. Two recycle bins would be replaced and returned to their original locations. Disturbed ground would be regraded and revegetated in accordance with TxDOT standard specification and will comply with federal EO 13112 on Invasive Species. Prior to construction, a tree survey consistent with COA Section 3 of COA Environmental Criteria Manual for tree and natural area protection will be performed to gauge the health and quality of the trees proposed to be impacted and the contractor will be required to create a Tree Protection program consistent with Section 3 of COA Environmental Criteria Manual for tree and natural area protection. Additionally, the contractor would be required to provide additional restoration if they impact more trees than designated for removal as a part of this temporary use agreement.

East Avenue and parking along East Avenue would be temporarily closed for periods of time during construction. Any damage caused by construction equipment to East Avenue or parking along East Avenue would be repaired and returned to its original condition.

The ADA parking spot at the Butler Hike and Bike Trail at East Avenue located within Edward Rendon Park would be returned to its original location and any damage caused by construction equipment during construction would be repaired. The temporary ADA parking spot location on Nash Hernandez Sr. Road would be returned to its original condition (i.e., a traditional parking spot), unless COA requests that it remain as an ADA I-35 parking spot.

Milestones and incentives would be included within the contractor’s schedule to restore the ADA parking spot and the approximately 0.7-acre area in Edward Rendon Park within 2 months of the non-conforming temporary use (6 months), or within a seasonally appropriate 2-month window to ensure success of revegetation. Restoration of trails (i.e., closing of detours and reopening of the original trail locations) would follow the ultimate completion of bridge construction (~6 years).
3.9.2.2 Waller Beach

For both build alternatives, there would need to be a 1.20-acre temporary construction staging area for the duration of construction, approximately six years. Additionally, the same 1.20-acre area would be needed to be permanently acquired by TxDOT for future maintenance operations on the I-35 bridge. Coordination with TPWD has begun for the parkland conversion process and identifying a replacement property and will be attached in the FEIS in Appendix D.

3.9.2.2.1 Environmental Consequences

Build Alternative 2. Impacts to Waller Beach Park as a result of Build Alternative 2 would include approximately 1.20 acres of parkland required for a proposed construction staging area for the approximately six-year construction duration, and permanent acquisition of the 1.20 acres for future maintenance operations on the I-35 bridge. Temporary impacts include 0.2 acre or 958.2 linear feet for a detour of the Butler Hike and Bike Trail.

The proposed construction staging area would result in permanent and temporary impacts to Waller Beach Park. Permanent impacts would occur to one tree and other vegetation in the area and the boat ramp located under the I-35 bridge, which would be permanently closed. Temporary impacts would occur to one boat ramp, a picnic table, and a portion of the Butler Hike and Bike trail in the park. Additional permanent impacts would include two parking areas: one along East Avenue and a parking lot within the TxDOT ROW under the I-35 bridge, which is owned used by park users. Both parking areas would be removed during the six-year construction duration of the proposed project and would remain permanently removed following the completion of the project. Although the TxDOT-owned parking lot under I-35 is used by park users, because it exists within TxDOT ROW it would not be considered parkland that is provided protection under Section 4(f).

The existing boat ramp located to the west of the I-35 bridge over Lady Bird Lake would be used as a transition point between land and water during construction. One picnic table located in this area is a permanent fixture and cannot be moved to another location outside the staging area; therefore, the picnic table would need to be dismantled. East Avenue would remain open but the on-street parking and parking underneath the I-35 bridge would be removed. All temporarily impacted facilities and amenities would be restored to their pre-construction condition following the 6-year construction duration (subject to future maintenance operations on the I-35 bridge).

Portions of the construction staging area are not visible from the roadway. Therefore, it is anticipated that motorists on I-35 and its frontage roads would not have any visual impacts as a result of the proposed staging area. However, it is likely that people who walk and bicycle utilizing the Butler Hike and Bike Trail in the park area would experience an impact to their visual environment due to the construction staging area.

Other indirect impacts under Build Alternative 2 include noise levels, which are predicted to decrease by 1 dB at the park; however, the park would still be impacted by roadway traffic noise. A noise barrier would be feasible and reasonable at abating noise levels for the park and has been proposed for incorporation into the project.
In summary, TxDOT is proposing a permanent conversion of approximately 1.20 acres of land needed for construction staging and water access for the duration of construction, or approximately six years. Coordination is ongoing with TPWD for Edward Rendon Park and Waller Beach Park. Section 3.9 discusses Section 6(f) properties and the analysis of potential project impacts.

**Modified Build Alternative 3.** The proposed construction staging area for Modified Build Alternative 3 is identical to the area in Build Alternative 2. The impacts to Waller Beach Park under Modified Build Alternative 3 would be identical to those under Build Alternative 2.

### 3.9.2.2.2 Mitigation

TxDOT proposes to maintain the Butler Hike and Bike Trail connection from one side of I-35 to the other but move the portion of the trail under I-35 to a nearby location outside of the construction area.

TxDOT is working with COA to identify potential replacement properties that are at least equal in fair market value and reasonably equivalent in usefulness and location to compensate for the approximately 1.2-acre conversion of Waller Beach Park. When a suitable replacement property is identified it will need to be approved by TPWD and the NPS as part of a formal conversion proposal. If a potential replacement property is identified prior to the release of the FEIS, then it will be described in the FEIS. Formal NPS approval of the conversion proposal and replacement property cannot occur until after the ROD for this project (see 36 CFR §59.3(b)(7)).

### 3.9.3 Chapter 26 of the Texas Parks and Wildlife Code

In addition to Section 4(f), the use of public land designated and used prior to the arrangement of the program or project as a park, recreation area, wildlife refuge, or historic site requires compliance with Chapter 26 of the Texas Parks and Wildlife Code. Chapter 26 also requires a finding that there is no feasible and prudent alternative to the use or taking of the protected land, and that the project includes all reasonable planning to minimize harm. Chapter 26 requires that a public hearing be held prior to the approval of the use of land from these publicly-owned park or historic site properties. The six parks and recreational areas and one publicly-owned historic property protected by Section 4(f) and 6(f) within the proposed project are also subject to Chapter 26. TxDOT will conduct a public hearing for the DEIS, which will follow the requirements of Chapter 26 for the properties impacted by the Preferred Alternative.

Impacts to all of these resources and associated mitigation have been previously discussed for the build alternatives. For the no build alternative, there would be no impacts to Chapter 26 resources.

### 3.10 Water Resources

The project area is located within the Colorado River watershed. Topography within the project area gradually slopes toward Lady Bird Lake, an impoundment of the Colorado River that creates a long narrow lake. Due to the urbanization of the project area, the watershed in the project area has been significantly modified from its natural condition, with many of the drainage features and streams modified or rerouted into ditches and stormwater drainage systems.
Surface water within the project area consists of intermittent and perennial streams, and an impounded lake. No wetlands were identified during the delineation of WOTUS conducted on July 8, 2021, with a follow up field visit conducted on June 14, 2022, to assess a modification to the study area. Study areas for proposed Build Alternative 2 and Modified Build Alternative 3 are slightly different in shape and size. Both build alternatives share the same general alignment at proposed surface water crossings; therefore, both build alternatives would have similar impacts and require the same regulatory action under Section 404 and Section 401 of the Clean Water Act (CWA).

The project area lies outside of the Edwards Aquifer Regulatory Zones; therefore, TCEQ Edwards Aquifer Rules do not apply to the Preferred Alternatives.

Compensatory mitigation for the loss of streambed in the Colorado River is anticipated to be required for the Preferred Alternative. Upon selection of an alternative, compensatory mitigation would be completed in accordance with the Section 404 permitting process with the USACE. For the No Build Alternative, there would be no impact to water resources, including surface water, groundwater, wetlands, coastal resources, and floodplains.

### 3.10.1 Clean Water Act Section 404

Both build alternatives would involve regulated activity in jurisdictional waters and therefore would require authorization under Section 404. Table 3.10-1 shows the waters that are anticipated to be jurisdictional waters in which regulated activity is anticipated to take place. It also indicates whether the impacts are anticipated to be authorized under Section 404 by a non-reporting nationwide permit (NWP) (i.e., no pre-construction notification [PCN] required), or if it is anticipated that an NWP with PCN, Individual Standard Permit, letter of permission, or Regional General Permit (RGP) would be required. Figures showing waters within the study areas for both build alternatives are included in Appendix N.

**Table 3.10-1. Anticipated Jurisdictional Waters**

<table>
<thead>
<tr>
<th>Name of water body</th>
<th>Type of water body</th>
<th>Location of water body</th>
<th>Covered by non-reporting NWP under Section 404?</th>
<th>NWP with PCN, Individual standard permit, letter of permission, or RGP required under Section 404?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tannehill Branch (S-1)</td>
<td>Intermittent Stream</td>
<td>I-35 at Tannehill Branch</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Lady Bird Lake (OW-1)</td>
<td>Lake/Open Water</td>
<td>I-35 bridge at Lady Bird Lake</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Lady Bird Lake (OW-1)</td>
<td>Lake/Open Water</td>
<td>Proposed boat dock and ramp at Lady Bird Lake</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Table 3.10-1. Anticipated Jurisdictional Waters

<table>
<thead>
<tr>
<th>Name of water body</th>
<th>Type of water body</th>
<th>Location of water body</th>
<th>Covered by non-reporting NWP under Section 404?*</th>
<th>NWP with PCN, individual standard permit, letter of permission, or RGP required under Section 404?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harpers Branch (S-2)</td>
<td>Intermittent Stream</td>
<td>Proposed drainage outfall structure at Harpers Branch</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Colorado River (S-3)</td>
<td>Perennial Stream</td>
<td>Proposed drainage outfall structure at the Colorado River</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*Non-notifying NWPs would be required to comply with applicable Regional and General Conditions including those for cultural resources and threatened and endangered species.

The Colorado River (S-3) is a traditional navigable water (TNW). Lady Bird Lake (OW-1), is an impoundment of the Colorado River and is therefore a TNW. Because these features are TNWs, the USACE has jurisdiction over them. Tannehill Branch (S-1) is a relatively permanent water (RPW) that has a continuous surface connection to the Colorado River. Harpers Branch is a short segment of stream that has a continuous surface connection to Lady Bird Lake. Due to the Tannehill Branch (S-1) and Harpers Branch (S-2) continuous surface connection to a TNW, the USACE will likely assert jurisdiction over these features.

The proposed project includes the construction of a drainage outfall that would discharge into the Colorado River and route drainage flows to downstream areas. The discharges from the outfall would not change the habitat or flow regime of the Colorado River. Furthermore, the outfall as well as discharges from the outfall are required to comply with all federal and state regulations and will be permitted by TCEQ under the Texas Pollutant Discharge Elimination System (TPDES). Upon selection of an alternative, a PCN for NWP 58 for Utility Line Activities for Water and Other Substances would be submitted to the USACE for the proposed drainage outfall structure at the Colorado River.

Drainage outfall structures would be constructed at Harpers Branch and at the north and south ends of the I-35 bridge structure at Lady Bird Lake. These structures would meet the terms and conditions of an NWP 58 for Utility Line Activities for Water and Other Substances. The permittee must submit a PCN to the District Engineer prior to commencing the activity if (1) a section 10 permit is required; or (2) the discharge would result in the loss of greater than 1/10 acre of WOTUS. The loss of WOTUS at the drainage outfall structures would not exceed 1/10 acre and no Section 10 permit is required. Therefore, it is unlikely that notification of the USACE would be required as long as the NWP 58 General Conditions and any applicable Regional Conditions for the State of Texas are met, including restoration of any temporary impacts below the ordinary high water mark (OHWM). Build Alternative 2 and Modified Build Alternative 3 include a similar design of the proposed outfall structures and therefore would be covered by NWP 58.
A RGP 8 for Minor Structures would be submitted to the USACE for the construction of a proposed boat dock and ramp at Lady Bird Lake. A permanent boat dock and ramp would be considered a separate action from the proposed I-35 bridge structure by the USACE and therefore would be permitted using an RGP 8.

Activities required for crossings of WOTUS associated with the construction, expansion, modification, or improvement of linear transportation projects (e.g., roads, highways, railways, trails, airport runways, and taxiways) in WOTUS may be permitted under NWP 14 for Linear Transportation Projects. It is anticipated that the Preferred Alternative would meet the terms and conditions of NWP 14 for crossings at Tannehill Branch and Lady Bird Lake. The permittee must submit a PCN to the district engineer prior to commencing the activity if (1) the loss of WOTUS exceeds 0.1 acre; or (2) there is a discharge in a special aquatic site, including wetlands. The loss of WOTUS at each crossing would not exceed 0.1 acre and no fill would occur in a special aquatic site, including wetlands. Therefore, it is unlikely that notification of the USACE would be required as long as the NWP 14 General Conditions and any applicable Regional Conditions for the State of Texas are met, including restoration of any temporary impacts below the OHWM.

CFR, Title 33, §323.3 (c)(2) states that the placement of pilings in WOTUS that do not or would not have the effect of a discharge of fill material shall not require a Section 404 permit. Bridge piers that are adequately spaced so that they would not impede water flow or cause sedimentation would not have the effect of a discharge of fill. However, if construction of piers would require temporary fill (e.g., equipment within the OHWM), then a regulated activity would likely occur and require authorization from the USACE under Section 404 of the CWA.

The need for an individual standard permit under Section 404 is not anticipated. If it is later determined that an individual standard permit under Section 404 is needed, compliance with EPA’s Section 404(b)(1) Guidelines would be confirmed prior to submittal of the individual standard permit application.

3.10.2 Clean Water Act Section 401

For projects that require an NWP under Section 404 that is covered by TCEQ’s blanket 401 water quality certification, regardless of whether the NWP is non-reporting or requires the submission of a PCN, TxDOT complies with Section 401 of the CWA by implementing TCEQ conditions for NWPs. For projects that require authorization under an NWP under Section 404 that is not covered by TCEQ’s blanket Section 401 water quality certification, or under an Individual Standard Permit, Letter of Permission, or RGP under Section 404, TxDOT will coordinate the Section 401 water quality certification with TCEQ. TCEQ will either approve or deny the Section 401 water quality certification, or issue a waiver. The TCEQ Section 401 water quality certification decision must be submitted to the USACE before use of the NWP can be confirmed, or an Individual Standard Permit, Letter of Permission, or RGP decision can be made.

3.10.3 Executive Order 11990 Wetlands

Executive Order (EO) 11990 prohibits new construction in wetlands unless (1) there is no practicable alternative to such construction, and (2) the project includes all practicable measures to minimize harm to wetlands. No wetlands are found within either of the Build Alternatives’ project areas; therefore, EO 11990 does not apply.
Neither Build Alternative nor the No Build Alternative would have an impact on this resource category or subject matter.

### 3.10.4 Rivers and Harbors Act

The Build Alternatives would involve regulated activity in a navigable waterway and therefore would require authorization under Section 10 of the Rivers and Harbors Act (RHA). Table 3.10-2 shows the waters that are anticipated to be navigable waters in which regulated activity is anticipated to take place. It also indicates whether the impacts are anticipated to be authorized under Section 10 by a non-reporting NWP (i.e., no PCN required), or if it is anticipated that a NWP with PCN, individual standard permit under both Section 404 and Section 10, individual permit under Section 10, letter of permission, or RGP would be required.

#### Table 3.10-2. Anticipated Navigable Waters

<table>
<thead>
<tr>
<th>Name of water body</th>
<th>Type of water body</th>
<th>Location of water body</th>
<th>Covered by non-reporting NWP under Section 10?</th>
<th>NWP with PCN, individual standard permit, letter of permission, or RGP required under Section 10?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colorado River (S-3)</td>
<td>Perennial Stream</td>
<td>Proposed drainage outfall structure at the Colorado River</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Upon selection of an alternative, a PCN for NWP 58 for Utility Line Activities for Water and Other Substances would be submitted to the USACE for the proposed drainage outfall structures at the Colorado River.

### 3.10.5 Clean Water Act Section 303(d)

The proposed project is located within five linear miles of, is within the watershed of, and drains to, an impaired assessment unit under Section 303(d) of the federal CWA (2020 Section 303(d) list) as listed in Table 3.10-3.

#### Table 3.10-3. Section 303(d) Impaired Assessments in Project Area

<table>
<thead>
<tr>
<th>Watershed</th>
<th>Segment name</th>
<th>Segment number</th>
<th>Assessment unit number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colorado</td>
<td>Waller Creek</td>
<td>1429C</td>
<td>1429C_01</td>
</tr>
</tbody>
</table>

To date, TCEQ has not identified (through either a total maximum daily load or the review of projects under the TCEQ MOU) a need to implement control measures beyond those required by the Construction General Permit (CGP) on road construction projects. Therefore, compliance with the project’s CGP, along with coordination under the TCEQ MOU for certain transportation projects, collectively meets the need to address impaired waters during the environmental review process. As required by the CGP, the Preferred Alternative and associated activities would be implemented, operated, and maintained using BMPs to control the discharge of pollutants from the project site.
3.10.6 Clean Water Act Section 402

Since TPDES CGP authorization and compliance (and the associated documentation) occur outside of the environmental clearance process, compliance is ensured by the policies and procedures that govern the design and construction phases of the project. The Project Development Process Manual and the Plans, Specifications, and Estimates (PS&E) Preparation Manual require a Stormwater Pollution Prevention Plan (SWP) be included in the plans of all projects that disturb one or more acres. The Construction Contract Administration Manual requires that the appropriate CGP authorization documents (NOI or site notice) be completed, posted, and submitted, when required by the CGP, to TCEQ and the municipal separate storm sewer system (MS4) operator. It also requires that projects be inspected to ensure compliance with the CGP.

The PS&E Preparation Manual requires that all projects include Standard Specification Item 506 (Temporary Erosion, Sedimentation, and Environmental Controls), and the “Required Specification Checklists” require Special Provision 506-003 on all projects that need authorization under the CGP. These documents require the project contractor to comply with the CGP and SWP, and to complete the appropriate authorization documents.

3.10.7 Floodplains

This project is federally-funded and therefore is subject to EO 11988, Floodplain Management. Portions of the project would occur within the floodplain; however, the project would not involve a significant encroachment in the floodplain as defined by 23 CFR §650.105(q).

3.10.8 Wild and Scenic Rivers

Neither the Build Alternatives nor the No Build Alternative would have an impact on this resource category or subject matter.

3.10.9 Coastal Barrier Resources

The Coastal Barrier Resources Act does not apply to the proposed project.

3.10.10 Coastal Zone Management

The proposed project is not located within the Texas Coastal Management Plan boundary. Therefore, a consistency determination is not required.

3.10.11 Edwards Aquifer

The TCEQ Edwards Aquifer Rules do not apply to the proposed project. The EPA Edwards Aquifer MOU does not apply to the proposed project.

3.10.12 International Boundary and Water Commission

The proposed project does not cross or encroach upon the floodway of the International Boundary and Water Commission (IBWC) ROW or an IBWC flood control project.
3.10.13 Drinking Water Systems

In accordance with TxDOT’s Standard Specifications for Construction and Maintenance of Highways, Streets and Bridges (Item 103, Disposal of Wells), any drinking water wells would need to be properly removed and disposed of during construction of the project.

3.10.14 General Land Office Memorandum of Understanding

This MOU involves requirements for acquisition of a lease from the GLO when a transportation project requires new ROW or expansion of existing ROW over state-owned land covered by the MOU, defined as real property owned by the State of Texas and under the management of the GLO, including non-tidally influenced State-owned riverbeds and beds of navigable streams in the public domain, and state submerged lands. This MOU would not be applicable to this project as no state-owned riverbeds or state-owned navigable streams are involved.

3.11 Biological Resources

3.11.1 Vegetation

3.11.1.1 Existing Conditions

The proposed project traverses highly urbanized areas of COA where there are minimal undeveloped spaces. The project area of the both build alternatives is composed of the existing I-35 and associated frontage roads, driveway/existing easements/COA ROW, and proposed ROW. There is a large amount of overlap between the ROW required for the proposed alternatives. The differences in vegetation along the project area for each alternative ROW and the existing roadway ROWs were minimal and do not exhibit meaningful variations at this level of review. Only small areas of vegetation were not regularly maintained by mowing, pruning, or other vegetation management techniques along both build alternatives.

Specifically, the proposed project is located in the Northern Blackland Prairie area of the Texas Blackland Prairies Ecoregion, which is characterized by rolling to nearly level plains. The region was historically dominated by little bluestem (Schizachyrium scoparium), big bluestem (Andropogon gerardii), yellow Indiangrass (Sorghastrum nutans), and tall dropseed (Sporobolus asper), but in the more mesic sites, vegetation such as eastern gamma grass (Tripsacum dactyloides) and switchgrass (Panicum virgatum) were dominant (Griffith et al. 2007). The main areas of the region that were historically forested, and some continue to be forested today, are the riparian areas found along the streams. These areas included wooded species such as bur oak (Quercus macrocarpa), Shumard oak (Quercus shumardii), sugar hackberry ( Celtis laevigata), elm (Ulmus spp.), eastern cottonwood (Populus deltoides), and pecan (Carya illinoinensis). The annual precipitation for the region varies from 28 inches in the south to 42 inches in the north. Today, only a few small remnants of the natural prairie vegetation can be found in the region.

The total project area for each alternative consists of approximately 92 percent existing ROW (including driveway/existing easements/COA ROW) and, within that existing ROW, over 90 percent is already concrete pavement. The remaining project areas are highly developed with landscaped commercial properties or regularly mowed areas of existing ROW. Ornamental plants such as crepe myrtles (Lagerstroemia indica), Bradford pears
(Pyrus calleryana), live oaks (Quercus virginiana), Shumard oaks, and various shrubs were observed along the project area of both build alternatives. Bermuda grass (Cynodon dactylon) and St. Augustine grass (Stenotaphrum secundatum) are the most common herbaceous plants within the landscaped areas, but perennial rye (Lolium perenne), Johnsongrass (Sorghum halepense), and various wildflower species, such as Mexican hat (Ratibida columnifera), Coreopsis (Coreopsis sp.), and asters (Aster sp.), were observed in medians that had not been recently mowed. Four parks occur within the project area of each alternative within the vicinity of Lady Bird Lake: Norwood Park, International Shores, Waller Beach, and Edward Rendon Park. The park areas are characterized primarily by maintained herbaceous grasses and scattered mature oak and pecan. The Butler Hike and Bike Trail traverses the banks of Lady Bird Lake and crosses through the project area of both build alternatives beneath I-35. This trail is lined by mature oaks, pecans, black willows (Salix nigra), Chinaberry trees (Melia azedarach), and cottonwood trees with a thick mid-story of various shrubs such as yaupon (Ilex decidua), oak saplings, grape vines (Vitis sp.), greenbriar (Smilax sp.), Virginia creeper (Parthenocissus quinquefolia), and crossvine (Bignonia capreolata). Portions of this trail within the project areas are a boardwalk with no vegetation that is isolated over the lake. The Norwood Park has an “Off-leash Dog Area” that overlaps the project area of both build alternatives. This portion of the park has a barren understory and mature oak trees. The drainage outfall proposed downstream of Longhorn Dam for both build alternatives occurs at an area that is densely vegetated with riparian habitat.

A review of TPWD’s Ecological Mapping Systems (EMST) data shows that over 99 percent of the project areas are mapped as urban vegetation, with less than 1 percent mapped as a combination of open water, agriculture, Edwards Plateau savannah, woodland, and shrubland, riparian, and disturbed prairie vegetation. Limited field investigations were conducted to review the vegetative conditions. The investigations determined that the majority of the project areas are accurately mapped as urban with only a small portion of riparian areas occurring along the Hike and Bike Trail at Lady Bird Lake and at the proposed outfall structure location downstream of Longhorn Dam. Very small amounts (less than 0.1 acre each) of disturbed prairie and Edwards Plateau savannah, woodland, and shrublands were observed. The open water was confirmed to be where the project areas are bridged over Lady Bird Lake and no agricultural vegetation was observed in the project areas.

3.11.1.2 Environmental Consequences

3.11.1.2.1 Build Alternative 2

Construction of Build Alternative 2 would impact herbaceous, shrub, tree, and other plantings throughout the project area through site preparation activities. Clearing and grading would remove the existing vegetative cover and replace it with mostly impervious cover associated with travel lanes, entrance and exit ramps, and frontage roads. Open areas occurring within the proposed project area would likely be planted with herbaceous vegetation that would be routinely maintained by mowing.

A small portion of wooded areas associated with the parks would likely require some tree removal under Build Alternative 2 to allow for construction equipment and utility work within a drainage easement along the I-35 bridge over Lady Bird Lake. The other vegetated areas of the parks that are within the Build Alternative 2 ROW are currently maintained open areas that would be minimally impacted by proposed project construction. Tree removal would be necessary along the banks of the Colorado River for the necessary drainage outfall structure.
Build Alternative 2 would be approximately 53.9 acres more urban vegetation than Modified Build Alternative 3 and 0.1 acre more Edwards Plateau, Savannah, Woodland, and Shrubland due to the difference in size between the two study areas.

3.11.2.2 Modified Build Alternative 3

Construction of Modified Build Alternative 3 would impact herbaceous, shrub, tree, and other plantings throughout the project area through site preparation activities. Clearing and grading would remove the existing vegetative cover and replace it with mostly impervious cover associated with travel lanes, entrance and exit ramps, and frontage roads. Open areas occurring within the proposed project area would likely be planted with herbaceous vegetation that would be routinely maintained by mowing.

A small portion of the wooded areas associated with the parks would likely require some tree removal under Modified Build Alternative 3 to allow for construction equipment and utility work within a drainage easement along the I-35 bridge over Lady Bird Lake. The other vegetated areas of the parks that are within the Modified Build Alternative 3 ROW are currently maintained open areas that would be minimally impacted by proposed project construction. Tree removal would be necessary along the banks of the Colorado River for the necessary drainage outfall structure.

3.11.2.3 No Build Alternative

There would be no impact to vegetation as a result of the No Build Alternative. Existing vegetation within open areas of existing ROW would continue to be maintained by mowing, and more densely vegetated riparian areas would remain undisturbed (such as within the parks and along the running trail). Areas outside of the existing I-35 ROW would likely be maintained in their present state by existing landowners, with potential alterations resulting from future development activities.

3.11.2 Wildlife and Habitat

3.11.2.1 Existing Conditions

Native wildlife populations within central Travis County have been largely displaced by the development and urbanization of Austin, leaving remaining habitat areas highly fragmented. The majority of riparian areas, grasslands, and upland savannahs, which provide cover for wildlife, have been removed. However, several wildlife species have adapted to these urbanized conditions; therefore, the developed urban conditions provide habitat for many wildlife species throughout the proposed project area for either alternative.

Birds that use open habitats in the region include the northern mockingbird (*Mimus polyglottos*), red-winged blackbird (*Agelaius phoeniceus*), mourning dove (*Zenaida macroura*), and common grackle (*Quiscalus quiscula*). Birds commonly found within urban and residential areas include the northern cardinal (*Cardinalis cardinalis*), common grackle, northern mockingbird, European starling (*Sturnus vulgaris*), house sparrow (*Passer domesticus*), and blue jay (*Cyanocitta cristata*). The riparian habitat adjacent to Lady Bird Lake and the Colorado River provides cover, foraging, and perching habitat for many species, including neo-tropical migrants. The
existing bridges within the project areas provide potential nesting locations for various birds such as barn swallows (*Hirundo rustica*) and cliff swallows (*Petrochelidon pyrrhonota*).

Mammal species adapted to living in urban and fragmented habitats are likely to occur within the proposed project area of both build alternatives. These species include Virginia opossums (*Didelphis virginiana*), black rat (*Rattus rattus*), house mouse (*Mus musculus*), and gray squirrels (*Sciurus carolinensis*). The existing bridges within the project area of both build alternatives could provide suitable roosting habitat for species such as the Mexican free-tailed bat (*Tadarida brasiliensis*) or cave myotis bat (*Myotis velifer*). Because of the lack of suitable cover, the presence of larger mammals is likely to be limited within the proposed project areas. However, transient observations of nutria (*Myocastor coypus*), racoons (*Procyon lotor*), and skunk (*Mephitis mephitis*) might occur within the proposed project areas, primarily within the vicinity of Lady Bird Lake and the Colorado River.

Central Texas has a diverse assemblage of reptiles and amphibians. Turtles and lizards that could be present within the parks, riparian areas, and open water areas include the red-eared slider (*Trachemys scripta elegans*), snapping turtle (*Chelydra serpentina*), Texas spiny softshell turtle (*Apalone spinifera emoryi*), green anole (*Anolis carolinensis*), and five-lined skinks (*Eumeces fasciatus*). The Texas garter snake (*Thamnophis sirtalis*), Texas rat snake (*Elaphe obsoleta lindheimerii*), and western cottonmouth (*Agkistrodon piscivorus leucostoma*) are all common snakes that could occur within the proposed project areas. Amphibians that could be found within the project area of either alternative include the southern leopard frog (*Rana utricularia*), Gulf Coast toad (*Incilius valliceps*), and green tree frog (*Dryophytes cinerus*).

### 3.11.2.2 Environmental Consequences

#### 3.11.2.2.1 Build Alternative 2

Wildlife occurring within the proposed project area has adapted to the existing urban development of central Travis County. Construction of Build Alternative 2 would potentially impact wildlife through the removal of vegetation or structures that provide habitat for wildlife. Mobile species would be expected to leave the project area as construction activities are initiated. Less mobile species or species sheltering in vegetation or structures could be injured or killed by demolition activities, movement of heavy construction equipment, debris removal, or any required dewatering. The conversion of existing developed and landscaped conditions to roadway ROW would cause a loss of habitat and could cause further fragmentation of remaining habitat areas. Increased impervious cover may introduce additional roadway pollutants to which wildlife could be directly exposed or that might degrade the quality of habitat adjacent to the project area. Wildlife remaining in areas adjacent to the project area would be expected to adapt to the changed conditions (e.g., increased or decreased traffic movements and noise levels). Build Alternative 2 involves the addition of two bridges within the project area that could provide additional nesting locations for various migratory birds such as barn swallows and cliff swallows.

#### 3.11.2.2.2 Modified Build Alternative 3

Wildlife occurring within the proposed project area has adapted to the existing urban development of central Travis County. Construction of Modified Build Alternative 3 would potentially impact wildlife through the removal
of vegetation or structures that provide habitat for wildlife. Mobile species would be expected to leave the project area as construction activities are initiated. Less mobile species or species sheltering in vegetation or structures could be injured or killed by demolition activities, movement of heavy construction equipment, debris removal, or any required dewatering. The conversion of existing developed and landscaped conditions to roadway ROW would cause a loss of habitat and could cause further fragmentation of remaining habitat areas. Increased impervious cover may introduce additional roadway pollutants to which wildlife could be directly exposed or that might degrade the quality of habitat adjacent to the project area. Wildlife remaining in areas adjacent to the project area would be expected to adapt to the changed conditions (e.g., increased or decreased traffic movements and noise levels). Modified Build Alternative 3 involves the addition of two bridges within the project area that could provide additional nesting locations for various migratory birds such as barn swallows and cliff swallows.

3.11.2.2.3 No Build Alternative

There would be no impacts to wildlife or potential habitat as a result of the No Build Alternative. Open areas would continue to be regularly maintained and no riparian vegetation would be removed. The areas adjacent to the existing ROW would likely be maintained in their present state by existing landowners, with alterations potentially occurring as a result of future development. Future development could cause a reduction of habitat by the removal of trees or abandoned buildings or the development of vegetated areas.

3.11.3 Executive Order 13112 on Invasive Species

This project is subject to and will comply with federal EO 13112 on Invasive Species. TxDOT implements this EO on a programmatic basis through its Roadside Vegetation Management Manual and Landscape and Aesthetics Design Manual.

3.11.4 Executive Memorandum on Environmentally and Economically Beneficial Landscaping

This project is subject to and will comply with the Federal Executive Memorandum on Environmentally and Economically Beneficial Landscaping, effective April 26, 1994. TxDOT implements this Executive Memorandum on a programmatic basis through its Roadside Vegetation Management Manual and Landscape and Aesthetics Design Manual.

3.11.5 Migratory Bird Protections

This project will comply with applicable provisions of the Migratory Bird Treaty Act and Texas Parks and Wildlife Code Title 5, Subtitle B, Chapter 64, Birds. It is TxDOT policy to avoid removal and destruction of active bird nests except through federal or state-approved options. In addition, it is TxDOT policy, where appropriate and practicable, to:

- Use measures to prevent or discourage birds from building nests on man-made structures within portions of the project areas planned for construction, and
3.0 Affected Environment and Environmental Consequences

- Schedule vegetation-clearing activities outside the typical nesting season.

Additional preemptive and preventative measures that may be applied, where appropriate and practicable, are described in TxDOT's Guidance, “Avoiding Migratory Birds and Handling Potential Violations.”

3.11.6 Fish and Wildlife Coordination Act

The proposed project, regardless of alternative, is anticipated to require a NWP issued by the USACE. Compliance with the Fish and Wildlife Coordination Act will be accomplished by complying with the terms and conditions of the NWP.

3.11.7 Bald and Golden Eagle Protection Act of 2007

The Preferred Alternative is not within 660 feet of an active or inactive bald or golden eagle nest. Therefore, no coordination with USFWS is required. Although no bald or golden eagle nests were observed during the field investigations, there are recorded sightings of bald eagles along Lady Bird Lake and downstream of Longhorn Dam. Therefore, a nest survey would be conducted prior to the start of construction.

3.11.8 Magnuson-Stevens Fishery Conservation Management Act

The Essential Fish Habitat/Magnuson-Stevens Fishery Conservation and Management Act does not apply to the proposed project.

3.11.9 Marine Mammal Protection Act

The project area of either alternative for the proposed project does not contain suitable habitat for marine mammals.

3.11.10 Species of Greatest Conservation Need (SGCN)

3.11.10.1 Existing Conditions

The Species Analysis Spreadsheet (Appendix O) contains an additional table that includes state-listed SGCN that occur within Travis County, as compiled by TxDOT. The table indicates whether habitat for each species is present within the proposed project areas and whether there would be an effect/impact to any of the listed species from implementation of the proposed project. Eighteen SGCN could potentially occur within the proposed project areas: Woodhouse’s toad (Anaxyrus woodhousii), American eel (Anguilla rostrata), Guadalupe bass (Micropterus treculii), silverband shiner (Notropis shumardi), Texas shiner (Notropis amabilis), a caddisfly (Neotrichia juani), big brown bat (Eptesicus fuscus), cave myotis bat (Myotis velifer), eastern red bat (Lasiurus borealis), hoary bat (Lasiurus cinereus), swamp rabbit (Sylvilagus aquaticus), plateau spot-tailed earless lizard (Holbrookia lacerata), slender glass lizard (Ophisaurus attenuatus), Texas garter snake (Thamnophis sirtalis annectens), Texas fescue (Festuca versuta), and tree dodder (Cuscuta exaltata). Descriptions of the habitat requirements for these species included in TxDOT-compiled Travis County species list are in the Species Analysis Spreadsheet.
The Woodhouse’s toad, plateau spot-tailed earless lizard, Texas garter snake, and slender glass lizard could be found within the park areas adjacent to Lady Bird Lake. The American eel, Guadalupe bass, silverband shiner, Texas shiner, caddis fly, and Texas map turtle could all potentially occur in the Colorado River below Longhorn Dam. The American eel, caddis fly, and Texas map turtle could also potentially occur within Lady Bird Lake. The cave myotis bat could potentially use concrete culverts or bridges as roosting locations. The big brown bat, eastern red bat, hoary bat, and swamp rabbit could all potentially occur within the forested area adjacent to the proposed drainage outfall structure along the Colorado River. The Correll’s false dragonhead may occur along the banks of Lady Bird Lake and the Colorado River; Texas fescue may occur within the riparian area near the outfall downstream of Longhorn Dam; and the tree dodder could potentially occur on any of the tree species found within the project areas.

TPWD’s Natural Diversity Database (NDD) contains records of 36 SGCN species that could potentially occur within a 10-mile buffer of the project areas (see attached NDD map in Appendix O). No observations of any SGCN occurred during site visits within the project areas on properties in which right-of-entry has been granted.

3.11.10.2 Environmental Consequences

3.11.10.2.1 Build Alternative 2

Eighteen SGCN could be impacted by Build Alternative 2. Taxa-specific mitigation strategies would be employed to avoid, minimize, and/or compensate for potential impacts to SGCN. Should additional habitat be located during subsequent surveys of biological resources for the Preferred Alternative that will be evaluated for the FEIS, this discussion would be updated and revised as needed.

3.11.10.2.2 Modified Build Alternative 3

Eighteen SGCN could be impacted by Modified Build Alternative 3. Taxa-specific mitigation strategies would be employed to avoid, minimize, and/or compensate for potential impacts to SGCN. Should additional habitat be located during subsequent surveys of biological resources for the Preferred Alternative that will be evaluated for the FEIS, this discussion would be updated and revised as needed.

3.11.10.2.3 No Build Alternative

There would be no impacts to SGCNs from the No Build Alternative. Open areas within the existing I-35 ROW would continue to be maintained and the overgrown vegetated riparian areas within existing ROW would be expected to remain undisturbed. Areas adjacent to the existing ROW would be maintained in their present state by landowners, with habitat alterations potentially occurring because of future development.
3.11 Threatened, Endangered, and Candidate Species

3.11.1 Existing Conditions

3.11.1.1 Federally-Listed Species

The purpose of the Endangered Species Act of 1973 (ESA) is to protect threatened and endangered species and their critical habitat. “Endangered” is defined as a species that is in danger of extinction throughout all or a substantial portion of its range. “Threatened” is defined as a species that is likely to become endangered in the future throughout all or a substantial portion of its range. In addition to endangered and threatened species, the USFWS maintains a list of candidate species. According to the USFWS, candidate species are plants and animals for which the agency has sufficient information on the species’ biological status and threats to propose the species as endangered or threatened under the ESA, but for which development of a proposed listing regulation is precluded by other higher-priority listing activities. Section 4 of the ESA identifies five criteria for a species to be listed as threatened or endangered:

- The present or threatened destruction, modification, or curtailment of a species’ habitat or range;
- Overutilization for commercial, recreational, scientific, or educational purposes;
- Disease or predation;
- The inadequacy of existing regulatory mechanisms; or
- Other natural or manmade factors affecting the species’ continued existence.

The USFWS IPaC Official Species List has three threatened species—piping plover (*Charadrius melodus*), red knot (*Calidris canutus rufa*), and Jollyville Plateau salamander (*Eurycea tonkawae*); one proposed endangered species—Texas fatmucket (*Lampsilis bracteata*); one proposed threatened species—bracted twistflower (*Streptanthus bracteatus*); eight endangered species—golden-cheeked warbler (*Setophaga chrysoparia*), whooping crane (*Grus americana*), Austin blind salamander (*Eurycea waterlooensis*), Barton Springs salamander (*Eurycea sosorum*), Tooth Cave ground beetle (*Rhadine persephone*), Bee Creek Cave harvestman (*Texella reddelli*), Bone Cave harvestman (*Texella reyesi*), and Tooth Cave spider (*Tayshaneta myopica*); and one candidate species—monarch butterfly (*Danaus plexippus*) (USFWS 2022). Though it is not yet officially added to the USFWS IPaC system, in September of 2022, the USFWS announced a proposal to list the tricolored bat (*Perimyotis subflavus*) as endangered as well (USFWS, 2022b). Though it is not yet officially added to the USFWS IPaC system, in September of 2022, the USFWS announced a proposal to list the tricolored bat (*Perimyotis subflavus*) as endangered as well (USFWS, 2022b). Two of the bird species, piping plover and red knot, are conditionally listed on the IPaC website for proposed projects that are related to wind energy generation.

The proposed project is a highway project; therefore, these two threatened bird species were not considered in the threatened and endangered species review. No critical habitat was identified within the project area of either alternative or within the immediate vicinity of the project areas.

In addition to the USFWS Official Species List, a TxDOT-compiled Travis County species list (see *Species Analysis Spreadsheet* in Appendix O) includes three additional mollusk species and one fish species as potentially occurring within the project areas: the false spike (*Fusconaia mitchelli*), Texas pimpleback (*Cyclonaias petrina*), Texas fawnsfoot (*Truncilla macrodon*), and smalleye shiner (*Notropis buccula*). The false spike and Texas...
pimpleback are both federally-proposed endangered species, the Texas fawnsfoot is a federally-proposed threatened species, and the smalleye shiner is a federally-endangered species.

According to TPWD’s NDD, there are recorded occurrences of 10 federally- or state-listed threatened, endangered, or proposed species occurring within 10 miles of the project area of both build alternatives: Austin blind salamander, Barton Spring salamander, Jollyville Plateau salamander, Tooth Cave ground beetle, Bee Creek Cave harvestman, Bone Cave harvestman, golden-cheeked warbler, smalleye shiner, Texas fatmucket, and bracted twistflower. A habitat assessment of the proposed project areas determined that there is potential habitat for one proposed threatened species, four proposed endangered species, and one candidate species within both build alternatives: the Texas fawnsfoot, false spike, Texas fatmucket, Texas pimpleback, tricolored bat, and monarch butterfly, respectively. There is no habitat within the project area of either alternative for the other 12 species listed on the Official Species List or additional federal species from TxDOT/TPWD lists. A full explanation of the habitat suitability for each species can be found in the Species Analysis Form and Species Spreadsheet in Appendix O.

The Colorado River is within the known range of the false spike, Texas fatmucket, Texas pimpleback, and Texas fawnsfoot. A habitat reconnaissance survey was performed by TxDOT biologists in October 2021 within the location of the potential outfall into the Colorado River. TxDOT determined that these four mussel species were unlikely to occur in this location due to poor habitat quality (e.g. excessive growth of aquatic vegetation, large areas covered in decomposing vegetation and woody debris, and unstable substrate subject to frequent scour). TxDOT biologists conducted a due diligence presence/absence survey in September and November 2022 in accordance with the Texas Freshwater Mussel Survey Protocol (USFWS & TPWD 2021) to confirm that none of these species occurs in this area. The site-specific survey methodology was reviewed by TPWD and USFWS and approved on August 10, 2022. No live native freshwater mussels of any kind were found during these surveys. Since the false spike, Texas fatmucket, Texas pimpleback, and Texas fawnsfoot do not occur within the project area, no further action regarding these species is required.

Habitat for the tricolored bat was determined to exist along the riparian zones along Lady Bird Lake and at the location of the outfall downstream of Longhorn Dam. The mature trees with shaggy bark and open cavities could provide potential roosting locations for the bat, and any vegetation removals in these areas could disturb roosting bats. Any tree removal could potentially cause unintentional take of the species as well. A bat presence/absence survey should occur prior to the removal of any potential roosting locations and bat exclusion devices may be necessary.

The marginal habitat for the monarch butterfly determined within the project areas is highly urbanized and regularly maintained by mowing, but during the summer and spring months wildflowers are regularly observed. The monarch butterfly is anticipated to be proposed for listing under the ESA in Fiscal Year 2023. As the species is currently only a candidate species (USFWS determined in 2020 that listing is “warranted, but precluded”), no consultation with the USFWS is required at this time. TxDOT is a partner in the Nationwide Candidate Conservation Agreement with Assurances/Candidate Conservation Agreement for monarch butterfly on Energy and Transportation Lands (Agreement). The Agreement authorizes incidental take for all activities included in the proposed project should the monarch butterfly be listed as threatened or endangered.
3.11.11.2 State-listed Species

Chapters 68 and 88 of the TPW Code address TPWD’s responsibilities regarding state-listed threatened and endangered animal and plant species, respectively. The attached Species Analysis Spreadsheet evaluates all state and federally-listed threatened and endangered species for Travis County as compiled by TxDOT. The table includes a description of the habitat requirements for each species and indicates whether that habitat is present within the proposed project areas, and whether there would be an effect/impact to any of the listed species from implementation of the proposed project. A habitat assessment of the proposed project areas (see attached Species Analysis Spreadsheet in Appendix 0) determined that there is potential habitat for four state threatened species within both build alternatives: the Texas fawnsfoot, false spike, Texas fatmucket, and Texas pimpleback. Although the potential habitat is in the Colorado River, as detailed above, TxDOT determined that these four mussel species are not likely to be found at the proposed outfall location in the Colorado River due to the high currents, predominantly sandy substrates, and high potential for water temperature fluctuations from the releases of Longhorn Dam. A due diligence presence/absence survey was performed in fall 2022 to confirm whether there are occurrences of these species in this area. Potential implications for these species occurrences on the project will be updated accordingly prior to construction.

There is no habitat within the project area of either alternative for any other state threatened or endangered species. No NDD records exist for any state-listed threatened or endangered species within a 1.5-mile buffer of the project areas. Additionally, no observations of any state-listed species occurred during site visits within the project areas on properties in which right-of-entry was granted.

3.11.12 Environmental Consequences

3.11.11.2.1 Build Alternative 2

No impacts are anticipated to 13 of the 15 species listed or proposed for listing by USFWS as a result of Build Alternative 2. An analysis of the project area determined that of the total 48.3 acres of proposed ROW including 3.2 acres of temporary/permanent easements needed for Build Alternative 2, only approximately 20.1 acres are not already impervious cover and could therefore provide potential monarch butterfly habitat. The project may affect the monarch butterfly; however, the monarch is currently a candidate species and no consultation with USFWS is required at this time. As construction activities for this project are not anticipated to be completed prior to Fiscal Year 2024, when a listing decision for the species is anticipated, additional coordination may be required. The project should be reevaluated at that time to determine if further action is required if the species becomes proposed for federal listing. Two of the listed bird species (piping plover and red knot) were removed from consideration in this review because the proposed project is not related to wind energy generation. The tricolored bat may be affected by the proposed project, but at this time the species is only proposed for listing and no official protection is afforded by the USFWS. Though no consultation is required for this species at this time, a presence/absence survey will occur prior to any vegetation removal within the riparian areas of the proposed project and bat exclusion practices will be implemented if the species is determined to be present. The remaining federally-listed species would not be impacted by Build Alternative 2 due to the absence of suitable habitat. No state-listed threatened or endangered species would be impacted. No impacts or effects to any threatened or endangered species resulting from implementation of Build Alternative 2 are anticipated. Should
additional habitat be located during subsequent field surveys of biological resources for the Preferred Alternative that will be evaluated for the FEIS, this discussion would be updated and revised as needed.

3.11.11.2.2 Modified Build Alternative 3

No impacts are anticipated to 13 of the 15 species listed or proposed for listing by USFWS as a result of Modified Build Alternative 3. An analysis of the project area determined that of the 44.7 acres of proposed ROW including 3.2 acres of temporary/permanent easements only 18.8 acres are not already impervious cover and could potentially provide monarch habitat. The project may affect the monarch butterfly; however, the monarch is currently a candidate species and no consultation with USFWS is required at this time. As construction activities for this project are not anticipated to be completed prior to Fiscal Year 2024, when a listing decision for the species is anticipated, additional coordination may be required. The project should be reevaluated at that time to determine if further action is required if the species becomes proposed for federal listing. Two of the listed bird species (piping plover and red knot) were removed from consideration in this review because the proposed project is not related to wind energy generation. The tricolored bat may be affected by the proposed project, but at this time the species is only proposed for listing and no official protection is afforded by the USFWS. Though no consultation is required for this species at this time, a presence/absence survey will occur prior to any vegetation removal within the riparian areas of the proposed project and bat exclusion practices will be implemented if the species is determined to be present. The remaining federally-listed species would not be impacted by Modified Build Alternative 3 due to the absence of suitable habitat. No state-listed threatened or endangered species would be impacted. No impacts or effects to any threatened or endangered species resulting from implementation of Modified Build Alternative 3 are anticipated. Should additional habitat be located during subsequent field surveys of biological resources for the Preferred Alternative that will be evaluated for the FEIS, this discussion would be updated and revised prior to construction.

3.11.11.2.3 No Build Alternative

There would be no impacts to federally- or state-listed threatened or endangered species from the No Build Alternative. Open areas within the existing I-35 ROW would continue to be maintained and the overgrown vegetated riparian areas within existing ROW would be expected to remain undisturbed. Areas adjacent to the existing ROW would be maintained in their present state by landowners, with habitat alterations potentially occurring because of future development.

3.11.12 Texas Parks and Wildlife Coordination

In accordance with the MOU between TxDOT and TPWD, TPWD has provided a set of recommended BMPs in a document titled, “Beneficial Management Practices – Avoiding, Minimizing, and Mitigating Impacts of Transportation Projects on State Natural Resources,” which is available on TxDOT’s Natural Resources Toolkit at https://www.txdot.gov/inside-txdot/division/environmental/compliance-toolkits/natural-resources.html. The MOU provides that application of specific BMPs to individual projects will be determined by TxDOT at its discretion. The TPWD-recommended BMPs that will be applied to this project are indicated in the Form – Documentation of TPWD BMPs prepared for the project, which is included in Appendix D. Coordination with TPWD was initiated for this project on July 11, 2022, and is ongoing. In order to minimize impacts to the 18 SGCN that
may potentially occur within the proposed project areas, the following taxa-specific BMPs would be implemented for the Preferred Alternative:

- Aquatic Amphibian and Reptile BMPs;
- Bat BMPs;
- Bird BMPs;
- Fish BMPs;
- Terrestrial Amphibian and Reptile BMPs;
- Vegetation BMPs;
- Aquatic Invertebrate BMPs;
- Water Quality BMPs; and
- Rare Plant BMPs

In addition, the contractors will be notified of all potential occurrences of SGCNs within the project area and to avoid harming any of the species, whenever possible. Swallow nests will be checked prior to removal to ensure no bats are utilizing them as roosting locations.

3.12 Air Quality

The Clean Air Act (CAA) requires EPA to manage NAAQS for certain widespread criteria pollutants (particulate matter [PM], ozone, CO, sulfur dioxide, nitrogen dioxide, and lead) and determines whether areas do or do not meet the air quality standards, based on data collected from air quality monitors. Areas where the air quality falls short of the NAAQS are designated as “nonattainment areas” and, through the regional MPO, must address air pollution from on-road mobile sources through the transportation conformity process per CAA Section 176(c). The conformity process is designed to ensure that the total emissions projected in a nonattainment MPO’s long-range and short-range transportation plans are within the Motor Vehicle Emissions Budget established by the state and approved by EPA to protect public health for the NAAQS.

In addition to the CAA transportation conformity requirements for highway projects, NEPA establishes procedural requirements for “major federal actions significantly affecting the quality of the human environment” and FHWA/FTA uses guidance, rather than rule, to establish the requirements for the CO TAQA, construction emissions, and the MSAT analysis under NEPA.

NOTE: The air and noise evaluations were modeled with data developed for and consistent with the Capital Express North and South Projects. This data set consistency across all three projects provided opportunities for direct comparisons of impacts. Updated traffic data will be used to update the evaluations for air and noise in the FEIS for the preferred alternative.

3.12.1 Transportation Conformity

The proposed project is located within Travis County. The area is in attainment or unclassifiable for all NAAQS; therefore, the transportation conformity rules do not apply.
3.12.2 Carbon Monoxide Traffic Air Quality Analysis

Since the project would add capacity and the design year traffic volume is above 140,000 vpd (see Table 3.12-1), a CO TAQA is required for the proposed project.

**Table 3.12-1: Projected AADT**

<table>
<thead>
<tr>
<th>I-35 Sections</th>
<th>AADT 2030 (ETC)</th>
<th>AADT 2050 (Design)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 1: South of William Cannon Dr. Ramp to north of 32nd St. Ramps</td>
<td>181,550</td>
<td>238,300</td>
</tr>
<tr>
<td>Section 2: North of 32nd St. Ramps to north end of project</td>
<td>245,200</td>
<td>305,900</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>I-35 Sections: Frontage Roads</th>
<th>AADT 2030 (ETC)</th>
<th>AADT 2050 (Design)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 3: South of William Cannon Drive Ramp to north of Lady Bird Lake (south of Holly Street Off-Ramp)</td>
<td>78,900</td>
<td>103,550</td>
</tr>
<tr>
<td>Section 4: North of Lady Bird Lake (south of Holly Street Off-Ramp) to south of 32nd St. Off-Ramp</td>
<td>71,050</td>
<td>89,450</td>
</tr>
<tr>
<td>Section 5: South of 32nd St. Off Ramp to north of Airport Blvd. Ramps</td>
<td>48,400</td>
<td>60,200</td>
</tr>
<tr>
<td>Section 6: North of Airport Blvd. Ramps to south of US 290 INTX Ramps</td>
<td>84,400</td>
<td>104,500</td>
</tr>
</tbody>
</table>

A CO TAQA was conducted to assess whether the project would adversely affect local air quality by contributing to CO levels that exceed the 1-hour or 8-hour CO NAAQS. Using the CAL3QHC dispersion model, CO concentrations for the Build Alternatives were modeled for the estimated time of completion (ETC) and design years. The analysis factored in worst-case assumptions along areas of the proposed project with the highest design hour volume of vehicles and narrowest ROW for each segment and alternative. Additional analyses were conducted at selected intersections to assess CO emissions due to idling vehicles with the worst projected LOS.

See Appendix P, CO TAQA Technical Report, for the complete analysis. The CO TAQA analysis will be updated in the Final EIS for the Preferred Alternative.

3.12.2.1 Build Alternative 2

The analysis results indicate that CO concentrations under Build Alternative 2 would not be expected to exceed the national standard. Table 3.12-2 depicts the worst-case 1-hour and 8-hour CO concentration for each analyzed segment under Build Alternative 2.
3.12.2 Modified Build Alternative 3

The analysis results indicate that CO concentrations under Modified Build Alternative 3 would not be expected to exceed the national standard. Table 3.12-3 depicts the worst-case 1-hour and 8-hour CO concentration for each analyzed segment under Modified Build Alternative 3.

Table 3.12-3: Worst-Case 1-Hour and 8-Hour CO Concentrations by Section – Modified Build Alternative 3

<table>
<thead>
<tr>
<th>Modeled Section</th>
<th>Alternative</th>
<th>1-Hour CO ppm NAAQS: 35 ppm</th>
<th>8-Hour CO ppm NAAQS: 9 ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2030 (ETC)</td>
<td>% NAAQS</td>
</tr>
<tr>
<td>Segment 1</td>
<td>No Build</td>
<td>1.9</td>
<td>5.4</td>
</tr>
<tr>
<td></td>
<td>Alt 3 Mod</td>
<td>1.7</td>
<td>4.9</td>
</tr>
<tr>
<td>Segment 2</td>
<td>No Build</td>
<td>2.1</td>
<td>6.0</td>
</tr>
<tr>
<td></td>
<td>Alt 3 Mod</td>
<td>2.3</td>
<td>6.6</td>
</tr>
<tr>
<td>Segment 3</td>
<td>No Build</td>
<td>2.0</td>
<td>5.7</td>
</tr>
<tr>
<td></td>
<td>Alt 3 Mod</td>
<td>1.9</td>
<td>5.4</td>
</tr>
<tr>
<td>Segment 4</td>
<td>No Build</td>
<td>2.0</td>
<td>5.7</td>
</tr>
<tr>
<td></td>
<td>Alt 3 Mod</td>
<td>1.8</td>
<td>5.1</td>
</tr>
<tr>
<td>Segment 5</td>
<td>Alt 3 Mod</td>
<td>1.9</td>
<td>5.4</td>
</tr>
<tr>
<td>Segment 6</td>
<td>Alt 3 Mod</td>
<td>1.9</td>
<td>5.4</td>
</tr>
</tbody>
</table>

Source: CO TAQA Technical Report

ppm – parts per million
Table 3.12-3: Worst-Case 1-Hour and 8-Hour CO Concentrations by Section – Modified Build Alternative 3

<table>
<thead>
<tr>
<th>Modeled Section</th>
<th>Alternative</th>
<th>1-Hour CO ppm NAAQS: 35 ppm</th>
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</thead>
<tbody>
<tr>
<td></td>
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<td>Segment 2</td>
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<td>2.1</td>
<td>6.0</td>
</tr>
<tr>
<td></td>
<td>Alt 3 Mod</td>
<td>2.3</td>
<td>6.6</td>
</tr>
<tr>
<td>Segment 3</td>
<td>No Build</td>
<td>2.0</td>
<td>5.7</td>
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<tr>
<td></td>
<td>Alt 3 Mod</td>
<td>1.8</td>
<td>5.1</td>
</tr>
<tr>
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<td>2.0</td>
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<tr>
<td></td>
<td>Alt 3 Mod</td>
<td>1.8</td>
<td>5.1</td>
</tr>
<tr>
<td>Segment 5</td>
<td>Alt 3 Mod</td>
<td>1.8</td>
<td>5.1</td>
</tr>
<tr>
<td>Segment 6</td>
<td>Alt 3 Mod</td>
<td>1.8</td>
<td>5.1</td>
</tr>
</tbody>
</table>

Source: CO TAQA Technical Report

ppm – parts per million

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1. 3.12.2.3 No Build Alternative

The No Build Alternative would not result in improvements to I-35 in the proposed project area; therefore, the existing condition of these facilities would remain the same and the AADT would continue to increase over time. Emissions would likely be lower than present levels in the design year as a result of EPA regulations for vehicle engines and fuels along with associated fleet turnover.

2. 3.12.3 Mobile Source Air Toxics Analysis (MSAT)

Controlling air toxic emissions became a national priority with the passage of the CAA Amendments of 1990, whereby Congress mandated that the EPA regulate 188 air toxics, also known as hazardous air pollutants. The EPA has assessed this expansive list in its latest rule on the Control of Hazardous Air Pollutants from Mobile Sources (Federal Register, Vol. 72, No. 37, page 8430, February 26, 2007), and identified a group of 93 compounds emitted from mobile sources that are listed in its Integrated Risk Information System (IRIS). In addition, EPA identified nine compounds with significant contributions from mobile sources that are among the national and regional-scale cancer risk drivers from its 2011 National Air Toxics Assessment. These are 1,3-

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6. The EPA has a program titled the IRIS that characterizes the health hazards of chemicals found in the environment, including MSAT. IRIS has a process (https://www.epa.gov/iris/basic-information-about-integrated-risk-information-system) for developing these assessments, which allows for the for the public and scientific community to submit relevant information for inclusion in them.

7. See: https://www.epa.gov/national-air-toxics-assessment
butadiene, acetaldehyde, acrolein, benzene, diesel particulate matter (DPM), ethylbenzene, formaldehyde, naphthalene, and polycyclic organic matter. While FHWA considers these the priority MSAT, the list is subject to change and may be adjusted in consideration of future EPA rules.

For each alternative, the amount of MSATs emitted would be proportional to the VMT, assuming that other variables, such as fleet mix, are the same for each alternative. The VMT estimated for each of the Build Alternatives is slightly higher than that for the No Build Alternative because the additional roadway capacity increases the efficiency of the roadway and attracts rerouted trips from elsewhere in the transportation network. Although information is incomplete or unavailable to evaluate project-specific MSAT health impacts, regardless of the Build Alternative chosen, emissions would likely be lower than present levels in the design year as a result of EPA regulations for vehicle engines and fuels. Based on regulations now in effect, overall MSAT emissions will decline significantly over the next several decades. FHWA estimates that even if VMT increases by 45 percent from 2010 to 2050 as forecast, a combined reduction of 91 percent in the total annual emissions for the priority MSAT is projected for the same time period. This will reduce both the background level of MSATs and the possibility of even minor MSAT emissions from the proposed project. See Appendix P, Qualitative MSAT Disclosure, for the complete qualitative MSAT disclosure. The calculated MSAT emissions are based on emission rates per VMT. Since both build alternatives follow the same alignment and are designed to manage the same vehicle capacity, the difference in their MSAT results is not expected to be discernible.

A quantitative MSAT analysis will be conducted during preparation of the Final EIS to calculate total MSATs for the Preferred Build Alternative and No Build Alternative. During this analysis, MSAT emissions will be analyzed for the following scenarios:

- Base, No Build (Existing): 2021
- Interim, No Build Alternative: 2030
- Interim, Preferred Build Alternative: 2030
- Design, No Build Alternative: 2050
- Design, Preferred Build Alternative: 2050

3.12.4 Construction Emissions

During the construction phase of this project, temporary increases in PM and MSAT emissions may occur from construction activities. The primary construction-related emissions of PM are fugitive dust from site preparation, and the primary construction-related emissions of MSAT are DPM from diesel-powered construction equipment and vehicles.

The potential impacts of PM emissions would be minimized by using fugitive dust control measures contained in standard specifications, as appropriate. The Texas Emissions Reduction Plan (TERP) provides financial incentives to reduce emissions from vehicles and equipment. TxDOT encourages construction contractors to use...
this and other local and federal incentive programs to the fullest extent possible to minimize diesel emissions. Information about the TERP program can be found on TCEQ’s TERP website.\(^8\)

Considering the temporary and transient nature of construction-related emissions, the use of fugitive dust control measures, the encouragement of the use of TERP, and compliance with applicable regulatory requirements, it is not anticipated that emissions from construction of this project would have any significant impact on air quality in the area.

### 3.13 Hazardous Materials

#### 3.13.1 Existing Conditions

An ISA form was completed documenting hazardous materials within the project corridor. Below is a summary of these conditions and an analysis of impacts. Documentation of the ISA is maintained in the Austin District project files. See Appendix Q for the Hazardous Materials ISA report.

The ISA included a visual survey of the existing ROW and surrounding area, and research into existing and previous land uses to identify possible hazardous materials within the project limits. The existing use of the project limits and surrounding area is transportation ROW and a combination of commercial, residential, and institutional land uses, based on the site survey.

Aerial photographs from years 1940, 1953, 1966, 1973, 1980, 1988, 1996, 2004, and 2012 were also reviewed. Topographic maps reviewed include:

- Austin, TX 1:125,000—Years 1897 and 1910
- Oak Hill, TX 1:24,000—Years 1966, photorevised 1973, 1986, and 2013
- Montopolis, TX 1:24,000—Years 1966, photorevised 1973, 1986, and 2013
- Buda, TX 1:24,000—Years 1955, 1981

The visual survey of the project area was conducted August 1 and August 30, 2021, and focused on the roadway, proposed project ROW, and adjacent properties as viewed from the existing public ROW.

#### 3.13.1.1 Review of Federal, State, and Supplemental Databases

A regulatory database search was performed by GeoSearch on August 8, 2021, to facilitate review of areas where new ROW would be required for design changes. The 2021 GeoSearch report identified a total of 1,207 records within the search radii prescribed by ASTM (American Society for Testing and Materials) E 1527-13. Of those records in the GeoSearch report, 28 sites (primarily Petroleum Storage Tanks [PST], Leaking Petroleum Storage Tanks [LPST] and Voluntary Cleanup Program [VCP] sites) were determined to be moderate- or high-risk

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\(^8\) [https://www.tceq.texas.gov/airquality/terp](https://www.tceq.texas.gov/airquality/terp)
sites, or sites that have the potential to impact the project corridor. This determination was based on the type of
database listing, the information provided in the database report, and the distance and direction of the listing to
the corridor. These sites are described in the Hazardous Materials ISA, Appendix Q, Table 1.

Additionally, six orphan or unlocatable sites were identified in the database search.

3.13.2 Environmental Consequences

3.13.2.1 Build Alternative 2

The I-35 Capital Express Central Project would require the acquisition of approximately 45.2 acres of new ROW
for Build Alternative 2. This includes acquisition of residential and commercial properties. In addition to small
slivers of property along the existing facility, the acreage also includes acquisition of 131 commercial businesses
and 145 residential units under Build Alternative 2.

The databases searched included federal, state, local, and tribal databases as defined by ASTM E 1527-13.
Further analysis of potential sites of concern relative to project design/excavation and ROW requirements would
be considered prior to construction. The depth to groundwater will be determined for locations where
construction is proposed to occur to determine the likelihood of reaching groundwater and to determine whether
contaminants held in the groundwater would be likely to impact construction.

Within the project limits, there are 27 facilities with 25 registered petroleum storage tanks (RPST) sites that
would likely be displaced as part of the project. Removal and disposition of tank systems would be addressed
during the ROW negotiation and acquisition phase, in accordance with established procedures and regulatory
requirements. RPST files would be reviewed to confirm tank system status prior to initiating removal activities.

Fifteen of the registered PST facilities are also listed as LPST sites. An additional 20 LPST sites within the
proposed project have the potential to impact the project corridor since planned ROW acquisition or project work
is planned for these sites. Based on the TCEQ priority and status indicated in the LPST database records search,
environmental impacts from LPSTs were limited to minor soil contamination, or groundwater contamination with
no receptors impacted. TCEQ issued the final concurrence for the majority of these listings and the cases are
closed. The exception is Map ID 3 (LPST 120765) located at 3735 North I-35, since the LPST case is still ongoing.
A summary table and map showing the location of the sites is provided in the Hazardous Materials ISA, Appendix
Q, Figure 4 and Table 1.

Since displacements and tank system removal would be required, excavation would be greater than three feet,
and storm sewers or utility adjustments would be required, the LPST files for facilities adjacent to the project
limits were also reviewed. LPST sites within the proposed project area have the potential to impact the project
corridor. Additional investigation would be performed as needed to confirm if contamination would be
encountered during construction. If contamination was confirmed, then TxDOT would develop appropriate soils
and/or groundwater management plans for activities within these areas.

At this time, utility adjustment requirements have not been determined. There is a potential for contamination
to be encountered during utility adjustments. Coordination with utility companies concerning this contamination
would be addressed during the utility coordination stage of project development. It is anticipated that all utility adjustments or relocation would be completed prior to construction.

The proposed project would include the excavation and construction of pier and structure support locations. Excavation in these areas may increase the potential of encountering hazardous materials contamination during construction. Additional subsurface environmental investigation services would need to be coordinated by TxDOT ENV Hazardous Materials Group to determine whether possible contamination might be encountered during construction in the vicinity of the 25 medium and high-risk sites identified in the ISA. If hazardous constituents were confirmed, then appropriate soils and/or groundwater management plans for activities within those areas would be developed.

For any of the sites located adjacent to or within the footprint of the Preferred Alternative, impacts associated with hazardous materials would most likely occur during construction and would be related to activities within or near existing hazardous materials sites. However, risks would be potentially minimized by coordinating with TxDOT ENV Hazardous Materials Group to conduct additional assessment for the moderate and high-risk sites identified in the ISA Form. Additional assessment could include regulatory file reviews, Phase 1 Environmental Site Assessments, and/or subsurface investigations, as appropriate to resolve or address hazardous materials concerns, considering project design and ROW requirements relative to the sites. Additional assessment would be conducted prior to construction in accordance with TxDOT guidance.

### 3.13.2.1.1 Possible Asbestos-Containing Materials

The project includes the demolition of building and bridge structures. These structures may contain asbestos-containing materials. Asbestos inspections, specification, notification, license, accreditation, abatement, and disposal, as applicable, would comply with federal and state regulations. Asbestos issues would be addressed prior to demolition or any other asbestos-disturbing activity.

### 3.13.2.1.2 Other Sites of Concern

The RRC GIS maps show natural gas transmission lines and pipelines for non-highly volatile liquid (HVL) products (liquid products that are not highly volatile) intersecting the Build Alternatives as well as numerous liquid propane tank locations. During ROW negotiation, determinations would be required to make necessary adjustments and/or relocate pipelines. Location and depth of pipelines that would remain in place would need to be marked on the ground (in the field) prior to construction activities to prevent accidental damage to or rupture of the pipelines. TxDOT intends to take proper precautions to avoid impacts related to petroleum pipelines.

### 3.13.2.2 Modified Build Alternative 3

The I-35 Capital Express Central Project would require the acquisition of approximately 41.7 acres for Modified Build Alternative 3. This includes acquisition of residential and commercial properties. In addition to small slivers of property along the existing facility, the acreage also includes acquisition of 69 commercial properties and 26 residential properties under Modified Build Alternative 3.
Modified Build Alternative 3 has the same number of potential sites of concern relative to project design/excavation and ROW requirements as Build Alternative 2.

3.13.2.3 No Build Alternative

With the No Build Alternative, no construction or property acquisition associated with the project would occur; therefore, there would be no potential to encounter hazardous materials.

3.14 Traffic Noise

A traffic noise analysis was conducted for the proposed project in accordance with TxDOT’s (FHWA approved) Traffic Noise Policy (2019). The Traffic Noise Technical Report (2022), which includes details about the analysis, is available in Appendix R.

Sound from highway traffic is generated primarily from vehicle tires, engines, and exhaust. It is commonly measured in decibels and is expressed as “dB.”

Sound occurs over a wide range of frequencies. However, not all frequencies are detectable by the human ear; therefore, an adjustment is made to the high and low frequencies to approximate the way an average person hears traffic sounds. This adjustment is called A-weighting and is expressed as “dB(A).”

Also, because traffic sound levels are never constant due to the changing number, type, and speed of vehicles, a single value is used to represent the average or equivalent sound level and is expressed as “Leq.”

The traffic noise analysis process includes the following elements:

- Identification of land use activity areas that might be impacted by traffic noise.
- Determination of existing noise levels.
- Prediction of future noise levels.
- Identification of possible noise impacts.
- Consideration and evaluation of measures to reduce noise impacts.

The FHWA has established the following Noise Abatement Criteria (NAC), shown in Table 3.14-1, for various land use activity areas that are used as one of two means to determine when a traffic noise impact would occur.

<table>
<thead>
<tr>
<th>Activity Category</th>
<th>FHWA dB(A) Leq</th>
<th>Activity Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>57 (exterior)</td>
<td>Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.</td>
</tr>
</tbody>
</table>

Table 3.14-1. FHWA Noise Abatement Criteria (NAC)
### Table 3.14-1. FHWA Noise Abatement Criteria (NAC)

<table>
<thead>
<tr>
<th>Activity Category</th>
<th>FHWA dB(A) Leq</th>
<th>Activity Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>67 (exterior)</td>
<td>Residential</td>
</tr>
<tr>
<td>C</td>
<td>67 (exterior)</td>
<td>Active sports areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or non-profit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.</td>
</tr>
<tr>
<td>D</td>
<td>52 (interior)</td>
<td>Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.</td>
</tr>
<tr>
<td>E</td>
<td>72 (exterior)</td>
<td>Hotels, motels, offices, restaurants/bars, and other developed lands, properties or activities not included in A-D or F.</td>
</tr>
<tr>
<td>F</td>
<td>--</td>
<td>Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing.</td>
</tr>
<tr>
<td>G</td>
<td>--</td>
<td>Undeveloped lands that are not permitted.</td>
</tr>
</tbody>
</table>

1. A noise impact occurs when either the absolute or relative criterion is met:

2. **Absolute Criterion:** The predicted noise level at the receiver approaches, equals, or exceeds the NAC. “Approach” is defined as one dB(A) below the NAC. For example, a noise impact would occur at a Category B residence if the noise level is predicted to be 66 dB(A) or above.

3. **Relative Criterion:** The predicted noise level substantially exceeds the existing noise level at a receiver even though the predicted noise level does not approach, equal, or exceed the NAC. “Substantially exceeds” is defined as more than 10 dB(A). For example: a noise impact would occur at a Category B residence if the existing level is 54 dB(A) and the predicted level is 65 dB(A).

The FHWA traffic noise modeling software (TNM 2.5) was used to calculate existing and predicted traffic noise levels. The model primarily considers the number, type, and speed of vehicles; highway alignment and grade; cuts, fills, and natural berms; surrounding terrain features; and the locations of activity areas likely to be impacted by the associated traffic noise.

NOTE: The air and noise evaluations were modeled with data developed for and consistent with CapEx-North and South Projects. This data set consistency across all three projects provided opportunities for direct comparisons of impacts. Updated traffic data will be used to update the evaluations for air and noise in the FEIS for the preferred alternative.
3.14.1 Existing Conditions

The proposed project lies within an existing developed urban corridor in COA. Land uses adjacent to the project area include single-family and multifamily residences (NAC B); schools, places of worship, cemeteries, public parks/recreation, public/non-profit institutional facilities and medical facilities (NAC C and D), and restaurants/offices with outside seating and hotels with swimming pools (NAC E). Existing and predicted traffic noise levels were modeled at representative land use activity areas (receptors) adjacent to the project alternatives that might be impacted by traffic noise and would potentially benefit from feasible and reasonable noise abatement. New construction and permitted developments (prior to May 2022) available from COA Development Services Department are also included in the analysis.

A validation study was performed in order to ensure that traffic noise is the main source of noise and to verify that the existing models accurately predict existing traffic noise based on current conditions. Model validation compares field-collected sound level measurements to traffic noise levels calculated in an existing condition model that used field-collected traffic parameters. Differences between the measured and calculated levels for this project were within the +/- 3 dB(A) tolerance allowed by FHWA. Therefore, the existing noise models are considered validated for this project.

3.14.2 Environmental Consequences

Noise impacts associated with each build alternative are discussed below. Noise abatement measures were considered and analyzed for each impacted receptor location in accordance with TxDOT’s (FHWA approved) Traffic Noise Policy (2019). Abatement measures, typically noise barriers, must provide a minimum noise reduction, or benefit, at or above the threshold of 5 dB(A). A barrier is not acoustically feasible unless it reduces noise levels by at least 5 dB(A) at greater than 50 percent of first-row impacted receptors. To be reasonable, the barrier must not exceed the cost reasonableness allowance of 1,500 square feet per benefited receptor and must meet the noise reduction design goal of 7 dB(A) for at least one receptor. In addition, an abatement measure may not be reasonable if the construction costs are unreasonably high (defined as greater than $105,000 per benefited receiver) due to site constraints, as determined through an alternate barrier cost assessment.

3.14.2.1 Build Alternative 2

The traffic noise analysis determined that out of 95 representative receivers modeled for Build Alternative 2, 53 were predicted to have noise levels that approach or exceed the FHWA NAC; therefore, Build Alternative 2 would result in traffic noise impacts.

Eight noise barriers were found to be both reasonable and feasible for Build Alternative 2 and are recommended for incorporation into the proposed project. See Table 3.14-2 for details of the proposed noise barriers, including alternate barrier costs.

Barrier 1/Cherrywood Neighborhood (R19, R20, and R93): These receivers represent the Cherrywood Neighborhood on the east side of I-35 between 38½ Street and 30th Street. Based on preliminary calculations,
a segmented barrier 2,545 feet in total length and 20 feet in height, that was determined by the engineering team to be constructable, would reduce noise levels by at least 5 dB(A) for 15 of the 18 impacted, first-row receivers and reduce the noise level at one or more receivers by at least 7 dB(A). The total cost of the barrier is $1,933,598, which includes $1,781,500 for the standard barrier cost and $152,098 for the alternate barrier costs. With 36 benefitted receivers, the cost of this barrier per benefitted receiver is $53,711. Therefore, this noise barrier is reasonable using the alternate barrier cost assessment and is proposed for incorporation into the proposed project.

**Barrier 2/Aura University Park Apartments (R21):** This receiver represents the Aura University Park Apartments on the west side of I-35 between 32nd Street and Duncan Lane. Based on preliminary calculations, a barrier segmented into 4 parts to maintain sidewalk access at 434 feet in length and 18 feet in height, that was determined by the engineering team to be constructable, would reduce noise levels by at least 5 dB(A) for 18 of the 21 impacted, first-row receivers and reduce the noise level at one or more receivers by at least 7 dB(A). The total cost of the barrier is $323,404, which includes $273,420 for the standard barrier cost and $49,984 for the alternate barrier costs. With 18 benefitted receivers, the cost of this barrier per benefitted receiver is $17,967. Therefore, this noise barrier is reasonable using the alternate barrier cost assessment and is proposed for incorporation into the proposed project.

**Barrier 3/AMLI Eastside Apartments (R42):** This receiver represents the AMLI Eastside Apartments on the east side of I-35 between 9th Street and 10th Street. Based on preliminary calculations, a barrier 201 feet in length and 20 feet in height, that was determined by the engineering team to be constructable, would reduce noise levels by at least 5 dB(A) for 7 of the 10 impacted, first-row receivers and reduce the noise level at one or more receivers by at least 7 dB(A). The total cost of the barrier is $152,227, which includes $140,700 for the standard barrier cost and $11,527 for the alternate barrier costs. With 7 benefitted receivers, the cost of this barrier per benefitted receiver is $21,747. Therefore, this noise barrier is reasonable using the alternate barrier cost assessment and is proposed for incorporation into the proposed project.

**Barrier 4/3Waller Apartments (R49):** This receiver represents the 3Waller Apartments on the west side of I-35 between 3rd Street and 4th Street. Based on preliminary calculations, a barrier 244 feet in length and 20 feet in height, that was determined by the engineering team to be constructable, would reduce noise levels by at least 5 dB(A) for 12 of the 16 impacted, first-row receivers and reduce the noise level at one or more receivers by at least 7 dB(A). The total cost of the barrier is $184,783, which includes $170,800 for the standard barrier cost and $13,983 for the alternate barrier costs. With 12 benefitted receivers, the cost of this barrier per benefitted receiver is $15,399. Therefore, this noise barrier is reasonable using the alternate barrier cost assessment and is proposed for incorporation into the proposed project.

**Barrier 5/Norwood Park (R64):** This receiver represents the Norwood Park on the west side of I-35, north of Riverside Drive. The average size of residential lots in the vicinity is 0.2 acre; therefore, it was determined that the equivalent number of receivers for the impacted exterior activity area (determined to be 2.0 acres) is 10 receivers. Based on preliminary calculations, a barrier 377 feet in length and 12 feet in height, that was determined by the engineering team to be constructable, would reduce noise levels by at least 5 dB(A) at the impacted, first-row receivers and reduce the noise level at one or more receivers by at least 7 dB(A). The total
cost of the barrier is $190,040, which includes $158,340 for the standard barrier cost and $31,700 for the
alternate barrier costs. With 10 benefitted receivers, the cost of this barrier per benefitted receiver is $19,004.
Therefore, this noise barrier is reasonable using the alternate barrier cost assessment and is proposed for
incorporation into the proposed project.

**Barrier 6/Berkshire Riverview Apartments (R66):** This receiver represents the Berkshire Riverview Apartments
on the east side of I-35, north of Riverside Drive. Based on preliminary calculations, a segmented barrier 691
feet in total length and 20 feet in height, that was determined by the engineering team to be constructable,
would reduce noise levels by at least 5 dB(A) for 16 of the 18 impacted, first-row receivers and reduce the noise
level at one or more receivers by at least 7 dB(A). The total cost of the barrier is $656,244, which includes
$483,700 for the standard barrier cost and $172,544 for the alternate barrier costs. With 30 benefitted
receivers, the cost of this barrier per benefitted receiver is $21,875. Therefore, this noise barrier is reasonable
using the alternate barrier cost assessment and is proposed for incorporation into the proposed project.

**Barrier 7/Motel 6 (R78):** This receiver represents the Motel 6 on the east side of I-35, approximately 360 feet
north of Royal Hill Drive. Based on preliminary calculations, a barrier 133 feet in length and 8 feet in height, that
was determined by the engineering team to be constructable, would reduce noise levels by at least 5 dB(A) for
the 12 roadway-facing units and reduce the noise level at one or more receivers by at least 7 dB(A). The total
cost of the barrier is $41,508, which includes $37,240 for the standard barrier cost and $4,268 for the alternate
barrier costs. With 12 benefitted receivers, the cost of this barrier per benefitted receiver is $3,459. Therefore,
this noise barrier is reasonable using the alternate barrier cost assessment and is proposed for incorporation
into the proposed project.

**Barrier 8/Grace Woods Apartments (R82):** This receiver represents the Grace Woods Apartments on the east
side of I-35, approximately 625 feet north of Woodward Street. Based on preliminary calculations, a segmented
barrier 613 feet in total length and 20 feet in height, that was determined by the engineering team to be
constructable, would reduce noise levels by at least 5 dB(A) for 18 of the 20 impacted, first-row receivers and
reduce the noise level at one or more receivers by at least 7 dB(A). The total cost of the barrier is $464,434,
which includes $429,100 for the standard barrier cost and $35,334 for the alternate barrier costs. With 43
benefitted receivers, the cost of this barrier per benefitted receiver is $10,801. Therefore, this noise barrier is
reasonable using the alternate barrier cost assessment and is proposed for incorporation into the proposed
project.
### Table 3.14-2. Build Alternative 2 Noise Barrier Proposal (preliminary)

<table>
<thead>
<tr>
<th>Barrier ID</th>
<th>Traffic Noise Barrier</th>
<th>Representative Receiver(s)</th>
<th>Total # Benefited Receivers</th>
<th>Height (feet)</th>
<th>Length (feet)</th>
<th>Total Square Feet</th>
<th>Standard Barrier Cost ($)</th>
<th>Alternate Barrier Cost ($)</th>
<th>Total Cost ($)</th>
<th>Cost per Benefited Receiver ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Cherrywood Neighborhood</td>
<td>R19, R20, and R93</td>
<td>36</td>
<td>20</td>
<td>2,545</td>
<td>50,900</td>
<td>1,781,500</td>
<td>152,098</td>
<td>1,933,598</td>
<td>53,711</td>
</tr>
<tr>
<td>2</td>
<td>Aura University Park Apartments</td>
<td>R21</td>
<td>18</td>
<td>18</td>
<td>434</td>
<td>7,812</td>
<td>273,420</td>
<td>49,984</td>
<td>323,404</td>
<td>17,967</td>
</tr>
<tr>
<td>3</td>
<td>AMLI Eastside Apartments</td>
<td>R42</td>
<td>7</td>
<td>20</td>
<td>201</td>
<td>4,020</td>
<td>140,700</td>
<td>11,527</td>
<td>152,227</td>
<td>21,747</td>
</tr>
<tr>
<td>4</td>
<td>3Waller Apartments</td>
<td>R49</td>
<td>12</td>
<td>20</td>
<td>244</td>
<td>4,880</td>
<td>170,800</td>
<td>13,983</td>
<td>184,783</td>
<td>15,399</td>
</tr>
<tr>
<td>5</td>
<td>Norwood Park</td>
<td>R64</td>
<td>10</td>
<td>12</td>
<td>377</td>
<td>4,524</td>
<td>158,340</td>
<td>31,700</td>
<td>190,040</td>
<td>19,004</td>
</tr>
<tr>
<td>6</td>
<td>Berkshire Riverview Apartments</td>
<td>R66</td>
<td>30</td>
<td>20</td>
<td>691</td>
<td>13,820</td>
<td>483,700</td>
<td>172,544</td>
<td>656,244</td>
<td>21,875</td>
</tr>
<tr>
<td>7</td>
<td>Motel 6</td>
<td>R78</td>
<td>12</td>
<td>8</td>
<td>133</td>
<td>1,064</td>
<td>37,240</td>
<td>4,268</td>
<td>41,508</td>
<td>3,459</td>
</tr>
<tr>
<td>8</td>
<td>Grace Woods Apartments</td>
<td>R82</td>
<td>43</td>
<td>20</td>
<td>613</td>
<td>12,260</td>
<td>429,100</td>
<td>35,334</td>
<td>464,434</td>
<td>10,801</td>
</tr>
</tbody>
</table>

1. Noise barriers were not reasonable and feasible for the remaining impacted representative receivers for Build Alternative 2, and therefore abatement is not proposed for those locations.

2. Any subsequent project design changes, such as potential cap locations along the roadway, may require a reevaluation of this preliminary noise barrier proposal. The final decision to construct the proposed noise barriers would not be made until completion of the project design, utility evaluation, and polling of adjacent property owners.

3. To avoid noise impacts that may result from future development of properties adjacent to the proposed project, local officials responsible for land use control programs must ensure, to the maximum extent possible, no new activities are planned or constructed along or within the following predicted (2041) noise impact contours (see Table 3.14-3).
3. Affected Environment and Environmental Consequences

3.0.2 Table 3.14 - Traffic Noise Contours [dB(A) Leq]

<table>
<thead>
<tr>
<th>Location</th>
<th>Build Alternative 2 Distance from ROW</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NAC Category B &amp; C</td>
</tr>
<tr>
<td></td>
<td>Distance from ROW</td>
</tr>
<tr>
<td></td>
<td>NAC Category E</td>
</tr>
<tr>
<td>South side of US 290, between Cameron Rd and Berkman Dr</td>
<td>170 feet</td>
</tr>
<tr>
<td></td>
<td>50 feet</td>
</tr>
<tr>
<td>West side of I-35, north of Woodward St</td>
<td>170 feet</td>
</tr>
<tr>
<td></td>
<td>90 feet</td>
</tr>
<tr>
<td>West side of I-35, north of Austin ISD</td>
<td>&gt;190 feet*</td>
</tr>
<tr>
<td></td>
<td>10 feet</td>
</tr>
</tbody>
</table>

*Beyond the extent of the undeveloped parcel boundary.

A copy of this traffic noise analysis will be available to local officials to assist in future land use planning. On the date of approval of this document (Date of Public Knowledge), FHWA and TxDOT are no longer responsible for providing noise abatement for new development adjacent to the project.

3.14.2.2 Modified Build Alternative 3

The traffic noise analysis determined that out of 90 representative receivers modeled for Modified Build Alternative 3, 51 were predicted to have noise levels that approach or exceed the FHWA NAC; therefore, Modified Build Alternative 3 would result in traffic noise impacts.

Nine noise barriers were found to be both reasonable and feasible for Modified Build Alternative 3 and are recommended for incorporation into the proposed project. See Table 3.14-4 for details of the proposed noise barriers, including alternate barrier costs.

**Barrier 1/Cherrywood Neighborhood (R19, R20, and R93):** These receivers represent the Cherrywood Neighborhood on the east side of I-35 between 38th ½ Street and Edgewood Avenue. Based on preliminary calculations, a segmented barrier 2,545 feet in total length and 20 feet in height, that was determined by the engineering team to be constructable, would reduce noise levels by at least 5 dB(A) for 26 of the 30 impacted, first-row receivers and reduce the noise level at one or more receivers by at least 7 dB(A). The total cost of the barrier is $1,933,598, which includes $1,781,500 for the standard barrier cost and $152,098 for the alternate barrier costs. With 58 benefitted receivers, the cost of this barrier per benefitted receiver is $33,338. Therefore, this noise barrier is reasonable using the alternate barrier cost assessment and is proposed for incorporation into the proposed project.

**Barrier 2/Aura University Park Apartments (R21):** This receiver represents the Aura University Park Apartments on the west side of I-35 between 32nd Street and Duncan Lane. Based on preliminary calculations, a barrier segmented into 4 parts to maintain sidewalk access at 434 feet in length and 20 feet in height, that was determined by the engineering team to be constructable, would reduce noise levels by at least 5 dB(A) for 18 of the 21 impacted, first-row receivers and reduce the noise level at one or more receivers by at least 7 dB(A). The total cost of the barrier is $355,684, which includes $303,800 for the standard barrier cost and $51,884 for the alternate barrier costs. With 18 benefitted receivers, the cost of this barrier per benefitted receiver is...
$19,760. Therefore, this noise barrier is reasonable using the alternate barrier cost assessment and is proposed for incorporation into the proposed project.

Barrier 3/AMLI Eastside Apartments (R42): This receiver represents the AMLI Eastside Apartments on the east side of I-35 between 9th Street and 10th Street. Based on preliminary calculations, a barrier 201 feet in length and 20 feet in height, that was determined by the engineering team to be constructable, would reduce noise levels by at least 5 dB(A) for 7 of the 10 impacted, first-row receivers and reduce the noise level at one or more receivers by at least 7 dB(A). The total cost of the barrier is $152,227, which includes $140,700 for the standard barrier cost and $11,527 for the alternate barrier costs. With 7 benefitted receivers, the cost of this barrier per benefitted receiver is $21,747. Therefore, this noise barrier is reasonable using the alternate barrier cost assessment and is proposed for incorporation into the proposed project.

Barrier 4/3Waller Apartments (R49): This receiver represents the 3Waller Apartments on the west side of I-35 between 3rd Street and 4th Street. Based on preliminary calculations, a barrier 277 feet in length and 18 feet in height, that was determined by the engineering team to be constructable, would reduce noise levels by at least 5 dB(A) for 23 of the 24 impacted, first-row receivers and reduce the noise level at one or more receivers by at least 7 dB(A). The total cost of the barrier is $189,298, which includes $174,510 for the standard barrier cost and $14,788 for the alternate barrier costs. With 23 benefitted receivers, the cost of this barrier per benefitted receiver is $8,230. Therefore, this noise barrier is reasonable using the alternate barrier cost assessment and is proposed for incorporation into the proposed project.

Barrier 5/Norwood Park (R64): This receiver represents the Norwood Park on the west side of I-35, north of Riverside Drive. The average size of residential lots in the vicinity is 0.2 acre; therefore, it was determined that the equivalent number of receivers for the impacted exterior activity area (determined to be 2.0 acres) is 10 receivers. Based on preliminary calculations, a barrier 377 feet in length and 16 feet in height, that was determined by the engineering team to be constructable, would reduce noise levels by at least 5 dB(A) at the impacted, first-row receivers and reduce the noise level at one or more receivers by at least 7 dB(A). The total cost of the barrier is $253,320, which includes $211,120 for the standard barrier cost and $42,200 for the alternate barrier costs. With 10 benefitted receivers, the cost of this barrier per benefitted receiver is $25,332. Therefore, this noise barrier is reasonable using the alternate barrier cost assessment and is proposed for incorporation into the proposed project.

Barrier 6/Berkshire Riverview Apartments (R66): This receiver represents the Berkshire Riverview Apartments on the east side of I-35, north of Riverside Drive. Based on preliminary calculations, a segmented barrier 579 feet in total length and 20 feet in height, that was determined by the engineering team to be constructable, would reduce noise levels by at least 5 dB(A) for 11 of the 18 impacted, first-row receivers and reduce the noise level at one or more receivers by at least 7 dB(A). The total cost of the barrier is $568,504, which includes $405,300 for the standard barrier cost and $163,204 for the alternate barrier costs. With 22 benefitted receivers, the cost of this barrier per benefitted receiver is $25,841. Therefore, this noise barrier is reasonable using the alternate barrier cost assessment and is proposed for incorporation into the proposed project.

Barrier 7/Motel 6 (R78): This receiver represents the Motel 6 on the east side of I-35, approximately 360 feet north of Royal Hill Drive. Based on preliminary calculations, a barrier 133 feet in length and 8 feet in height, that
was determined by the engineering team to be constructable, would reduce noise levels by at least 5 dB(A) for the 12 roadway-facing units and reduce the noise level at one or more receivers by at least 7 dB(A). The total cost of the barrier is $41,508, which includes $37,240 for the standard barrier cost and $4,268 for the alternate barrier costs. With 12 benefitted receivers, the cost of this barrier per benefitted receiver is $3,459. Therefore, this noise barrier is reasonable using the alternate barrier cost assessment and is proposed for incorporation into the proposed project.

**Barrier 8/Grace Woods Apartments (R82):** This receiver represents the Grace Woods Apartments on the east side of I-35, approximately 625 feet north of Woodward Street. Based on preliminary calculations, a segmented barrier 613 feet in total length and 20 feet in height, that was determined by the engineering team to be constructable, would reduce noise levels by at least 5 dB(A) for 18 of the 20 impacted, first-row receivers and reduce the noise level at one or more receivers by at least 7 dB(A). The total cost of the barrier is $464,434, which includes $429,100 for the standard barrier cost and $35,334 for the alternate barrier costs. With 43 benefitted receivers, the cost of this barrier per benefitted receiver is $10,801. Therefore, this noise barrier is reasonable using the alternate barrier cost assessment and is proposed for incorporation into the proposed project.

**Barrier 9/Camden Rainey Street (R54):** This receiver represents the Camden Rainey Street Apartments on the west side of I-35, south of Cesar Chavez Street. Based on preliminary calculations, a barrier modeled on the outside of the SB frontage road at 506 feet in length and 20 feet in height, that was determined by the engineering team to be constructable, would reduce noise levels by at least 5 dB(A) for 10 of the 15 impacted, first-row receivers and reduce the noise level at one or more receivers by at least 7 dB(A). The total cost of the barrier is $383,369, which includes $354,200 for the standard barrier cost and $29,169 for the alternate barrier costs. With 10 benefitted receivers, the cost of this barrier per benefitted receiver is $38,337. Therefore, this noise barrier is reasonable using the alternate barrier cost assessment and is proposed for incorporation into the proposed project.

### Table 3.14-4. Modified Build Alternative 3 Noise Barrier Proposal (preliminary)

<table>
<thead>
<tr>
<th>Barrier ID</th>
<th>Traffic Noise Barrier</th>
<th>Representative Receiver(s)</th>
<th>Total # Benefited Receivers</th>
<th>Height (feet)</th>
<th>Length (feet)</th>
<th>Total Square Feet</th>
<th>Standard Barrier Cost ($)</th>
<th>Alternate Barrier Cost ($)</th>
<th>Total Cost ($)</th>
<th>Cost per Benefited Receiver ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barrier 1</td>
<td>Cherrywood Neighborhood</td>
<td>R19, R20, and R93</td>
<td>58</td>
<td>20</td>
<td>2,545</td>
<td>50,900</td>
<td>1,781,500</td>
<td>152,098</td>
<td>1,933,598</td>
<td>33,338</td>
</tr>
<tr>
<td>Barrier 2</td>
<td>Aura University Park Apartments</td>
<td>R21</td>
<td>18</td>
<td>20</td>
<td>434</td>
<td>8,680</td>
<td>303,800</td>
<td>51,884</td>
<td>355,684</td>
<td>19,760</td>
</tr>
<tr>
<td>Barrier 3</td>
<td>AMLI Eastside Apartments</td>
<td>R42</td>
<td>7</td>
<td>20</td>
<td>201</td>
<td>4,020</td>
<td>140,700</td>
<td>11,527</td>
<td>152,227</td>
<td>21,747</td>
</tr>
<tr>
<td>Barrier 4</td>
<td>3Waller Apartments</td>
<td>R49</td>
<td>23</td>
<td>18</td>
<td>277</td>
<td>4,986</td>
<td>174,510</td>
<td>14,788</td>
<td>189,298</td>
<td>8,230</td>
</tr>
<tr>
<td>Barrier 5</td>
<td>Norwood Park</td>
<td>R64</td>
<td>10</td>
<td>16</td>
<td>377</td>
<td>6,032</td>
<td>211,120</td>
<td>42,200</td>
<td>253,320</td>
<td>25,332</td>
</tr>
</tbody>
</table>
Table 3.14-4. Modified Build Alternative 3 Noise Barrier Proposal (preliminary)

<table>
<thead>
<tr>
<th>Barrier ID</th>
<th>Traffic Noise Barrier</th>
<th>Representative Receiver(s)</th>
<th>Total # Benefited Receivers</th>
<th>Height (feet)</th>
<th>Length (feet)</th>
<th>Total Square Feet</th>
<th>Standard Barrier Cost ($)</th>
<th>Alternate Barrier Cost ($)</th>
<th>Total Cost ($)</th>
<th>Cost per Benefited Receiver ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barrier 6</td>
<td>Berkshire Riverview Apartments</td>
<td>R66</td>
<td>22</td>
<td>20</td>
<td>579</td>
<td>11,580</td>
<td>405,300</td>
<td>163,204</td>
<td>568,504</td>
<td>25,841</td>
</tr>
<tr>
<td>Barrier 7</td>
<td>Motel 6</td>
<td>R78</td>
<td>12</td>
<td>8</td>
<td>133</td>
<td>1,064</td>
<td>37,240</td>
<td>4,268</td>
<td>41,508</td>
<td>3,459</td>
</tr>
<tr>
<td>Barrier 8</td>
<td>Grace Woods Apartments</td>
<td>R82</td>
<td>43</td>
<td>20</td>
<td>613</td>
<td>12,260</td>
<td>429,100</td>
<td>35,334</td>
<td>464,434</td>
<td>10,801</td>
</tr>
<tr>
<td>Barrier 9</td>
<td>Camden Rainey Street Apartment</td>
<td>R54</td>
<td>10</td>
<td>20</td>
<td>506</td>
<td>10,120</td>
<td>354,200</td>
<td>29,169</td>
<td>383,369</td>
<td>38,337</td>
</tr>
</tbody>
</table>

1. Noise barriers were not reasonable and feasible for the remaining impacted representative receivers for Modified Build Alternative 3, and therefore abatement is not proposed for those locations.

3. Any subsequent project design changes, such as potential cap locations along the roadway, may require a reevaluation of this preliminary noise barrier proposal. The final decision to construct the proposed noise barriers would not be made until completion of the project design, utility evaluation, and polling of adjacent property owners.

7. To avoid noise impacts that may result from future development of properties adjacent to the proposed project, local officials responsible for land use control programs must ensure, to the maximum extent possible, no new activities are planned or constructed along or within the following predicted (2041) noise impact contours (see Table 3.14-5).

Table 3.14-5. Traffic Noise Contours [dB(A) Leq]

<table>
<thead>
<tr>
<th>Location</th>
<th>Modified Build Alternative 3 Distance from ROW</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NAC Category B &amp; C 66 dB(A)</td>
</tr>
<tr>
<td>South side of US 290, between Cameron Rd and Berkman Dr</td>
<td>NA**</td>
</tr>
<tr>
<td>West side of I-35, north of Woodward St</td>
<td>170 feet</td>
</tr>
<tr>
<td>West side of I-35, north of Austin ISD</td>
<td>&gt;190 feet*</td>
</tr>
</tbody>
</table>

*Beyond the extent of the undeveloped parcel boundary.

**No noise contour analysis for this area because no work is being proposed along US 290 East in Modified Build Alternative 3.
A copy of this traffic noise analysis will be available to local officials to assist in future land use planning. On the date of approval of this document (Date of Public Knowledge), FHWA and TxDOT are no longer responsible for providing noise abatement for new development adjacent to the project.

3.14.2.3 No Build Alternative

Under the No Build Alternative, the proposed project would not be constructed. If the No Build Alternative were implemented, traffic noise levels would be expected to increase with an associated future increase in traffic volumes, and no noise abatement measures would be taken.

3.15 Induced Growth

Transportation projects that provide new or improved access to adjacent land could induce development of undeveloped land or redevelopment of land to more intensive uses. This section provides an analysis of potential indirect and induced growth impacts that could be attributed to the proposed I-35 Capital Express Central Project. The CEQ defines indirect effects as those “... caused by an action and occur later in time or farther removed in distance but are still reasonably foreseeable. Indirect effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water, and other natural systems, including ecosystems” (40 CFR 22 §1508.8).

3.15.1 Build Alternatives

An induced growth analysis was developed using TxDOT’s January 2019 Indirect Impacts Analysis Guidance. The proposed I-35 Capital Express Central Project was evaluated using TxDOT’s Risk Assessment for Indirect Impacts published in April 2014, which serves as an initial step to evaluate whether a proposed project could induce growth and would warrant further analysis. Based on the results of the Risk Assessment Tool, TxDOT determined that an induced growth analysis would be necessary for the proposed I-35 Capital Express Central Project. The determination that an induced growth analysis was needed was based on the following factors:

- Availability of land for development and redevelopment
- Increased capacity from the implementation of the proposed project
- Substantial increase in access and mobility in the project area
- Existing and projected economic and population growth in the project area

The six-step methodology for the induced growth analysis was developed using TxDOT 2019 Indirect Impacts Analysis Guidance, which is based on the National Cooperative Highway Research Program (NCHRP) Report 466: Desk Reference for Estimating the Indirect Effects of Proposed Transportation Projects (NCHRP 2002) and the AASHTO Practitioner’s Handbook 12: Assessing Indirect and Cumulative Impacts Under NEPA (AASHTO 2016). The six steps are:

1. Define the methodology.
2. Define the area of influence (AOI) and study timeframe.
3. Identify areas subject to induced growth in the AOI.
4. Determine if growth is likely to occur in the induced growth areas.
5. Identify resources subject to induced growth impacts.
6. Identify mitigation, if applicable.

**Step 1 – Define the Methodology:** To better understand the potential for proposed changes along I-35 in Austin TX, from US 290 East to SH 71/Ben White Boulevard, to induce growth, or otherwise lead to changes in the land use and development, TxDOT surveyed a group of professionals composed of planners, real estate professionals, and urban development professionals from academia, the private sector, and non-governmental organizations.

A Delphi panel Collaborative Judgment approach to forecasting and making value judgments was used to assess the induced growth impacts from the proposed I-35 Capital Express Central Project. See Appendix S for the Delphi Panel Summary Report. The Collaborative Judgment approach is supported by planning assumptions and land use projections from the land management districts within the project area. This approach leverages regional and local experts to identify areas of potential growth, development trends, and the probability of the proposed project to influence local land use decisions within the AOI. TxDOT chose the Delphi panel Collaborative Judgment approach because Austin, including the proposed project area, has been experiencing rapid population and employment growth and TxDOT needed a wide variety of perspectives to help contextualize the factors currently influencing growth. The group of professionals was invited to participate in a modified-Delphi study composed of two web-based surveys. For both surveys, the professionals evaluated potential population growth and land use impacts in the proposed study area resulting from the changes to I-35. The purpose of the I-35 Delphi panel was to develop a consensus assessment in the three key areas:

- The geographic areas most likely to be affected by the I-35 Capital Express Central Project;
- The likelihood and rate of growth/degrowth in identified areas; and
- The resources likely to affect, or otherwise constrain, growth induced by the I-35 Capital Express Central Project.

For the Delphi panel, TxDOT sought to recruit a maximum of 25 participants with significant local knowledge of land use and development. Potential panel members were identified based on their likelihood of having both general and local knowledge of regional growth and development processes. TxDOT selected the Delphi panel to be (1) representative of the gender, ethnic, and socioeconomic diversity of the broader community; and (2) include experts from across the development community including planners, public officials, real estate developers, urban development consultants, community justice organizations, and academics. A total of 19 unique individuals associated with 18 different organizations participated in the study. Thirteen participants took the first survey and twelve participants completed the second survey. Six participants from the first round and six new participants completed the second survey. Two multiple choice surveys with an integrated participatory GIS component were developed on the ArcGIS 123 Survey platform. The Delphi panel experts were asked to answer a combination of multiple-choice questions with corresponding opportunities to explain their responses and participatory GIS questions to (a) identify forward-looking land use possibilities and population growth trends, (b) identify geographic areas most likely to be affected by the project, or (c) better understand which
aspects of the project are likely to drive growth and/or land use change. The Delphi Panel Summary Report provides additional details on the Delphi panel overview, participants, questions, and responses; this report will be available for review at TxDOT Austin District office, and online (Appendix S).

Step 2. Define the AOI and Study Timeframe: The AOI for the induced growth analysis represents the geographical area where indirect effects related to project-influenced development and land use changes would most likely occur. The NCHRP Report 466 states that “development effects are most often found up to one mile around a freeway interchange, two to five miles along major feeder roadways to the interchanges, and up to one-half mile around a transit station.” This is a general guideline, and individual projects must be analyzed on a case-by-case basis. The AOI for the induced growth analysis for the I-35 Capital Express Central Project encompasses approximately 38,162.06 acres (~59.63 square miles) in Travis County, which includes areas of potential growth and redevelopment (see Figure 3.15-1). The proposed project extends from north to south, along the I-35 corridor, from US 290 East (on the north) to US 290 West/SH 71 (on the south); its ROW would be 200 to 500 feet wide. The AOI is defined by Rundberg Lane on the north, running from east to west and Stassney Lane on the south also running from east to west. The eastern boundary of the AOI is marked by US 183/Ed Bluestein Boulevard.

• **AOI Eastern Boundary:** The eastern boundary of the AOI begins along East Stassney Lane and extends east to SH 71 (East Ben White Boulevard) toward US 183. From this point, the AOI continues north along US 183 and runs right at the intersection of US 183 and Cameron Road; the east AOI boundary follows Cameron Road to the intersection of Cameron Road and East Rundberg Lane. East Rundberg Lane marks the start of the northern boundary of the AOI.

• **AOI Northern Boundary:** Moving east to west, the northern extent of the AOI extends along Rundberg Lane, turns toward the north, onto North Lamar Boulevard and then runs onto Rutland Drive. At the intersection of Rutland Drive and Burnet Road, the AOI boundary runs north along Burnet Road and then turns onto West Braker Lane, where it continues west, past MoPac toward Research Boulevard, which marks the northernmost corner of the AOI. At Research Boulevard, the AOI boundary turns south, marking the northwestern boundary of the AOI.

• **AOI Western Boundary:** From north to south, starting at the intersection of Research Boulevard and West Braker Lane, the western boundary of the AOI extends southwest along Loop 360 and then turns onto Jollyville Road running through residential neighborhoods to the intersection of Jollyville Road and Mesa Drive, where the AOI boundary continues south along Mesa Drive. At the intersection of Mesa Drive and Spicewood Springs Road, the AOI boundary turns east and runs along Spicewood Springs Road, passing MoPac toward the intersection of West Anderson Lane and Burnet Road. At Burnet Road, the west AOI boundary turns south and runs along Burnet Road through the residential neighborhoods until it reaches West 45th Street where it runs along West 45th Street and then turns south onto North Lamar Boulevard. The western AOI boundary runs along North Lamar Boulevard and turns onto West Gate Boulevard and runs south until it reaches the intersection of West Gate Boulevard and West Stassney Lane, which marks the end of the western boundary.
Figure 3.15-1. AOI Boundary
• **AOI Southern Boundary:** The southern boundary of the AOI begins at the intersection of West Gate Drive and West Stassney Lane and extends from west to east along West Stassney Lane, past Congress Avenue where the road changes to East Stassney Lane, past Nuckols Crossing Road, where East Stassney Lane turns north, ending the southern AOI boundary and marking the start of the east AOI boundary.

The development of the AOI boundary factored the following considerations:

• Political and geographic boundaries (existing roadways, natural features, jurisdictional limits, etc.).

• Initial corridor study area as basis of study area.

• The general travel shed for the corridor and the traffic analysis zones that would be substantially affected by the density of trips taken along the corridor upon project completion.

• Future land development. The AOI includes areas of potential growth based on future land use maps, vacant developable areas within 1-to-5-mile radius of the I-35 Project corridor.

• Redevelopment trends. The AOI includes areas of potential redevelopment surrounding the downtown area based on recent trends.

• The area surrounding the project is mostly urbanized and nearly built out.

• Delphi panel responses.

A temporal frame of reference is necessary when analyzing the range of impacts that may be caused by the proposed project in the future. The temporal boundary for this induced growth impacts analysis is from 2022 (mature planning) to 2045, which is the planning horizon year for the CAMPO RTP. The year 2045 is also utilized in other components of the DEIS analyses.

**Step 3. Identify areas subject to induced growth in the AOI:** To determine where induced growth could occur and where development would be limited or constrained, TxDOT reviewed COA GIS data to identify vacant land and undevelopable areas (such as waterbodies, floodplains, parklands, and existing development). Figure 3.15-2 shows the developed, developable/vacant, and undevelopable areas within the AOI; Table 3.15-1 lists the land-use types as well as developable and undevelopable areas within the AOI. To complete an analysis of the areas subject to induced growth, we utilized land use GIS data files (COA, 2019, 2021) and induced growth survey responses from Delphi panel to confirm or update recent development trends. The Delphi Panel Summary Report provides additional details on the Delphi panel responses and insights on growth and development trends within the AOI. Future land use plans and local planning regulations were also reviewed to identify projected areas of growth, areas of redevelopment, and policies that may encourage or restrict development. Future land use data in this analysis were derived from land use GIS data files (COA, 2019).
Figure 3.15-2. Developed and Undeveloped Areas
Table 3.15-1. Land Use (developed, vacant/developable, and undevelopable parcels) within the AOI

<table>
<thead>
<tr>
<th>Land Type</th>
<th>Area in acres</th>
<th>Percent of Total AOI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing Development</td>
<td>24,722.04</td>
<td>64.78 %</td>
</tr>
<tr>
<td>Undevelopable</td>
<td>399.99</td>
<td>1.05 %</td>
</tr>
<tr>
<td>Vacant/Developable</td>
<td>1,657.51</td>
<td>4.34 %</td>
</tr>
<tr>
<td>Parking/Redevelopable</td>
<td>263.14</td>
<td>0.69 %</td>
</tr>
<tr>
<td>Water</td>
<td>7.16</td>
<td>0.02 %</td>
</tr>
<tr>
<td>ROW</td>
<td>8,098.45</td>
<td>21.22 %</td>
</tr>
<tr>
<td>Floodplain/Park/Open Space</td>
<td>2,990.97</td>
<td>7.84 %</td>
</tr>
<tr>
<td>Undetermined/Unknown Land Uses</td>
<td>22.80</td>
<td>0.06 %</td>
</tr>
<tr>
<td><strong>Total AOI</strong></td>
<td><strong>38,162.06</strong></td>
<td><strong>100.00 %</strong></td>
</tr>
</tbody>
</table>

Source: COA (2021)

Approximately 1,657.51 acres in the AOI are characterized as vacant and developable land (COA, 2021). This acreage represents approximately 4.34 percent of the 38,162.06-acre AOI. Approximately 263.14 acres (0.69%) are designated as surface parking areas that could potentially be redeveloped. The vacant and developable tracts of land are sparsely located within the AOI. Most of the AOI is densely populated and has minimal land available for new development; there is a mix of residential, government, educational, commercial, and park land uses. Areas of potential growth are more suitable for redevelopment and infill development. **Table 3.15-1** provides the total acreage of potentially developable and undevelopable land in the AOI. The AOI contains approximately 2,901 acres (7.6% of the AOI) of land designated as the Federal Emergency Management Agency (FEMA) 100-year floodplain, which includes special flood hazard areas—Zones A, AE, AO, AH, VE, AR (FEMA NFHL, 2019; COA, 2019).

The CAMPO 2045 Regional Growth Forecast projections show continued population and employment growth throughout the suburban areas of Travis County through the year 2045. Land use and growth projections estimated in the 2045 RTP include the proposed I-35 Capital Express Central Project. Information obtained from local experts about announced developments provided context of existing conditions and growth trends and helped identify the areas that could experience induced development and redevelopment. The survey questionnaire responses submitted by the Delphi expert panel included information related to substantial proposed developments and the areas of both development and redevelopment. Using the interactive GIS, the Delphi panel answered questions and identified locations where they believed new development and redevelopment would be most likely to occur within the AOI. The Delphi panel participants identified 12 areas located throughout east Austin, including Mueller, directly along the corridor between Lady Bird Lake and MLK Jr. Boulevard, Del Valle and Pleasant Hill near the airport, and also between Manor Road and US 290 East; the panel also identified an area in the southern portion of the study area at the intersection of I-35 and Ben White Boulevard. The CAMPO 2045 Regional Growth Forecast projections show continued population and employment growth throughout the suburban areas of Travis County through the year 2045. Land use and growth projections estimated in the 2045 RTP include the proposed I-35 Capital Express Central Project. Information obtained from local experts about announced developments provided context of existing conditions and growth trends and helped identify the areas that could experience induced development and redevelopment. The survey questionnaire responses submitted by the Delphi expert panel included information related to substantial proposed developments and the areas of both development and redevelopment. Using the interactive GIS, the Delphi panel answered questions and identified locations where they believed new development and redevelopment would be most likely to occur within the AOI. The Delphi panel participants identified 12 areas located throughout east Austin, including Mueller, directly along the corridor between Lady Bird Lake and MLK Jr. Boulevard, Del Valle and Pleasant Hill near the airport, and also between Manor Road and US 290 East; the panel also identified an area in the southern portion of the study area at the intersection of I-35 and Ben White Boulevard.
Boulevard, Figure 3.15-2 shows the new- and re-development parcels identified by the Delphi panel. Within the AOI, including the different areas identified by the panel respondents, there are planned developments such as schools, hospitals, medium- to high-density residential, commercial, retail, industrial, hotel, UT expansions, and medical offices. The planned developments would also involve new- and re-development of previously developed parcels. Table 3.15-2 is a list of the number of announced developments within the AOI by land use category. When comparing the number of announced developments and the vacant developable land (~1,657 acres) within the AOI, the data showed that the AOI is nearing build-out and there would be a limited potential for new development. Redevelopment is considered a potential real estate trend given the density of existing development throughout the AOI. The Delphi Panel Summary Report provides additional insights on the areas of development and redevelopment, identified by the Delphi panel participants.

Table 3.15-2. Proposed Developments within the AOI

<table>
<thead>
<tr>
<th>Land Use Category</th>
<th>Number of Planned Developments</th>
<th>Number of Housing Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>98</td>
<td>0</td>
</tr>
<tr>
<td>Educational</td>
<td>12</td>
<td>1,056</td>
</tr>
<tr>
<td>Governmental</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Industrial</td>
<td>16</td>
<td>0</td>
</tr>
<tr>
<td>Medical</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Mixed-Use</td>
<td>96</td>
<td>20,202</td>
</tr>
<tr>
<td>Unknown and Other</td>
<td>42</td>
<td>0</td>
</tr>
<tr>
<td>Residential</td>
<td>127</td>
<td>16,470</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>399</strong></td>
<td><strong>37,728</strong></td>
</tr>
</tbody>
</table>

Source: COA (2019)

Step 4. Determine if Growth is likely to Occur in Induced Growth Areas: New roadways have the potential to provide access that could facilitate new development; furthermore, improvements in transportation infrastructure that increase mobility, reduce congestion, or reduce overall travel times could also attract development and redevelopment. Changes in land use patterns could occur as a result of ROW acquisition, which could lead to displacement of businesses and residences. While improvements to transportation infrastructure may influence growth, there are other factors that would affect where growth may occur. These factors include (i) development trends, (ii) favorable planning and regulatory policies, (iii) availability of utilities, (iv) suitability of land, and (v) presence of physical and environmental constraints. The Delphi panel ranked the different factors influencing and limiting growth; these rankings are shown in Figure 3.15-3. The Delphi panelists were in strong agreement that land use regulation (zoning) was the primary constraint on land use change, and it would have implications for both ongoing trends and any potential impacts from the project.
Regional and Local Data Trends within the AOI: Since the 1980s, COA and Travis County have experienced rapid growth, which was initially fueled by the technology industry. Land development surged to support technology uses, such as in the Tech Ridge area. Downtown redevelopment in the early 2000s included high-rise, mixed uses that increased the attractiveness of living in the downtown. Today, ongoing growth continues to attract residents, particularly those who are interested in an urban lifestyle. There are two distinct reasons that a community grows: 1) natural growth that occurs when the number of births exceed deaths in a given year; and 2) migration. Between 2010 and 2020, approximately 33 percent of Travis County’s growth was driven by natural increase in population, the other 67 percent of the county’s recent growth was due to migration to the region (Root Policy Research and City of Austin 2020).

As previously noted in Table 3.15-1, about 95 percent of the AOI is characterized as existing developments, ROW, floodplain, parkland and, due to the already developed nature of the AOI, the primary type of development activity occurring today is either redevelopment or infill development of vacant and underutilized properties. Future land use within the AOI is mainly guided by COA Imagine Austin Comprehensive Plan and implemented by zoning. COA
develops future land use maps for each NPA; these are rolled up into one future land use map that sets the direction and is used as the guiding framework for zoning decisions. By adopting a land use map, each NPA’s neighborhood plan helps to amend COA Comprehensive Plan. Additionally, COA has initiated the Land Development Code Revision, which determines how land can be used throughout COA, including what, where, and how much can be built. This initiative has two facets: an update of the text of the code and a corresponding update to the zoning map, which shows where the new zones were applied. The proposed changes to the zoning code and maps would increase the allowable densities along many important corridors, including the project. Much of what is currently zoned commercial is proposed to be changed to mixed-use zoning, which provides more opportunities to combine residential, office, and retail uses in single locations to develop more walkable communities that are good for the local economy, while serving the residents, employees, and visitors of the surrounding neighborhoods. Through 2045, COA planning and zoning is expected to continue on its current path, which would lead to greater urbanization of the Austin area, with focal points of higher density, mixed-use development primarily around transit station areas, and in activity centers and activity corridors.

Land Development Projects: COA maintains a database of “emerging projects” to track ongoing property investment and development activity. The development projects tracked by COA include civic, commercial, industrial, mixed-use, office, single-family residential, multifamily residential, retail, transportation, and utility developments. According to COA in 2021, the total area of new residential developments was approximately 29,354,129 square feet (674.81 acres); as of April 2022, the new residential developments in the study area comprised approximately 12,585,219 square feet (289.32 acres) and are anticipated to exceed the 2021 numbers. Other larger emerging developments (either recently completed or in the planning stages) within and near the AOI include:

- **Airport Commerce Park**: Phase III of this industrial project is currently under construction.
- **South Shore District Planned Unit Development (PUD)**: A 20-acre development along East Riverside Drive east of I-35.
- **Lakeshore PUD**: A 50-acre development with 1,500 apartments and 100,000 square feet of retail.
- **Plaza Saltillo District**: A 10-acre redevelopment with 696 multifamily residential units, 260,000 square feet of retail and office space, and parkland centered around the Plaza Saltillo Station.

Population Growth Trends within the AOI (Historic, Current, and Forecast): According to the USCB, the population of Travis County increased from approximately 1,024,266 in 2010 to 1,290,188 in 2020; this represents a growth of approximately 26 percent over the 10-year period. From 2020 to 2021, population increased by approximately 1.2 percent. CAMPO has developed a Regional Growth Forecast, including population, employment, and land use, for Travis and other counties within its area of jurisdiction. Table 3.15-3 shows the historic, current, and forecast population growth data and shows population within the AOI is expected to see continued growth between 2022 and 2045. The Delphi panel experts acknowledged the anticipated strong growth in their responses. The past, present, and projected demographic trends highlight an existing moderate to strong potential for growth in the AOI. The range of moderate to strong is used because some areas of the AOI are more densely built out compared to others.
Table 3.15-3. Historic, Current, and Future Population Growth Trends

<table>
<thead>
<tr>
<th>City or County</th>
<th>Total Population by Year</th>
<th>Change between 2010 and 2020</th>
<th>Change between 2020 and 2045</th>
</tr>
</thead>
<tbody>
<tr>
<td>Travis County</td>
<td>1,024,266 1,290,188 1,305,154 1,540,812 1,884155</td>
<td>26%</td>
<td>46%</td>
</tr>
<tr>
<td>COA</td>
<td>790,390 961,855 1,026,833 1,153,409 1,339,031</td>
<td>22%</td>
<td>39%</td>
</tr>
</tbody>
</table>

NOTE: * Percent change numbers are rounded off to the nearest whole number.
Sources: U.S. Census Bureau QuickFacts: Travis County, Texas (2022); TDC - Texas Population Projections Program (2022); and austin_forecast_2021_pubfix.pdf (austintexas.gov) (2022)

Regional Plans: The proposed project area is within the planning area of the CAMPO RTP. The 2045 RTP guides transportation planning projects in the region. The recommended investments in the plan amount to approximately $42.5 billion over the plan horizon (CAMPO 2022). The 2045 RTP’s goals are to improve safety, operational efficiency and manage congestion, provide more reliable travel times, create more dependable and consistent routes for transit, emergency responders, and other motorists, as well as strengthen regional economic competitiveness, and meet federal, state, and local design standards. The proposed project aligns with the CAMPO RTP goals to improve operational efficiency, safety, and congestion. The proposed project would provide additional capacity to improve efficiency, alleviate congestion, improve safety, provide dependable routes for transit and emergency responders, and update the associated roadways and bridges to current TxDOT design standards.

Planned Roadway and Transit Projects: Roads are primarily maintained by TxDOT, COA, and the surrounding jurisdictions. The roadway projects generally consist of drainage and safety enhancements, rehabilitation improvements, and widening to accommodate traffic growth. Investments in the transit network are mainly informed by CAMPO’s Transit Development and RTPs. The most recent study has informed the planning efforts to expand the local transit network, simplify local service, and improve regional connectivity by streamlining service. CapMetro manages COA’s transit system, including the Metrorail, Metrobus, MetroExpress, MetroRapid, MetroRideShare, MetroAccess, UT shuttles, and MetroBike (the bicycle rentals). CapMetro is currently working on transit development efforts that include the new Orange Line light rail services and the Green Line commuter rail service. Table 3.15-4 includes a list of some of the major roadway and transit projects listed in the RTP.

Table 3.15-4. Summary of Regional Roadway and Transit Projects (CAMPO 2045 RTP)

<table>
<thead>
<tr>
<th>Roadway/Facility Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SH 71</td>
<td>Construct 3-lane EB frontage road along SH 71 and 1-lane direct connector from 183S to 71E from east of Riverside to US 183 and a 1-lane direct connector from 183N to 71E.</td>
</tr>
<tr>
<td>SH 71</td>
<td>Construct WB frontage road from US 183 to Presidential Blvd.</td>
</tr>
</tbody>
</table>
Table 3.15-4. Summary of Regional Roadway and Transit Projects (CAMPO 2045 RTP)

<table>
<thead>
<tr>
<th>Roadway/Facility Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>US 183</td>
<td>Reconstruct existing roadway to 4-lane divided from SH 71 to SH 130.</td>
</tr>
<tr>
<td>Barton Springs Rd.</td>
<td>Widen existing 4-lane divided to a 4-lane divided with pedestrian/bicycle and transit improvements from South Lamar Blvd. to South Congress Ave.</td>
</tr>
<tr>
<td>South Congress Ave.</td>
<td>Pedestrian/bicycle and transit improvements from Riverside Dr. to Slaughter Ln.</td>
</tr>
<tr>
<td>East 7th St.</td>
<td>Retrofit 4-lane divided with continuous left-turn lane to a 4-lane divided with pedestrian/bicycle and transit improvements from I-35 to US 183.</td>
</tr>
<tr>
<td>East Cesar Chavez St.</td>
<td>Widen 2-lane undivided to a 2-lane with continuous left-turn lanes and pedestrian/bicycle and transit improvements from I-35 to US 183.</td>
</tr>
<tr>
<td>North Pleasant Valley Rd.</td>
<td>Widen 2-lane undivided to a 4-lane divided with pedestrian/bicycle and transit improvements from Cesar Chavez St. to Riverside Dr.</td>
</tr>
<tr>
<td>Montopolis Dr.</td>
<td>Retrofit 4-lane undivided with continuous left-turn lane to 4-lane divided with pedestrian/bicycle and transit improvements from Burleson Rd. to US 183.</td>
</tr>
<tr>
<td>Metro Express Bus</td>
<td>Extend service routes to downtown Austin from San Marcos; Buda; Southpark Meadows; Georgetown; Round Rock; Howard Station; Elgin; Manor; Hutto; Pflugerville; Lockhart; Easton Park; South Mopac; Bastrop; Del Valle; Four Points.</td>
</tr>
<tr>
<td>MetroRapid Bus</td>
<td>Extend service routes: Oak Hill to Republic Square; Cameron/Dessau extension to ACC Highland; Pleasant Valley extension to Mueller; Burnet extension to Domain; Manor Rd. extension to Expo Center; MLK extension to west Austin; 7th/Lake extension to west Austin and east Austin; Parmer extension to Wildhorse; Menchaca extension to south Austin and Republic Square.</td>
</tr>
<tr>
<td>Blue Line Light Rail</td>
<td>New light rail service: Republic Square; Downtown Station; MACC/Rainey; Waterfront; Travis Heights; Lakeshore; Riverside; Faro; Montopolis.</td>
</tr>
<tr>
<td>Orange Line Light Rail</td>
<td>New light rail service: Tech Ridge; Parmer; Braker; Rundberg; North Lamar Transit Center; Crestview; Koenig; Triangle; Hyde Park; Hemphill Park; UT/West Mall; Capitol West; Government Center; Republic Square; Auditorium Shores; SoCo; Oltorf; Saint Edward’s; South Congress Transit Center; Stassney; William Cannon; Slaughter Transit Center.</td>
</tr>
</tbody>
</table>
Table 3.15-4. Summary of Regional Roadway and Transit Projects (CAMPO 2045 RTP)

<table>
<thead>
<tr>
<th>Roadway/Facility Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green Line Commuter Rail</td>
<td>New commuter rail line from downtown Austin to Manor.</td>
</tr>
<tr>
<td>Other</td>
<td>Capital repair, rehabilitation, and replacement projects.</td>
</tr>
</tbody>
</table>

**Potential for Induced Development:** The preceding summaries of planning studies and published documents indicate that there are numerous initiatives underway to direct development and redevelopment throughout the AOI. The analysis of the potential induced growth impacts of the Build Alternatives was performed during preparation of this DEIS. To make reasonable judgments about potential project-induced impacts, TxDOT leveraged a Delphi panel to assess the induced growth impacts from the I-35 Capital Express Central Project. The Delphi panel consisted of 19 diverse experts familiar with regional land use trends and potential growth impact. The purpose of consulting with the local planning experts was to seek their input on whether the proposed project improvements could increase the rate of development or attract additional development within the AOI. The panel was invited to respond to two rounds of a customized web-based questionnaire with a GIS component, and provide feedback on the three key areas:

- The geographic areas most likely to be affected by the project,
- The likelihood and rate of growth/degrowth in identified areas, and
- The resources likely to affect, or otherwise constrain, growth induced by the project.

During the surveys, the Delphi panel experts were asked questions related to the AOI, induced population growth, land-use changes, and constraints to development or redevelopment. The Delphi panel participants were asked to assess the appropriateness of the proposed AOI indicated on a web map and to explain the reasons for their responses. The Delphi panel respondents said the AOI study boundary was incorrect and needed to be expanded farther east and farther north and south of the boundary. Research and coordination with TxDOT confirmed the expansion of the AOI boundary was not necessary because the areas farther east, north, and south of the proposed AOI boundary had been included in indirect impacts environmental analyses for other projects. Due to the proximity of the projects, the previous project boundaries would eclipse the proposed improvements to I-35. Therefore, no modifications to the AOI boundary were made.

With regard to induced population growth, the Delphi panel participants were asked to assess the likelihood that the project would lead to population growth within the AOI and explain their responses (see Appendix S, Delphi Panel Summary Report). None of the Delphi panel respondents thought that the proposed project would independently induce development in the AOI. During the second survey, 58 percent of the panel said that population growth within the AOI would likely be “About the Same.” The Delphi panel participants stated that
complex factors influence population growth and believed that a highway improvement project is not the driving factor in determining population growth trends. Most of the Delphi panel respondents stated that population growth will likely be about the same, following current growth trends. The panel anticipated that future development within the AOI would be driven primarily by existing increasing population growth trends and other planned development in the region; development would not be driven by the proposed I-35 Capital Express Central improvements. Based on the Delphi panel responses as well as the analysis of existing and future land use, accessibility, and population growth trends, the proposed project would not induce development or increase the rate or intensity of development in the AOI. Detailed survey results and Delphi panel responses are included in the Delphi Panel Summary Report available for review at TxDOT Austin District office and online.

When asked about the likelihood of the proposed project inducing redevelopment within the proposed study boundary, 54 percent of respondents in the first survey indicated that redevelopment was “Neither Likely nor Unlikely.” In the second survey, 58 percent of the panel said redevelopment is “Neither Likely nor Unlikely.” There was a moderate shift toward more participants indicating that redevelopment was Extremely Unlikely in the second survey. In open text responses, the Delphi panel participants said they believed that there is a possibility that elements of the proposed improvements would create interest in redevelopment; however, there are other limiting factors such as existing city code and zoning rules, that would have more impact on redevelopment (see Appendix S, Delphi Panel Summary Report, Figure 4).

To further understand the constraints and drivers of land use and population changes within the AOI, we asked the Delphi panel to rank a set of factors likely to limit growth, development, and redevelopment; they identified “current zoning requirements” as the key determinant limiting potential growth trends. The Delphi panel also noted the “lack of affordable housing” and “lack of education infrastructure” as factors that would limit growth. Lack of affordable housing was ranked as the second most important factor by 69 percent of participants. Thirty-eight percent (38%) of participants identified floodplain designations as the third most important limiting factor for growth. As previously stated in Step 3, approximately 2,901 acres or 7.6 percent of the AOI is designated as parkland and floodplain which includes special flood hazard areas—Zones A, AE, AO, AH, VE, AR (FEMA NFHL 2019; COA, 2019). The Delphi panel participants believed that land use and zoning regulations that restrict development in parks and floodplain areas are the primary constraint for growth. The panel agreed that zoning limits growth throughout the study area, especially in residential areas currently zoned SF-3 (Family Residence). The panel also raised the issue of transportation policy, including transit improvements and cycling and pedestrian infrastructure, as an additional limiting factor.

When asked for feedback about the spatial dimension of development and redevelopment, the Delphi panel identified 12 areas located throughout east Austin, including Mueller, Del Valle and Pleasant Hill near AUS, areas between Manor Road and US 290 East, and areas near the intersection of I-35 and Ben White Boulevard showing spatial dimension of development and redevelopment (see ArcGIS - I-35 Land Use and Development Panel Survey Development/Redevelopment Responses or review the Delphi Panel Summary Report in Appendix S).

In their responses, the Delphi panel participants stated there were no substantial new development opportunities adjacent to the project. Additionally, the panel believed that the proposed project north of East 51st Street did not include sufficient east-west crossing to attract either type of development in that area, noting
that further pedestrian linkages would be necessary to increase development activity between Hyde Park and Mueller. Detailed Delphi panel survey responses are included in the Delphi Panel Summary Report available for review at TxDOT Austin District office and online.

In summary, the key findings from the Delphi Panel responses showed that the I-35 Capital Express Central improvements would not have a substantial impact on existing population growth trends. According to the majority of the Delphi panel (58%), the proposed I-35 Capital Express Central Project would not induce redevelopment. Although the proposed project could create interest for redevelopment in the AOI, there are other limiting factors such as existing zoning requirements and ordinances, that would more likely affect redevelopment opportunities. The I-35 Capital Express Central Project may provide modest opportunities for new infill or greenfield development, but not substantial redevelopment. Both new development and redevelopment of parcels throughout the region are highly constrained by current land use and zoning regulations.

**Step 5. Identify Resources Subject to Induced Growth Impacts:** Based on current development and population growth trends within the AOI, the vacant (developable and redevelopable) areas within the AOI are already experiencing development and redevelopment; these current land use changes are not being propelled by the proposed I-35 Capital Express Central Project. As previously noted in Step 3 of the Induced Growth Analysis, less than 5 percent of the land within the AOI is developable and already experiencing land use changes driven by existing population growth trends. Data from COA (2021) were used to determine which resources are present in the areas identified for potential redevelopment. Given that the AOI is already experiencing rapid population growth, largely due to migration, it is anticipated that the proposed project would not induce development or increase the rate or intensity of development in the AOI. The Delphi expert panel responses stated that growth and development within the AOI will continue to follow current trends; future development within the AOI would be driven primarily by existing increasing population growth trends and other planned development in the region and not the proposed I-35 Capital Express Central improvements.

**Step 6. Identify Mitigation:** There is vacant land and redevelopable areas within the AOI; these account for approximately 5.03 percent of the AOI, which translates to about 1,920.65 acres. COA’s permitting and emerging projects database shows ongoing projects within the vacant and developable areas of the AOI. The Delphi panel responses acknowledged that the proposed project could have some influence related to development of greenfield and unused or underused parcels within the AOI; but overall growth and development would be driven by the current population growth and local development trends. The Delphi panel indicated that the proposed project could create opportunities for new development adjacent to the highway improvement due to improved east-west connectivity; however, existing land-use and zoning regulations would have the greatest influence on both development and redevelopment. Since COA has been experiencing rapid population growth and development over the past few years, the proposed I-35 Capital Express Central Project is not the key driving factor for development or redevelopment within the AOI. The proposed project would not induce growth; therefore, mitigation measures and strategies would not be necessary.

Future land development activities would generally be private ventures regulated by COA’s Code of Ordinances. The regulations in COA Code address environmental and social impacts by requiring mitigation as part of site design and construction, such that development is in accordance with overall City objectives. In addition, the
agencies and programs that would guide any development of a potential project would be similar to the typical mitigation and permitting measures required of TxDOT. For example, all development (public or private developers) must comply with flood control regulations under FEMA and the local floodplain administration, the ESA, the CWA, CWA Section 401 Water Quality Certification requirements, and CWA Section 404 permits for projects affecting jurisdictional WOTUS, including wetlands.

The proposed project would not likely result in induced growth within the AOI based on future development predictions in local planning documents; historic and projected population, employment, and development trends; and feedback received from the Delphi panel. The proposed improvements would improve connectivity and mobility between east and west Austin for all modes of travel, which could contribute to the desirability of areas available for redevelopment; however, these areas are already considered highly attractive for redevelopment in the absence of the proposed improvements. Growth trends established over the last several decades indicate these areas would redevelop regardless of the project if zoning allows in the future. The project would not affect the trajectory of redevelopment within the AOI or introduce changes that would affect redevelopment that would not otherwise occur. Improvements to the existing interstate would not create new opportunities for growth within the AOI, which contains very limited land available for development, particularly in proximity to the proposed project limits. In summary, while the project would benefit connectivity and mobility across I-35, the improvements would not introduce changes substantial enough to alter long-established growth trends within the AOI, particularly in consideration of other factors—such as economic drivers, zoning, and housing market volatility—that more strongly influence development in Austin. Proposed mitigation is discussed further in Section 3.25.

3.15.2 No Build Alternative

Under the No Build alternative, the construction of the proposed I-35 Capital Express Central improvements would not occur; as such, there would be no project-induced growth.

3.16 Cumulative Effects

Cumulative effects to the environment are those that result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. “Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time” (40 CFR §1508.7). The cumulative effects analysis includes a series of analyses, focused on each of the resources selected for detailed consideration.

The proposed project would have direct and indirect impacts to community resources (community cohesion, travel patterns, ROW acquisition and displacements, EJ, community facilities, parkland, and traffic noise) ecological resources (vegetation, wildlife, and potential threatened and endangered species habitat), and historic resources. The direct and/or indirect effects to these resources are considered significant; therefore, a detailed cumulative effects analysis is required for the proposed I-35 Capital Express Central project.
3.16.1 Cumulative Effects Methodology

The screening tools used in this cumulative effects analysis included TxDOT guidance documents titled *Cumulative Impacts Analysis Guidelines* (TxDOT, 2019b) and the *Cumulative Impacts Decision Tree* (April 2014). The cumulative effects analysis focuses on 1) those resources significantly impacted by the project, and 2) resources currently in poor or declining health or at risk even if the impact from the proposed action is minimal. While two build alternatives, Build Alternative 2 and Modified Build Alternative 3, are being considered for the proposed project, the cumulative effects analysis focuses on the overall impacts of the proposed project in relation to and in addition to impacts of other projects in the area.

The steps for estimating cumulative effects recommended in the January 2019 Guidance include defining and documenting the following:

- **Step 1** - Resource Study Area (RSA), Conditions, and Trends
- **Step 2** - Direct and Indirect Effects on each Resource from the Proposed Project
- **Step 3** - Other Actions – Past, Present, and Reasonably Foreseeable – and their Effect on each Resource
- **Step 4** - The Overall Effects of the Proposed Project Combined with Other Actions
- **Step 5** - Mitigation of Cumulative Effects

TxDOT guidance separates the cumulative effects analysis into five distinct steps, where all resources are covered together under each step. However, for this analysis the process was modified to provide a more cohesive discussion of cumulative effects for each resource. The following modified process was utilized for this analysis:

- **Step 1** - RSA, Conditions, and Trends
- **Step 2** - Other Past, Present, and Reasonably Foreseeable Actions
- **Step 3** - Effects Analysis and Mitigation for Resources Subject to Cumulative Effects

To determine which resources will be assessed in detail in the cumulative effects analysis, Table 3.16-1 summarizes the direct and indirect impacts the proposed I-35 Capital Express Central project would have on each identified resource. Although the effects of the two build alternatives vary, both build alternatives have similar study areas. Therefore, for the purposes of this report, one RSA was delineated for each resource and the cumulative effects analysis considers general impacts of both build alternatives for each resource and respective study area.

3.16.2 Resource Study Area, Conditions, and Trends (Step 1)

3.16.2.1 Identification of Resources

A series of environmental and socioeconomic resources were reviewed as part of the proposed I-35 Capital Express Central project. Table 3.16-1 depicts the direct and indirect impacts to each resource considered to be
carried through the cumulative effects analysis. Based on the type and extent of direct and indirect impacts, a cumulative effects analysis is required for the following resources: community impacts including socioeconomic, which includes EJ, displacements (commercial, residential, and community facilities), traffic noise, and parkland; ecological resources (vegetation/wildlife habitat and potential threatened and endangered species); and historic resources.
### Table 3.16-1. Direct and Indirect Impacts to Environmental/Socioeconomic Resources Considered for Cumulative Effects Analysis

<table>
<thead>
<tr>
<th>Environmental/Socioeconomic Resource</th>
<th>Direct Impact</th>
<th>Indirect Impact</th>
<th>Is the Resource in Poor or Declining Health?</th>
<th>Cumulative Effects Analysis is Necessary?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Facilities/Services</td>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Yes – displaced community facilities would include: two FQHCs, CommUnityCare – David Powell Health Center and CommUnityCare – Hancock Walk-In Care; The Austin Veteran Affairs (VA) Center; and two early childhood centers Escuelita de Alma and Extend-A-Care. Several BN service locations currently provided by COA for those experiencing homelessness would be displaced (not permanent facilities) including under existing bridges of I-35 at Airport Blvd. and 7th Street. Minor ROW acquisition would be required from other community facilities that would not be expected to change the function of the facilities.</td>
<td>Yes – While most of the AOI is developed, areas of potential growth are most suitable for redevelopment and infill development. Some of these areas are planned developments that would not be subject to induced development. Redevelopment is considered to be a potential real estate trend. Displacements of community facilities in predominately EJ census geographies could fragment communities and the populations that rely on their services. Residents would also need to travel to</td>
<td>No</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>
Table 3.16-1. Direct and Indirect Impacts to Environmental/Socioeconomic Resources Considered for Cumulative Effects Analysis

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</thead>
<tbody>
<tr>
<td><strong>Environmental</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resource</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>other locations to receive services, which may increase travel times and add costs in transportation in order to use services. Displaced services may no longer be able to serve their communities.</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Socioeconomic (Displacements and Economic, etc.)</strong></td>
<td>Yes – Build Alternative 2 would be expected to displace 131 commercial businesses and 145 residences (including multi-family units), and 15 vacant properties. Modified Build Alternative 3 would be expected to displace 69 commercial properties and 26 residences (including multi-family units) and 12 vacant buildings. The business displacements could result in the loss of jobs in the area; however, a local and nationwide labor shortage is currently occurring. Housing prices in Austin were up almost 27 percent compared to 2020</td>
<td>Yes – Displacements in predominately EJ census geographies could fragment communities and force displaced residents to other parts of Austin or other communities/cities. Residents would also need to travel to other locations to receive services or patronize business elsewhere, which may increase travel times and</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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Table 3.16-1. Direct and Indirect Impacts to Environmental/Socioeconomic Resources Considered for Cumulative Effects Analysis

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<th>Is the Resource in Poor or Declining Health?</th>
<th>Cumulative Effects Analysis is Necessary?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creating a highly competitive housing and commercial market.</td>
<td>add costs in transportation in order to use services. Benefits include improved facilities for alternative modes of transportation.</td>
<td>Homelessness encampments exist in the study area. TxDOT’s IAH aims to manage homelessness by providing outreach and connecting people with necessary services and donation drives.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental Justice (EJ)</td>
<td>Yes – minority and low-income populations are present within the community study area. Of the 291 total displacements with Build Alternative 2, 172 would be in EJ geographies. Of the 107 total displacements with the Modified Build Alternative 3, 90 would be in EJ geographies. Noise and Air Quality impacts to EJ populations would be similar to impacts to all populations.</td>
<td>Yes – The majority of displacements are located in predominately EJ census geographies. The displacements could fragment communities and force displaced residents to other parts of Austin or other communities/cities. Residents would also need to travel to other locations to receive services or donate drives.</td>
<td>Yes – East Austin has experienced a high degree of gentrification. Many residents who have historically lived in the community RSA have been displaced to areas east of US 183 and other areas that are more affordable such as Round Rock. It is expected that the movement of EJ</td>
<td>Yes</td>
</tr>
</tbody>
</table>
### Table 3.16-1. Direct and Indirect Impacts to Environmental/Socioeconomic Resources Considered for Cumulative Effects Analysis

<table>
<thead>
<tr>
<th>Environmental/Socioeconomic Resource</th>
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<th>Indirect Impact</th>
<th>Is the Resource in Poor or Declining Health?</th>
<th>Cumulative Effects Analysis is Necessary?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Water Resources</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Groundwater Resources</td>
<td>No – project area is outside Edwards Aquifer recharge, transition, and contributing zone.</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Floodplains</td>
<td>Yes – project area bisects two 100-year floodplains at Tannehill Branch and at Lady Bird Lake.</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>WOTUS, including Wetlands and Water Quality</td>
<td>Yes – impacts to four potentially jurisdictional waters (Tannehill Branch, Colorado River/Lady Bird Lake, Harpers Branch and Colorado River (proposed drainage outfall structure)). Additionally, the project</td>
<td>No</td>
<td>Impacts to WOTUS, a resource in poor and declining health, would occur. However, because</td>
<td>No</td>
</tr>
</tbody>
</table>

EJ and non-EJ populations would benefit from reduced congestion, the project’s SUP, enhanced bridges, and bypass lanes. Patrons would continue to patronize business elsewhere, which may increase travel times and add costs in transportation disproportionately impacting EJ populations who use these services. Benefits include improved facilities for alternative modes of transportation. Populations would continue to patronize business elsewhere, which may increase travel times and add costs in transportation disproportionately impacting EJ populations who use these services. Benefits include improved facilities for alternative modes of transportation. Populations would continue due to rising costs.
Table 3.16-1. Direct and Indirect Impacts to Environmental/Socioeconomic Resources Considered for Cumulative Effects Analysis

<table>
<thead>
<tr>
<th>Environmental/Socioeconomic Resource</th>
<th>Direct Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>area is within five linear miles of, is within the watershed of, and drains into an impaired assessment unit (Waller Creek Unit 1429C_01) under Section 303(d) of the CWA.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cumulative Effects Analysis is Necessary?</th>
</tr>
</thead>
<tbody>
<tr>
<td>those impact would not exceed specified limits of the USACE NWPs, the project would proceed under a non-reporting NWP 14 without the need for mitigation. Additionally, water quality would be protected by meeting the general conditions and Section 401 Certification requirements for NWP 14. The SW3P implemented for the project would include at least one BMP for erosion control, sediment control, and post-construction TSS control from the Tier 1 401 Water Quality Certification Conditions for NWPs as published by the TCEQ. Because these BMPs are in...</td>
</tr>
</tbody>
</table>
Table 3.16-1. Direct and Indirect Impacts to Environmental/Socioeconomic Resources Considered for Cumulative Effects Analysis

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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>place, the resource is not carried forward.</td>
</tr>
<tr>
<td>Ecological Resources</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vegetation and Wildlife Habitat</td>
<td>Yes – impacts to herbaceous, shrub, tree, and other plantings throughout the project areas through site preparation activities are anticipated. Clearing and grading would remove the existing vegetative cover and it would be replaced with mostly impervious cover. Open areas would likely be planted with herbaceous vegetation that would be maintained. Wooded areas would likely require some tree removal for construction. Removal of natural vegetation may cause erosion and BMPs would be implemented to reduce erosion along the project. Impacts to fragmented habitat through removal of vegetation or structures that provide habitat for wildlife. Mobile species would likely leave during construction, less mobile species could be injured or killed. Exposure to additional roadway pollutants.</td>
<td>Yes – Potential loss of vegetation and fragmentation of habitat.</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>
### Table 3.16-1. Direct and Indirect Impacts to Environmental/Socioeconomic Resources Considered for Cumulative Effects Analysis

<table>
<thead>
<tr>
<th>Environmental/Socioeconomic Resource</th>
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<th>Indirect Impact</th>
<th>Is the Resource in Poor or Declining Health?</th>
<th>Cumulative Effects Analysis is Necessary?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Possible additional nesting locations for birds under the proposed bridges.</td>
<td></td>
<td>Yes – Potential loss of vegetation and fragmentation of habitat.</td>
<td>Yes – Monarch Butterfly is expected to be listed on federal endangered species list in 2024, and the tricolored bat is proposed endangered. SGCN S1-S3.</td>
<td>Yes</td>
</tr>
<tr>
<td>Potential impacts to Monarch Butterfly, a candidate species. No further coordination needed since not proposed for listed until 2024.</td>
<td>Potential impacts to the tricolored bat, a proposed endangered species. A presence/absence survey should occur to determine presence, and bat exclusion devices implemented as determined necessary. A total of 18 SGCN may be impacted by the proposed project. Species-specific mitigation strategies would be employed. Coordination with TPWD is ongoing. BMPs would be implemented to minimize impacts to 18 SGCN.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Threatened and Endangered Species

- **Monarch Butterfly**: Potential impacts to Monarch Butterfly, a candidate species. No further coordination needed since not proposed for listed until 2024. Potential impacts to the tricolored bat, a proposed endangered species. A presence/absence survey should occur to determine presence, and bat exclusion devices implemented as determined necessary. A total of 18 SGCN may be impacted by the proposed project. Species-specific mitigation strategies would be employed. Coordination with TPWD is ongoing. BMPs would be implemented to minimize impacts to 18 SGCN.
- **Tricolored Bat**: Presence/absence survey should occur to determine presence, and bat exclusion devices implemented as determined necessary.

#### Cultural Resources

- **ROW acquisition/adverse effect**:
  - EBBC Main Office *(Austin Chronicle)* (4000 North I-35)
  - Dura Tune Service Station (3810 North I-35)
  - Haster House (3009 North I-35)

<table>
<thead>
<tr>
<th></th>
<th>No</th>
<th>No</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Row acquisition/adverse effect:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EBBC Main Office <em>(Austin Chronicle)</em> (4000 North I-35)</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Dura Tune Service Station (3810 North I-35)</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Haster House (3009 North I-35)</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Table 3.16-1. Direct and Indirect Impacts to Environmental/Socioeconomic Resources Considered for Cumulative Effects Analysis

<table>
<thead>
<tr>
<th>Environmental/Socioeconomic Resource</th>
<th>Direct Impact</th>
<th>Indirect Impact</th>
<th>Is the Resource in Poor or Declining Health?</th>
<th>Cumulative Effects Analysis is Necessary?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential area</td>
<td>Residence at 4505 North I-35 in Delwood II Historic District (Build Alternative 2 only)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Residence at 4503 North I-35 in Delwood II Historic District (Build Alternative 2 only)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Roberts House (3509 North I-35)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ROW acquisition/effect determination in process:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Town Lake Park System between Waller Creek and Fiesta Gardens</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No ROW/no adverse effect:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>East 7th St. at Waller Creek Bridge</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>East 6th St. at Waller Creek Bridge</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>701 East 6th St.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Robinson Brothers Warehouse (501 North I-35)</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>604 East 3rd St.</td>
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<tr>
<td></td>
<td>606 East 3rd St.</td>
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<tr>
<td></td>
<td>608 East 3rd St.</td>
<td></td>
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<tr>
<td></td>
<td>Walker Brothers Warehouse (807 East 4th St.)</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>900 East 3rd St.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Austin Metal and Iron (300 Medina St.)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 3.16-1. Direct and Indirect Impacts to Environmental/Socioeconomic Resources Considered for Cumulative Effects Analysis

<table>
<thead>
<tr>
<th>Environmental/Socioeconomic Resource</th>
<th>Direct Impact</th>
<th>Indirect Impact</th>
<th>Is the Resource in Poor or Declining Health?</th>
<th>Cumulative Effects Analysis is Necessary?</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Palm Park (200 North I-35)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• 905 East 2nd St.</td>
<td></td>
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</tr>
<tr>
<td>• 907 East 2nd St.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Bonugli Grocery (78 San Marcos St.)</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>• 1601 Elmhurst Dr.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>• Travis Green Apartments (1304 Mariposa Dr.)</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Delwood Duplex Historic District</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• East 2nd/3rd Streets Historic District</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Rainey Street Historic District</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Sixth Street Historic District</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Swedish Hill Historic District</td>
<td></td>
<td></td>
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<tr>
<td>• Swedish Hill Extension Historic District</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>• Travis Heights-Fairview Park Historic District</td>
<td></td>
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<tr>
<td>• Willow-Spence Historic District</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No ROW/no effect:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Northeast HS (7201 Berkman Dr.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• St. George’s Episcopal Church/School (4301 North I-35)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• LBJ Library/Thompson Conf. Center (2300–2313 Red River St., 2405 Robert Dedman Dr.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table 3.16-1. Direct and Indirect Impacts to Environmental/Socioeconomic Resources Considered for Cumulative Effects Analysis

<table>
<thead>
<tr>
<th>Environmental/Socioeconomic Resource</th>
<th>Direct Impact</th>
<th>Indirect Impact</th>
<th>Is the Resource in Poor or Declining Health?</th>
<th>Cumulative Effects Analysis is Necessary?</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Little Campus (1701 Red River St.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Oakwood Cemetery (1601 Navasota St.)</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>• Limerick-Frasier House (810 East 13th St.)</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>• East 12th St. WB at Waller Creek Bridge</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>• East 12th St. EB at Waller Creek Bridge</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• 901 East 12th St.</td>
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<tr>
<td>• 912 East 11th St.</td>
<td></td>
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<tr>
<td>• Stubbs BBQ (801 Red River St.)</td>
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<td></td>
<td></td>
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<tr>
<td>• French Legation (822 Embassy Dr.)</td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

No ROW/effect determination in process:

- Mount Calvary Cemetery (East side, 2600-2700 blocks North I-35)

Section 4(f) impacts:

- EBBC Main Office *(Austin Chronicle)* - Individual Evaluation
- Dura Tune - Individual Evaluation
- Haster House – Individual Evaluation
- Residence at 4505 North I-35 in Delwood II Historic District (Build Alternative 2 only) – Individual Evaluation
Table 3.16-1. Direct and Indirect Impacts to Environmental/Socioeconomic Resources Considered for Cumulative Effects Analysis

<table>
<thead>
<tr>
<th>Environmental/Socioeconomic Resource</th>
<th>Direct Impact</th>
<th>Indirect Impact</th>
<th>Is the Resource in Poor or Declining Health?</th>
<th>Cumulative Effects Analysis is Necessary?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residence at 4503 North I-35 in Delwood II Historic District (Build Alternative 2 only) – Individual Evaluation</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Roberts House – Individual Evaluation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Butler Hike and Bike Trail – Individual Evaluation</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Waller Beach – Individual Evaluation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Edward Rendón Park – Individual Evaluation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Archaeological Resources</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Additional Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazardous Materials</td>
</tr>
<tr>
<td>Unresolved Hazardous Materials Concerns: ROW partial acquisition of active PSTs (Map IDs 48, 103, 141). Map IDs 1, 3, 4, 6, 8, 9, 14, and 15 have active or filled-in place PSTs that may be within ROW that would be acquired. The exact location of the PSTs will need to be determined prior to construction. Complete ROW acquisition of LPST (MAP IDs 7, 35, 37, 72, 78, 82, 103, 115, 125, 82, 281, 332, 140, 143, 141, and 114). Map IDs 130 and 123 are large contamination plumes or uncharacterized plumes that</td>
</tr>
</tbody>
</table>
Table 3.16-1. Direct and Indirect Impacts to Environmental/Socioeconomic Resources Considered for Cumulative Effects Analysis

<table>
<thead>
<tr>
<th>Environmental/Socioeconomic Resource</th>
<th>Direct Impact</th>
<th>Indirect Impact</th>
<th>Is the Resource in Poor or Declining Health?</th>
<th>Cumulative Effects Analysis is Necessary?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>have not had final concurrence issued and are considered high risk due to lack of spill characterization, history of multiple releases on-site, active use of on-site tanks, and proposed ROW acquisitions at these two locations. Low risk SPILLS listing (Map ID 19). Low-risk IHWCA (Map ID 402).</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air Quality</td>
<td></td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>FHWA estimates that even if VMT increases by 45 percent from 2010 to 2050 as forecast, a combined reduction of 91 percent in the total annual emissions for the priority MSAT is projected for the same time period.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Traffic Noise</td>
<td>Yes - of the 95 receivers modeled for Build Alternative 2, 53 would be impacted, and eight noise barriers would be feasible and reasonable. Of the 90 receivers modeled for Modified Build Alternative 3, 51 would be impacted, and nine noise barriers would be feasible and reasonable.</td>
<td>Yes - Traffic noise is an indirect impact; therefore, impacts included under direct impacts also apply here.</td>
<td>No</td>
<td>Yes – covered under community resources</td>
</tr>
<tr>
<td>Parkland, Section 4(f)/6(f), or</td>
<td>Parks located along the proposed project and Lady Bird Lake would be required for construction and</td>
<td>Yes – While induced growth is not anticipated as a</td>
<td>No</td>
<td>Yes – covered</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 3.16-1. Direct and Indirect Impacts to Environmental/Socioeconomic Resources Considered for Cumulative Effects Analysis

<table>
<thead>
<tr>
<th>Environmental/ Socioeconomic Resource</th>
<th>Direct Impact</th>
<th>Indirect Impact</th>
<th>Is the Resource in Poor or Declining Health?</th>
<th>Cumulative Effects Analysis is Necessary?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter 26 Properties</td>
<td>staging activities. The following park resources are undergoing Section 4(f) evaluation.</td>
<td>result of the proposed project, encroachment alteration impacts could be attributed to the use of parkland. The removal of trees and temporary but long-term closure of facilities could affect how people use these parks in the future.</td>
<td></td>
<td>under community resources</td>
</tr>
<tr>
<td>• Butler Hike and Bike Trail</td>
<td></td>
<td>A noise barrier is proposed at Lady Bird Lake, which would provide a beneficial impact to the park by reducing traffic noise.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Edward Rendon Park *</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>• Roy Guerrero Park</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• International Shores_3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Norwood Tract</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Waller Beach*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Lady Bird Lake</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

*Parks are also undergoing Section 6(f) evaluation.
3.16.2.2 Resource Study Areas and Temporal Boundaries for Analysis

The temporal boundary for the Community RSA and Ecological RSA is from 1962 to 2045. The year 1962 was chosen to include the initial I-35 project, which was completed that year. I-35 followed the alignment of East Avenue, which separated downtown Austin from east Austin. The year 2045 is the planning horizon for CAMPO’s current RTP. The temporal boundary for the Historic RSA is from 1980, the historic-age cut-off date used in the Project’s HRSR, to 2045.

3.16.2.2.1 Community RSA

The Community RSA was used to evaluate potential cumulative effects to the community from changes to community facilities, displacements, EJ, parkland, and traffic noise. The boundaries follow the CIA study area, an approximately 40 square-mile area between US 183 to the East, US 290 to the north, William Cannon Drive to the south, and generally South Congress Avenue and North Lamar Boulevard to the west. The RSA was delineated based on the conclusion that the proposed project would not induce development or redevelopment and, therefore, would not likely have cumulative effects to EJ populations beyond the CIA study area boundary. The RSA boundary is shown below in Figure 3.16.1. Community cohesion, EJ, community resources, parkland, and traffic noise impacts are included in the community resources discussion.

3.16.2.2.2 Historic RSA

The Historic RSA is delineated based on historic properties/districts identified within the APE that was used in the HRSR (2022). These properties/districts include those that are listed on or eligible for listing on the NRHP, COA Historic Landmarks, SAL, RTHL, and properties/districts that are under consideration in the current HRSR conducted for this project. Resources used for identifying properties consist of TxDOT’s online Historic Resources Aggregator, THC data, and COA Historic Landmarks data. In instances where the historic property was identified by a point, the entire parcel was included for the purposes of delineating the RSA. These identified resources are shown in Figure 3.16.2.
Figure 3.16. Cumulative Effects Community RSA
Figure 3.16-2. Cumulative Effects Historic RSA
3.16.2.2.3 Ecological RSA

The Ecological RSAs were used to evaluate potential cumulative effects to natural vegetation, wildlife, and threatened and endangered species habitat. More specifically this analysis will look into specific habitats for federally- or state-listed threatened and endangered species or SGCN within each Ecological RSA defined below. The Ecological RSAs are based on the general boundary of the watersheds that intersect the proposed project. The Ecological RSAs contain fragmented habitat and this outer boundary serves as the point at which cumulative effects would no longer be considered significant to species or their habitat. This area encompasses the home range of any individual federally- or state-listed species or SGCN for which habitat was identified within the proposed project area except the migratory bird species. No state-listed threatened or endangered species have habitat within the project area; however, there is habitat for 18 SGCNs. Habitat for the federal candidate species, Monarch Butterfly, and federally-proposed endangered species, is also present within the vicinity of the project and may be impacted. The Monarch Butterfly is anticipated to be proposed for listing on the ESA in 2024, during the proposed period of construction of the proposed project. Nine SGCN species with a Subnational (S) Conservation Status Rank of S1 – Critically Imperiled, S2 – Imperiled, or S3 – Vulnerable are considered to be in poor or declining health and included in this report (see Table 3.16-2). Nine species with an S4 – Apparently Secure, S5 – Secure, or SU – Unranked are located within the Ecological RSAs are not considered to be in poor or declining health and are excluded from this report.

The Ecological RSAs have been delineated by the EMST MOU habitat types for each of the species that may be impacted by the proposed project. EMST data is a tool, so vegetation should be field verified to ensure accuracy; however, it would not be feasible to field verify the vegetation from the EMST data for all Ecological RSAs. The watersheds that intersect the project area serve as the general boundary for each of the Ecological RSAs. The Ecological RSA habitat boundaries are described below in Table 3.16-2. The overlap of Ecological RSAs where species may be found is shown in Table 3.16-3. The ecological RSAs are shown in individual maps in Figure 3.16-3 through Figure 3.16-6 on the following pages. Beyond the Ecological RSA boundaries, land use primarily consists of agricultural land, would not support the ecological resources depicted in this document, or is deemed too far away from the proposed project to result in a direct, indirect, or cumulative impact.

Table 3.16-2. Ecological RSA Habitats

<table>
<thead>
<tr>
<th>Ecological Resources RSA ID</th>
<th>MOU Habitat Type (Common Vegetation Name)</th>
<th>Species (Common Name)</th>
<th>Acreage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>100-Year Floodplain</td>
<td>Guadalupe bass (S3), caddisfly (S1), Correll’s false dragon-head (S2)</td>
<td>6,665.5</td>
</tr>
<tr>
<td>2</td>
<td>All except Urban High Intensity</td>
<td>slender glass lizard (S3), Texas garter snake (S1), Monarch Butterfly (Federal Candidate), tree dodder (S3)</td>
<td>52,438.0</td>
</tr>
</tbody>
</table>
### Table 3.16-2. Ecological RSA Habitats

<table>
<thead>
<tr>
<th>RSA ID</th>
<th>MOU Habitat Type</th>
<th>Species (Common Name)</th>
<th>Acreage</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Crosstimber Woodland and Forest; Disturbed Prairie; Edwards Plateau Savannah, Woodland, and Shrubland; Post Oak Savanna; and Riparian</td>
<td>cave myotis bat (S2S3), tricolored bat (S2)</td>
<td>13,938.1</td>
</tr>
<tr>
<td>4</td>
<td>Edwards Plateau Savannah, Woodland, and Shrubland; Disturbed Prairie</td>
<td>plateau spot-tailed earless lizard (S2), Texas fescue (S3)</td>
<td>9,602.4</td>
</tr>
</tbody>
</table>

### Table 3.16-3. Species Overlap in RSAs

<table>
<thead>
<tr>
<th>Species</th>
<th>Potential RSAs of occurrence (from above table)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guadalupe bass (S3)</td>
<td>1</td>
</tr>
<tr>
<td>a caddisfly (S1)</td>
<td>1</td>
</tr>
<tr>
<td>Correll’s false dragon-head (S2)</td>
<td>1</td>
</tr>
<tr>
<td>slender glass lizard (S3)</td>
<td>1, 2, 3, 4</td>
</tr>
<tr>
<td>Texas garter snake (S1)</td>
<td>1, 2, 3, 4</td>
</tr>
<tr>
<td>Monarch Butterfly (federal Candidate)</td>
<td>1, 2, 3, 4</td>
</tr>
<tr>
<td>tree dodder (S3)</td>
<td>1, 2, 3, 4</td>
</tr>
<tr>
<td>cave myotis bat (S2S3)</td>
<td>1, 2, 3, 4</td>
</tr>
<tr>
<td>tricolored bat (S3)</td>
<td>1, 3, 4</td>
</tr>
<tr>
<td>plateau spot-tailed earless lizard (S3)</td>
<td>2, 3, 4</td>
</tr>
<tr>
<td>Texas fescue (S3)</td>
<td>2, 3, 4</td>
</tr>
</tbody>
</table>
Figure 3.16-3. Cumulative Effects Ecological RSA 1
Figure 3.16-4. Cumulative Effects Ecological RSA 2
3.0 Affected Environment and Environmental Consequences

Figure 3.16-5. Cumulative Effects Ecological RSA 3

EMST MOU Types: Crosstimber Woodland and Forest; Disturbed Prairie; Edwards Plateau Savannah, Woodland, and Shrubland; Post Oak Savannah; and Riparian

RSA 3 Habitat

I-35 Capital Express Central
From US 290 East
To US 290 West/SH 71
Travis County, TX
CSJ: 0015-13-388
Source: Nearmap 2021

- Project Area
- RSA Boundary
- RSA 3 Habitat

0 1.5 3 Miles
Figure 3.16-6. Cumulative Effects Ecological RSA 4

RSA 4 Habitat
EMST MOU Types:
Edwards Plateau
Savannah, Woodland,
and Shrubland; and
Disturbed Prairie

Cumulative Effects Ecological RSA 4
I-35 Capital Express Central
From US 290 East
To US 290 West/SH 71
Travis County, TX
CSJ: 0015-13-388
Source: Nearmap 2021

- Project Area
- RSA Boundary
- RSA 4 Habitat

0 1.5 3 Miles

Texas Department of Transportation
3.16.3.1 Community Resources

3.16.3.1.1 Population Growth

COA and Travis County have experienced tremendous population growth since 1960. As seen in Table 3.16-4, COA has grown from a population of 186,545 in 1960 to almost 1 million in 2020, an increase in population of 415.6 percent (Texas Almanac, n.d. & Texas State Library Archives Commission, 2020). Similarly, Travis County grew from a population of 212,136 in 1960 to a population of 1,290,188, a percent growth of 508.2 percent.

Table 3.16-4. Population Growth Within the Community Resource RSA

<table>
<thead>
<tr>
<th>Year</th>
<th>Austin</th>
<th>Travis County</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>186,545</td>
<td>212,136</td>
</tr>
<tr>
<td>1970</td>
<td>253,539</td>
<td>295,516</td>
</tr>
<tr>
<td>1980</td>
<td>345,890</td>
<td>419,573</td>
</tr>
<tr>
<td>1990</td>
<td>465,622</td>
<td>576,407</td>
</tr>
<tr>
<td>2000</td>
<td>656,562</td>
<td>812,280</td>
</tr>
<tr>
<td>2010</td>
<td>790,390</td>
<td>1,024,266</td>
</tr>
<tr>
<td>2020</td>
<td>961,855</td>
<td>1,290,188</td>
</tr>
</tbody>
</table>

Percent Change 1960–2020

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent Change</td>
<td>415.6%</td>
<td>508.2%</td>
</tr>
</tbody>
</table>

COA grew by 171,465 people, a population growth of 21.7 percent between 2010 and 2020. COA is currently the 11th largest city in the US. According to COA’s Housing and Planning Development (2021) and as seen in Figure 3.16-7, Non-Hispanic Whites drove the majority of COA’s population growth within the past decade (2010–2020), accounting for approximately 39.5 percent of all growth in that period. Black or African Americans accounted for approximately 3 percent of Austin’s growth from 2010-2020, while Hispanic or Latinos accounted for about 20.3 percent, American Indian and Alaskan Natives accounted for less than 1.0 percent, people of Asian descent accounted for 21.4 percent, Native Hawaiians comprised less than 1.0 percent, people of Other Races made up 2 percent, and people of Two or More Races constituted 13.7 percent of COA’s growth.
Figure 3.16-7. City of Austin Population Growth by Race from 2010 to 2020

COA experienced a decline in the overall African American population between 2000 and 2010 (Tang & Ren, 2014). While COA’s overall population increased 20.4 percent during these years, the African American population decreased by 5.4 percent and was the only racial group to see a decline in population (Tang & Ren, 2014). Based on Decennial Census data shown in Table 3.16-5, this trend reversed between 2010 and 2020 with an 8.6 percent increase in the African American population during these years (US Census Bureau, 2020). People of Other Races saw a population growth of 243.3 percent between 2010 and 2020 and grew by 3,393 individuals. People of Two or More Races saw a population growth of 171.9 percent or 23,510 individuals. People of Asian descent experienced a population growth of 74.6 percent or 36,694 individuals. The White population saw the largest increase in absolute numbers, with an increase of 67,723 individuals (a 17.6 percent increase). The Hispanic or Latino population increased by 12.5 percent or 34,741 individuals. The trend of population growth when compared to the state of Texas is similar for people of Other Races and Two or More Races. The increase of Native Hawaiian and Other Pacific Islander, Hispanic or Latino, and American Indian and Alaska Native populations were all much lower than the change in Texas. Population change of the Asian population was higher than in Texas. The White population increase was significantly higher than in Texas.

<table>
<thead>
<tr>
<th>Race</th>
<th>2010</th>
<th>2020</th>
<th>Population Change</th>
<th>Percent Change</th>
<th>Percent Change in Texas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other Race</td>
<td>1,448</td>
<td>4,841</td>
<td>3,393</td>
<td>234.3%</td>
<td>234.3%</td>
</tr>
<tr>
<td>Two or More Races</td>
<td>13,677</td>
<td>37,187</td>
<td>23,510</td>
<td>171.9%</td>
<td>177.3%</td>
</tr>
<tr>
<td>Asian</td>
<td>49,159</td>
<td>85,853</td>
<td>36,694</td>
<td>74.6%</td>
<td>64.6%</td>
</tr>
</tbody>
</table>
Table 3.16-5. Percent Change in Population by Race (2010–2020)

<table>
<thead>
<tr>
<th>Race</th>
<th>2010</th>
<th>2020</th>
<th>Population Change</th>
<th>Percent Change</th>
<th>Percent Change in Texas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Native Hawaiian and Other Pacific Islander</td>
<td>401</td>
<td>528</td>
<td>127</td>
<td>31.7%</td>
<td>55.5%</td>
</tr>
<tr>
<td>White</td>
<td>385,271</td>
<td>452,994</td>
<td>67,723</td>
<td>17.6%</td>
<td>1.6%</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>277,707</td>
<td>312,448</td>
<td>34,741</td>
<td>12.5%</td>
<td>20.9%</td>
</tr>
<tr>
<td>Black or African American</td>
<td>60,760</td>
<td>66,002</td>
<td>5,242</td>
<td>8.6%</td>
<td>19.3%</td>
</tr>
<tr>
<td>American Indian and Alaska Native</td>
<td>1,967</td>
<td>2,002</td>
<td>35</td>
<td>1.8%</td>
<td>6.0%</td>
</tr>
<tr>
<td>Total</td>
<td>790,390</td>
<td>961,855</td>
<td>171,465</td>
<td>21.7%</td>
<td>15.9%</td>
</tr>
</tbody>
</table>

Figure 3.16-8 shows the overall city population distribution by race. Non-Hispanic Whites comprise the largest racial group in COA at 47.1 percent of the population. The Hispanic or Latino population is the second-largest racial group and accounts for 32.5 percent of COA’s population. Asian and Black residents make up 8.9 percent
and 6.9 percent of COA’s population respectively. People of two or more races, who saw a population growth of 171.9 percent from 2010 to 2020, comprise 3.9 percent of the overall population. People of Other Races, American Indian and Alaskan Natives, and Native Hawaiian and Other Pacific islanders comprise 0.5 percent, 0.2 percent, and 0.1 percent of the population respectively.

According to COA’s comprehensive plan, Imagine Austin (adopted in 2012 and most recently amended in 2018), COA has a young population (2018). In 2010, more than 57 percent were under the age of 35 and 72 percent were under the age of 45. The 25–34 age group is the largest and makes up more than 20 percent of COA’s population.

Several companies have recently relocated their headquarters to or have increased their operations in Austin and the surrounding areas, including Tesla, Google, Facebook, Amazon, SpaceX, Apple, Canva, and Oracle (Austin Chamber of Commerce, 2022). This pattern suggests that the population in Austin and the surrounding communities will continue to grow in the future. As illustrated in Figure 3.16-9, Imagine Austin estimates that by 2040, COA will have a population of 1.3 million and the Austin-Round Rock-Georgetown MSA is estimated to have a population of 3.9 million (Robinson, 2016).
3.16.3.1.2 Historical Background

COA has a long history of structural racism which has had substantial, long-term effects for people of color in COA. According to 2020 ACS 5-year estimates, the median income for White households in COA is $80,237 while Black households have a median income of $48,833, and Hispanic or Latino households have a median income of $59,000 (USCB, 2020). Beyond income inequality, the effects of structural racism extend into educational quality, job availability, health, and generational wealth despite the advancements in civil rights since the temporal boundary of this study. Such inequities also persist in spite of these historically disadvantaged groups leading many local successes in arts, culture, education, and business that have contributed to a strong sense of community among Black and Hispanic/Latino populations in Austin.

In the late 19th century, Black and Hispanic populations resided in clusters throughout COA (Zehr, 2015). In 1917, the Supreme Court ruled that racially biased zoning is unconstitutional. Austin’s infamous 1928 Master Plan by Koch and Fowler proposed the creation of a “negro district” located to the east of East Avenue (present-day I-35). While racially biased zoning was deemed unconstitutional, segregation was still legal. In order to create the district, COA placed schools and other public services that served the Black population in the district. The effect of this is that the Black population had to move into the district or involuntarily have difficult access to facilities. Less than one decade later, in 1935, the Federal Home Loan Bank Board used Housing and Loan Corporation (HOLC) staff to appraise real estate risk levels across the US (Tretter, 2012). Minority areas and areas with older housing and poorer households were given a “hazardous” rating. Hazardous areas were refused financial services and capital needed for reinvestment; this process is now known as redlining. Essentially the entirety of east Austin was assigned a “hazardous” rating, and the entirety of the “negro district” was designated as “hazardous.” Because these areas were designated as “hazardous”, the HOLC would not provide mortgages for those areas, and African Americans and Hispanics were not able to access housing and benefit from the increased wealth that comes with homeownership. In addition to this, the use of deed restrictions and covenants further segregated COA as they were used to prohibit African Americans from occupying certain areas. Lastly, a physical divide served to further segregate COA (Tretter, 2012). East Avenue was the boundary separating African American residents to the east of COA (Zehr, 2015). In 1950, Austin created plans for the construction of I-35 and in 1962, the roadway was completed. The racial divide that began in 1928 remained in place for approximately 60 years and prohibited African Americans and Hispanics the opportunity of creating generational wealth and economic mobility. This lack of wealth, as well as other factors such as disadvantaged schools and high crime rates all play a role in being susceptible to residential displacement.

Austin’s Hispanic/Latino population also experienced segregation in the early to mid-1900s when the population had surpassed the African American population, also primarily in east Austin, in what has been termed “tri-racial” segregation. Due to an increase of racial discrimination and residential displacements to make way for industrial development in the “Old Mexico” neighborhood downtown, many Mexican American families moved eastward. The same 1928 Master Plan that created the “Negro District” paved the way for segregated schools, the Comal Street School (La Escuelita), for example, where Mexican American children were forced to transfer. Soon, Mexican American churches, schools, and businesses were established (Open Chair, 2020). Discriminatory language is found in private covenants and deed restrictions that state “Caucasian only” to not only restrict African Americans from neighborhoods, but Hispanic/Latinos as well (Zehr, 2015). As late as the 1950s, city
government had yet to extend basic services like paved roads, water, sewer, and electricity to east Austin.

Through “slum clearance”, a plan to displace residents south of East 7th Street to create an industrial district that included the Holly Street Power Plant, property values plummeted in the surrounding neighborhoods, which made homeownership possible for lower-income families (Open Chair, 2020).

A survey was conducted for the report, Those Who Stayed, found that the “The vast majority of longstanding residents surveyed home a negative view of the changes taking place around them. ... Many pay higher property taxes without experiencing an improvement in their overall quality of life.” A sense of community has been lost due to changes in their neighborhoods in the view of many Black and Hispanic/Latino residents in east Austin. Many say they do not know their new neighbors. Access to amenities and public facilities has also affected their neighborhoods. Residents state that positive changes have included access to supermarkets, trails, and police presence. Negative changes include public schools, new neighbors, and neighborhood businesses (Tang & Falola, 2018). This last point especially highlights gentrification by way of new businesses and restaurants that cater to new residents and visitors to east Austin while long established Black and Hispanic/Latino owned businesses find it difficult to keep their doors open.

3.16.3.1.3 Housing Affordability and Gentrification

COA has experienced a large increase in median house prices since 1990 and especially within the past five years (Texas A&M University, 2022). According to the Austin Board of Realtors, the median home price in Austin in April of 2022 was $640,000 (Austin Board of Realtors, 2022). In comparison, the median home price for Austin was $382,000 in April of 2017 (Austin Board of Realtors, 2017). In 2018, the renter cost burden rate increased in Austin for the first time since 2014. Over half of Austin’s renters spent at least 30 percent of their income on rent, and 23.2 percent of all renters in Austin spent at least 50 percent of their income on rent (Salviati, 2019). Drastic increases in home prices in Austin since 1990, as well as expensive renting costs, have made COA unaffordable for many residents. In addition to increasing housing prices, Austin is experiencing a shift where affluent residents move closer to COA center and lower-income residents move out. Combined, these phenomena are creating a displacement effect in Austin with the Black population in east Austin decreased 66.0 percent between 2000 and 2010 and the Hispanic/Latino population decreased by 33.0 percent in the same area during the same period (Open Chair, 2020).

In August of 2017, the Austin City Council passed a resolution allowing COA manager to enter an agreement with UT to develop a study on gentrification and displacement in Austin. In 2018, UT released a report surrounding residential displacement in Austin called Uprooted: Residential Displacement in Austin’s Gentrifying Neighborhoods and What Can Be Done About It (Way et al., 2018). The report uses the following definition of gentrification: “… the process by which higher income households displace low-income residents of a neighborhood, changing the essential character...of that neighborhood,” (Way et al., 2018). According to the report, “This process includes three dimensions: 1) the displacement of lower income residents; 2) the physical transformation of the neighborhood—mostly through the upgrading of its housing stock and commercial spaces; and 3) the changing cultural character of the neighborhood,” (Way et al., 2018). The study uses a three-step gentrification analysis to determine where gentrification is occurring in COA. The three parts analyzed are
vulnerability, demographic change, and housing market change. These three parts are discussed in the following paragraphs.

Indicators used to identify populations in Austin that are vulnerable to displacement from housing costs include income, race, and ethnicity; household composition (families with children and seniors); and housing status. These indicators were evaluated at the census tract level. The populations most vulnerable to displacement due to housing costs are mapped in Figure 3.16-10 below. An overlay of the Community RSA, shown in white, has been placed on the Uprooted map. The study found that the pockets of deepest disadvantage are located in north Austin near the Rundberg area; Montopolis, southeast of downtown Austin; and Franklin Park located south of downtown Austin and immediately east of I-35. The Montopolis and Franklin Park pockets are located within the Community RSA.

Uprooted also analyzed demographic change in Austin between the years 2000 and 2016. Indicators used in this analysis included homeownership (owning rather than renting), higher education, percent White, and income. Figure 3.16-11 below shows the results of this analysis; an overlay of the Community RSA, shown in white, has been placed on the Uprooted map. A clear spatial pattern emerges where Austin’s central neighborhoods have experienced substantial levels of demographic change. Much of the demographic change has occurred within the Community RSA.

Housing market change is another component analyzed by the Uprooted report. Home value data from the USCB were used to find home value change between 2000 and 2016, and 1990 and 2016 to determine whether home values are Accelerating, Appreciating, or Adjacent. Accelerating tracts are those with high appreciation between 1990-2016 but still have a low or moderate home value. Appreciated tracts are those with a low median home value in 1990 and high median home value in 2016 and high appreciation. Adjacent tracts are tracts with a low or moderate 1990 median home value, have low or moderate appreciation of home value and that touch the boundary of at least one tract with a high 2016 median home value and/or high 1990-2016 appreciation (Way et al., 2018). Figure 3.16-12 below shows the results of this analysis; an overlay of the Community RSA, shown in white, has been placed on the Uprooted map. Similar to the geographic pattern observed in Figure 3.16-10, housing prices are accelerating along the “eastern crescent” and similar to the spatial pattern seen in Figure 3.16-11, home prices have appreciated most greatly in neighborhoods that are central to downtown Austin. Much of the housing within the Community RSA is categorized as Accelerating or Adjacent while Appreciated tracts exist directly east of I-35 between Manor Road and 11th Street and as far east as Airport Boulevard. Additionally, Appreciated tracts exist south of East Cesar Chavez Street to Lady Bird Lake. Lastly, Appreciated tracts exist between East Riverside Drive and East Oltorf Street to the east of I-35.
Figure 3.16-10. Vulnerable Census Tracts in Austin

Source: Uprooted Report Note: Community RSA outlined in white.
Figure 3.16-11. Census Tracts that have Undergone Significant Demographic Change

Housing Market Appreciation (2000-2016)

Figure 3.16-12. Housing Market Appreciation by Census Tract

This three-factor analysis culminates by assigning neighborhood typologies. Five typologies are used by the Uprooted report: Susceptible, Early: Type 1, Early: Type 2, Dynamic, and Late. The typologies were designated based on criteria shown in Figure 3.16-13. Susceptible census tracts: 1) have low or moderate average residential real estate value, 2) have low or moderate recent appreciation, and 3) touch a tract with high average residential real estate value and/or high recent appreciation. Early: Type 1 census tracts: 1) have low or moderate average residential real estate value and 2) have high recent appreciation. Early: Type 2 tracts: 1) experienced substantial demographic change from 2000–2016, 2) have low or moderate average residential real estate value, 3) have low or moderate recent appreciation, and 4) touch a tract with high average residential real estate value and/or high recent appreciation. Tracts categorized as Dynamic: 1) experienced substantial demographic change from 2000–2016, 2) have low or moderate average residential real estate value, and 3) have high recent appreciation. Tracts categorized as Late: 1) experienced substantial demographic change from 2000–2016, 2) have high average residential real estate value, and 3) have high sustained appreciation. Census tracts that are not vulnerable were not classified as a gentrifying neighborhood.

### Categories of Gentrifying Neighborhoods

<table>
<thead>
<tr>
<th>Gentrifying tract type</th>
<th>Demographic change (2000 to 2012-16)</th>
<th>Average current residential real estate value (2012-16)</th>
<th>Appreciation</th>
<th>Must touch tract with high value and/or high recent appreciation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Susceptible</td>
<td></td>
<td>Low or moderate</td>
<td>Low or moderate recent (2000 to 2012-16)</td>
<td>√</td>
</tr>
<tr>
<td>Early: Type 1</td>
<td></td>
<td>Low or moderate</td>
<td>High recent (2000 to 2012-16)</td>
<td></td>
</tr>
<tr>
<td>Early: Type 2</td>
<td>✓</td>
<td>Low or moderate</td>
<td>Low or moderate recent (2000 to 2012-16)</td>
<td>√</td>
</tr>
<tr>
<td>Dynamic</td>
<td>✓</td>
<td>Low or moderate</td>
<td>High recent (2000 to 2012-16)</td>
<td></td>
</tr>
<tr>
<td>Late</td>
<td>✓</td>
<td>High</td>
<td>High sustained (1990 to 2012-16)</td>
<td></td>
</tr>
</tbody>
</table>


Figure 3.16-13. Neighborhood Typology Criteria. Source: Uprooted Report

The final map presented in the Uprooted report is shown below in Figure 3.16-14. Overall, 23 tracts are considered Susceptible, 13 are considered Early: Type 1, none were found to be Early: Type 2, 12 were considered Dynamic, 4 were considered Late and 6 were classified as Continued Loss. Within the Community RSA specifically, 8 tracts are considered Susceptible, 7 are considered Early: Type 1, none were found to be Early: Type 2, 10 were considered Dynamic, 2 were considered Late and 2 were classified as Continued Loss.
Continued Loss refers to neighborhoods that have lost enough vulnerable residents that they have passed the last stage of gentrification.

One of the report’s main findings is that “The impacts of the city’s rising housing costs have been particularly dramatic in the city’s “eastern crescent,” where historically low housing costs, produced in part through COA’s history of publicly-supported racial and ethnic segregation, now combine with broader social and economic trends to make these neighborhoods more desirable to higher-income households” (Way et al., 2018).

*Figure 3.16-15* Error! Reference source not found. is a map published by COA’s Housing and Planning Department showing the percent change in the African American population at the census tract level between the years 2010 and 2020 (2021). An overlay has been placed on the map outlining the Community RSA in black. The map shows that several tracts have experienced a loss of up to 70 percent of the African American population in the tract. These losses are concentrated in the “eastern crescent” observed in the Uprooted study. Almost all tracts in the Community RSA saw a loss of the African American Population.

*Figure 3.16-16* is another map published by COA’s Housing and Planning Department and shows a pronounced delineation of tracts with significant loss and gain of the Hispanic population (2021). An overlay has been placed on the map outlining the Community RSA in black. The area to the west of 183 and north of SH 71, including some areas outside of these roadways, experienced the largest loss in the Hispanic population. The areas east of 183 and south of SH 71 saw the largest increases in the Hispanic population. The geographic patterns seen in *Figure 3.16-15* and *Figure 3.16-16* closely follow the maps published under the Uprooted study. Firstly, Black and Hispanic households saw large decreases in central neighborhoods, which is what is shown in *Figure 3.16-11*. The same areas that appreciated (*Figure 3.16-12*) are the same areas that experienced large losses of the African American and Hispanic populations. Almost all tracts in the Community RSA had a loss of the Hispanic population between 2010–2020.

In 2018, Austin’s City Council approved a “Right-to-return” policy, which would help displaced residents return to their gentrified neighborhoods. Applications for low-income families to buy homes began in April 2022 (McGlinchy, 2022). The program is expected to begin in 2022. Under the policy, COA would employ a community land trust strategy and would therefore sell the house but own the land it is on. The effect of this is that the price of the house is lower than what it would sell for in the market. Twenty-eight properties are available under this program. People who apply for the program must show that they have been affected by gentrification or have generational ties to COA and must make less than the Austin family median income, which is $75,752 according to the 2020 ACS 5-year estimates.
Figure 3.16-14. Neighborhood Typology by Census Tract

Figure 3.16-15. Percent Change in African American Population Per Census Tract

Source: Austin Demographer. Note: Community RSA outlined in black.
COA’s comprehensive plan, *Imagine Austin* (adopted in 2012 and most recently amended in 2018), does not include a section on displacement or gentrification, however, COA has published a racial equity anti-displacement tool: Nothing About Us Without Us (COA, n.d.). This tool was developed under Project Connect, a citywide rapid transit system that will include light rail, rapid buses, additional Park & Ride facilities, and bicycle and pedestrian improvements using $7.1 billion of transit investments over the next 11 years. While transit investments improve a community’s transportation access, it also has the unintended consequence of increasing the costs of renting and home sales in proximity to the transit investments. In return, this disproportionately affects the transit system’s most frequent riders by displacing them—those who should have benefitted most from the transit improvements. Project Connect will direct $300 million towards community-identified projects to redress past harms stemming from displacement and prevent future displacement. The $300 million will be used for land acquisition, economic mobility investments, and affordable housing financing tools in order to prevent displacement caused by Project Connect (COA, Projects, n.d.).
3.0 Affected Environment and Environmental Consequences

3.16.3.1.4 Community Facilities

Community facilities are located throughout the Community RSA. Schools, parks, places of worship, daycare centers, fire stations, police stations, civic facilities, and other community facilities are readily located in the Community RSA. This section will focus on community facilities that are within reasonable distance to EJ populations. When observing EJ areas in the Community RSA, several clusters of census blocks emerge that are comprising 50 percent or greater minority populations and are below the 2022 DHHS poverty guidelines of $27,750 for a family of four. Figure 3.16-17 below shows the clusters that exist within the Community RSA. The cluster locations and the community facilities in their proximity are discussed below.

1) Cameron Road

The first cluster exists along Cameron Road south of US-183 and is labeled as “1” in Figure 3.16-17 below. Many community facilities exist in the area, including schools, places of worship (including a few that cater to the Hispanic/Latino population), a library, an Asian cultural center, one child after-school program, and one Hispanic/Latino grocery store.

2) Southeast corner of I-35 and US 290

A second cluster is located on the southeast corner of the I-35 and US 290 interchange. The EJ area is labeled as “2” in Figure 3.16-17 below. Nearby community facilities include parks, schools, a cemetery, a community college, places of worship, a hospital, and Hispanic/Latino grocery stores.

3) East Austin

A third cluster can be found on the north side of Lady Bird Lake to the east of I-35. The EJ area is labeled as “3” in Figure 3.16-17 below. Community facilities in close proximity to the EJ area include parks, trails, schools, and HHS centers. There are no facilities that cater specifically to any particular racial group. No medical facilities are located in or near the EJ area.

4) Montopolis

An EJ area exists on Montopolis Drive to the west of US-183. The area is shown in Figure 3.16-17 below and is labeled as “4”. Many places of worship are located in proximity to the EJ area, as well as a recreation center and a flea market. In addition to community facilities in the area, there is a substantial amount of retail that caters to the Hispanic/Latino population. There are no medical facilities in or near the EJ area.

5) South Austin

A large cluster of EJ populations can be found in south Austin on either side of I-35 and north of SH 71/US 290. The location of this area is labeled as “5” in Figure 3.16-17 below. Community facilities in proximity to the area include Saint Edwards University, schools, parks, one hospital, and places of worship (including several catering to the Hispanic/Latino population.)
Figure 3.16-17. Environmental Justice Clusters in the Community RSA

Source: 2020 Decennial Census And 2020 ACS 5-Year Estimates.
3.16.3.1.5 Parkland

There are 120 parks, cemeteries, golf courses, and greenbelts comprising approximately 2,080 acres of the Community RSA. All parks, cemeteries, golf courses, and greenbelts included in this calculation are owned by COA’s PARD. In 2009, Austin’s City Council passed a resolution saying that all residences in the urban core should be within a 0.25-mile (5-minute) walking distance from a park and within a 0.5-mile (10-minute) walking distance from a park outside the urban core. As of 2019, 65 percent of Austin’s population is within a ten-minute walk of a park (COA, 2019b).

Approximately 1,000 feet to the west of the project on 15th Street is Waterloo Park. Waterloo Park is a newly renovated park that is the largest in the downtown area. Waterloo Park is a part of the Waterloo Greenway that will eventually span from the eastern edge of Lady Bird Lake to 15th Street including 1.5 miles of park system on 35 acres of connected green space. The greenspace is being constructed in phases; the first phase opened in the summer of 2021 and all phases are expected to be completed by 2026 (Waterloo Greenway, n.d.). Much of the Waterloo Greenway will be located in close proximity to and will at times be adjacent to the proposed project, as seen for Palm Park in Figure 3.16-18.

Several parks exist adjacent to the proposed project along Lady Bird Lake. These parks include Waller Beach Park, Edward Rendon Park, Norwood Park, and International Shores_3. The parks, among others, are connected via the Butler Hike and Bike Trail, which circles the shores of Lady Bird Lake and passes underneath the current I-35 bridge. The parks, the trail, and the lake provide an urban greenspace used for recreation, transportation, culture, and community. There are currently 56 projects occurring throughout all COA parks in the Community RSA (COA, Projects, n.d.).

3.16.3.1.6 Traffic Noise

Noise models were created to evaluate current noise levels for representative receivers along the proposed project. Representative receivers include residences, cemeteries, places of worship, hospitals, recreational areas, and schools, among others. Existing noise levels were modeled using the current I-35 design. Most receivers receive a significant level of noise stemming from traffic flow on I-35. While no noise barriers currently exist along the project, some barrier-like structures exist such as an existing wall at Avenir Apartments located on I-35 and East 12th Street which were included in the traffic noise analysis.
Figure 3.16-18. The Waterloo Greenway System Located West of I-35

Source: Waterloo Greenway Conservancy
3.16.3.2 Historic Resources

For a detailed historic context for the project area, please see the I-35 Capital Express Central Project Historic Resources Survey Report (2022). The Historic RSA includes individual properties, districts, markers, SALs, COA Landmarks, and historic markers. A total of 245 properties were identified to be individually listed or recommended eligible for listing in the NRHP or are contributing resources to historic districts listed or eligible for listing in the NRHP. COA’s HLC reviews proposed changes to these resources including demolitions. COA offers tax abatement for projects that rehabilitate contributing properties within a historic district. City property taxes are 100 percent abated on the added value the rehabilitation produces. The abatement period varies by property type. COA also offers a tax exemption to owners of historic landmarks and a Heritage Grant program that offers up to $250,000 in capital work, signage, and marketing for properties that specialize in tourism. Preservation Austin, a non-profit that helps shape the culture, resilience, and community of Austin through preservation offers grants for up to $5,000 for brick-and-mortar work, planning, surveys, and local designation, and education (COA, Incentives and Grants, n.d.).

The THC offers or facilitates many preservation programs that affect the resources in the Historic RSA including Cemetery Preservation (there are three cemeteries within the RSA), Heritage Tourism, NRHP, Project Review, and SALs (Texas Historical Commission, Projects and Programs n.d.).

3.16.3.3 Ecological Resources

The proposed roadway facility would be constructed primarily within existing ROW, approximately 92.0 percent of the project area. The TPWD EMST data shows that over 99 percent of the project area is mapped as urban vegetation, with less than 1 percent being mapped as a combination of open water, agriculture, Edwards Plateau savannah, woodland and shrubland, riparian, and disturbed prairie vegetation. Trends have revealed that with the increased population within and around Austin, infill of open areas within the project area and sprawl outside of the project area occurs. With the continued influx of people into the greater Austin area, it is anticipated that continued growth would occur and cumulative effects to vegetation, wildlife, and habitat would occur.

3.16.3.3.1 Vegetation

The proposed project traverses the highly urbanized area in COA and there are minimal undeveloped spaces. The proposed project is located in the Northern Blackland Prairie area of the Texas Blackland Prairies Ecoregion, which is characterized by rolling to nearly level plains. The region was historically dominated by various prairie grasses. The main areas of the region that were historically forested, and some continue to be forested today, are the riparian areas found along the streams. Today, the ROW for I-35 consists of 90 percent concrete pavement. Only small remnants of the natural prairie vegetation can be found in the project area. There are still areas of forestland in riparian areas along streams. Parks and hike-and-bicycle trails are located within the project area; ecological resources in these recreational areas are characterized by maintained grasses and several species of scattered trees. No unusual vegetation such as rare species were observed within the project area.
3.16.3.3.2 Wildlife and Habitat

Native wildlife populations within central Travis County have been largely displaced by the development and urbanization of Austin, which has removed much of their original habitat, leaving the remaining habitat areas highly fragmented. However, many wildlife species have adapted to these urbanized conditions; therefore, the developed urban conditions provide habitat for many wildlife species throughout the proposed project area. Such wildlife may include a variety of birds, opossums, rats, squirrels, bats, raccoons, skunks, turtles, frogs, snakes, and lizards.

3.16.4 Other Past, Present, and Reasonably Foreseeable Actions (Step 2)

3.16.4.1 Past Actions

Aside from areas directly along I-35 north to about US 290 East, much of the area beyond US 183 to the east was open space and agricultural until the 1990s when development and construction of subdivisions and commercial areas began picking up east of I-35. Large-scale past projects that occurred within the boundaries of the combined RSAs include the following:

- I-35 – dedication year 1962
- Initial construction of MoPac – 1967
- US 183 – 1960s
- SH 130 – early 2000s
- Residential and commercial properties north of US 183 – expanded in the 1970s and 1980s
- Large shopping centers and subdivisions along I-35 to the north, south, and east – late 1990s and 2010s
- Mueller redevelopment of COA’s former airport site – began early 2000s
- Plaza Saltillo TOD along vacant tracts between East 4th and East 5th streets just east of I-35 – 2019
- Waterloo Park, a newly opened 11-acre revitalized green space, 105 miles of trails, gardens, and amphitheater – 2021
- Holly Street Power Plant removal – 2011
- Holly Shores at Town Lake Metro Park on former Holly Street Power Plant. Park, and 18-acre park with 3,000 feet of trail- 2021

Austin Planning and Zoning encourages TOD. COA currently has six TOD districts, four of which are located within the RSAs: Lamar Boulevard/Justin Lane, MLK Jr. Boulevard, Plaza Saltillo, and the Convention Center.

3.16.4.2 Current Actions

Current aerials show that there is earthwork being done for multiple large projects throughout the RSAs. Most appear to be residential (multifamily and subdivisions) and commercial in nature. Multiple buildings are currently under construction in downtown Austin. DAA identifies 24 projects including high-rise residential, commercial,
3.0 Affected Environment and Environmental Consequences

and office buildings. All except for one project are located west of I-35. The east Austin project is a nearly 350,000 square feet, 371-unit apartment building located along the NB frontage road between East 11th and East 12th Streets (https://downtownaustin.com/economic-development/emerging-projects/). Austin’s Innovation District is a downtown neighborhood centered around the redevelopment of the former Brackenridge Hospital Campus. The Innovation Tower, the district’s flagship building, has been completed and construction of the rest of the district is ongoing (https://downtownaustin.com/innovationdistrict/).

3.16.4.3 Reasonably Foreseeable Actions

Austin has experienced rapid population growth in the past few decades, which is expected to continue with or without the construction of the proposed project. Based on the 2020 census, the population of COA grew by 21 percent over the last decade for a total of 961,855. COA’s Housing and Planning Department demographics forecast sets the population at just under 1.4 million in 2050 (COA, Austin Area Population Histories and Forecasts, 2022). Along with the population growth, companies have made the area home to offices and manufacturing plants and residential development has increased. Projects are planned and likely to increase within the RSAs.

DAA proposes and has planning and visioning projects in various stages of development. These include the I-35 cap and stitch project in which the alliance organized an ULI report that studies the opportunity to cap and connect the I-35 corridor once the proposed Capital Express Central project is complete. The report outlines a proposal of 11 acres of caps in three locations: Cesar Chavez Street to 4th Street, 6th Street to 8th Street, and 11th Street to 12th Street (DAA, https://downtownaustin.com/what-we-do/current-projects/i35/). DAA identifies 23 planned or proposed development projects that include high-rise residential, commercial, and office buildings (https://downtownaustin.com/economic-development/emerging-projects/).

COA Housing and Planning Department leads the Palm District Planning Initiative. The district is bounded by 15th Street to the north, Lady Bird Lake to the south, Trinity Street to the west, and I-35 to the east. The proposed 5th Street Mexican American Heritage Corridor intersects this plan. The Palm District Planning Initiative is currently in the visioning process. The project’s plans include preserving the Palm School and Red River Cultural District, enhancing the 5th Street Mexican American Heritage Corridor, expanding Austin’s Innovation District, Convention Center expansion, and Brush Square renovation (https://downtownaustin.com/what-we-do/current-projects/palm-district/).

The plan for the Urban Greenbelt is to connect major and smaller parks to create a walkable trail and park system through Shoal Creek, Waller Creek, Lady Bird Lake, Pease Park, Waterloo Park, and the Butler Hike-and-Bike Trail and tie in Wooldridge, Republic, and Brush Squares as well as new pocket parks along Congress Avenue (https://downtownaustin.com/what-we-do/current-projects/urban-greenbelt/).

East Avenue Apartments is a planned development on a vacant lot between Waller Beach Park and Holiday Inn to the north along the I-35 Frontage Road. Construction is slated to begin in Fall 2022 and may have overlapping construction activities with the proposed project staging areas.
Available information from city and county planning departments and desktop research yields information about developments that are occurring in areas that are within the RSAs. The following projects do not comprise all planned projects taking place within the RSAs, rather they highlight major projects and represent the intensity of development taking place within Central Texas.

3.16.4.3.1 Project Connect

CapMetro and COA formed the Austin Transit Partnership, which currently has light rail, MetroRail, MetroRapid, and park and ride projects in various stages of planning and environmental studies under Project Connect.

The population of Central Texas is projected to double by 2040. With an already congested roadway network, the additional population will stretch travel times and costs and decrease mobility further. Project Connect is a series of projects that will improve Austin’s transit network and includes light rail lines, MetroRapid routes, and a subway. The Project Connect Vision Plan was developed beginning in 2016 and includes the following projects (https://projectconnect.com/):

- Rail
  - Orange Line – 21 miles long with 22 stations connecting north and south Austin from Tech Ridge Boulevard to Slaughter Lane running along the Lamar Boulevard/Guadalupe Street corridor past the UT campus and downtown and along South Congress Avenue. This route is currently served by MetroRapid 801.
  - Blue Line – 8.2 miles with 20 stations between downtown and the airport with service along East Riverside Drive. The Blue Line also operates on the Orange Line route to US 183 and North Lamar Boulevard.
  - Transit Subway – Light rail traveling underground downtown.
  - Red Line – Regional rail service between downtown through central and northwest Austin and the City of Leander. The line will connect to the larger system of other lines and bus routes. Improvements include construction of new stations and additional tracks.
  - Green Line – Regional service connecting downtown to east Austin's Colony Park.

- Bus
  - MetroRapid – Provides frequent service with limited stops, faster travel times, priority lanes, transit signal priority, improved stations, and higher frequency. Four new routes are proposed: Pleasant Valley from Mueller to the Goodnight Ranch Park & Ride, Expo Center from east Austin to UT and downtown Austin, The Gold Line, and Burnet Road. The Gold Line will begin as a MetroRapid bus route from Austin Community College-Highland to Republic Square and could be converted to light rail service in the future, and Burnet Road from the Domain to Oak Hill with the potential for underground service.
  - MetroExpress – Service to suburban Austin and surrounding communities with new routes between Park and Rides and major employment hubs including the Capitol Complex and 38th Street Medical District, with new routes to Del Valle and Oak Hill.
• Park and Ride
  • 24 additional Park & Ride facilities in outlying areas and nearby cities. As part of the facilities, food vendors, electric vehicle charging stations, seating, and public art installations are included in the plans.

3.16.4.3.2 Orange Line

Identified as one of two HCT corridors in the Project Connect Vision Plan, the Orange Line, a 21-mile corridor with 22 stations, would reduce travel times for both individual drivers and bus commuters. One possible alternative would operate through an underground tunnel which would further improve travel times and safety for all modes by reducing street-level conflicts. The feasibility of the tunnel option will be studied during the environmental phase of the project which has been initiated by CapMetro and FTA and the NEPA process is currently in progress.

3.16.4.3.3 Blue Line

The second identified HCT corridor, the proposed Blue Line project also includes a tunnel between 4th and Trinity Streets. A new transit bridge is proposed over Lady Bird Lake west of I-35. Austin is currently experiencing highway congestion, lack of mobility options, limited capacity, and increased travel times and costs. The Blue Line would help alleviate these issues and provide improved transit reliability and improve connectivity to affordable housing, employment, activity centers, and the airport. The Blue Line is currently undergoing the NEPA process with an EIS. As part of the proposed project, TOD zoning has been designated in areas such as the East Riverside Corridor and existing and planned activity centers. The cumulative impacts report is currently being drafted for the Project Connect Blue Line. Preliminary analysis concludes that the Blue Line may contribute to induced development, which would increase density and housing variety. This transit proximity for both employees and consumers could attract businesses and transit users. There would also be an opportunity for infill development around proposed stations in areas that are currently vacant or underutilized. Impacts could include increased property values and taxes. Anti-Displacement Investments are included in Project Connect, which would coordinate capital investments and purchase property for affordable housing, among other strategies.

COA has an available database of emerging projects that tracks and identifies investment and development projects. Projects that are included in the database are larger than 10 acres, include 20 or more residential units (pre-July 2019 data), and are in various stages of development or planning. COA’s website also references DAA and Austin Business Journal’s Austin Crane Watch, which also include projects in various stages of development or planning. The majority of the larger projects are further afield of the proposed project with larger concentrations south of the project near the Onion Creek Greenbelt, east of the project along US 71, and in the northeastern portion of the RSA in the Mueller neighborhood. Notable projects adjacent to the project include:

• A 34-acre expansion of the Hancock Center on East 41st Street Infill within the RMMA PUD in Mueller
• E 11th Street Office and Retail commercial site, a 0.23-acre 8,800 square-foot development.
• Shires Court, a 26-acre residential subdivision.
• Marabella Section 3, a 111-acre multifamily development with over 1,000 units.
Based on data available from COA, there are currently approximately 3,989 acres of planned subdivisions and proposed site plans, within the combined RSA boundaries. These are included in Table 3.16-6 below.

Table 3.16-6: Planned and Reasonable Foreseeable Projects within the RSAs

<table>
<thead>
<tr>
<th>Reasonably Foreseeable Actions</th>
<th>Community RSA</th>
<th>Ecological RSAs</th>
<th>Historic RSA</th>
<th>Combined RSAs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Plan</td>
<td>#</td>
<td>Acreage</td>
<td>#</td>
<td>Acreage</td>
</tr>
<tr>
<td>290</td>
<td>1,314.3</td>
<td>510</td>
<td>3,100.0</td>
<td>32</td>
</tr>
<tr>
<td>Planned Subdivision</td>
<td>43</td>
<td>146.9</td>
<td>67</td>
<td>805.9</td>
</tr>
<tr>
<td>Totals</td>
<td>333</td>
<td>1,461.2</td>
<td>577</td>
<td>3,905.9</td>
</tr>
</tbody>
</table>

Source: COA Emerging Projects

Other planned projects include both roadway and transit projects as part of networks outlined by TxDOT, CAMPO, and other local governments within the RSAs. Larger projects within the RSAs include two other segments of I-35 to the north and south of the evaluated project. Major transportation projects in the RSAs are outlined below in Table 3.16-7.

Based on results from the Delphi panel summary conducted as part of the indirect impacts analysis and the other projects identified for this report, the area within the RSAs is growing and development is ongoing. The I-35 Capital Express Central improvements would not have a substantial impact on existing population growth trends and would not induce redevelopment. Interest in developing may increase but zoning requirements and ordinances would limit these actions. Moderate development as infill and on greenfields is expected as a result of the proposed project. According to the survey results, zoning and a lack of both affordable housing and education infrastructure are large contributors to limiting development and redevelopment within the indirect impacts AOI. Additional factors limiting growth include land use regulations and issues of transportation policy. It stands to reason that the same factors may play a role in limiting growth also within the RSAs. The Delphi panel respondents identified no differences in induced development based on the build alternatives presented. Based on the analysis of existing and future land use, historic and projected population, and access, the Delphi panel found that the proposed project would not induce development or increase the rate or intensity of development in the AOI. The panel did focus a question on the potential cap and stitch accommodations creating green space over I-35. The cap and stitch project is discussed in further detail in relation to cumulative effects in Section 3.16.5.1.9.

Figure 3.16-19 below shows the location of major projects within the RSAs including planned subdivisions and developments as well as site plans as identified by cities and counties.
### Table 3.16-7: Planned Transportation Projects within the RSAs

<table>
<thead>
<tr>
<th>Transportation Facility/Development</th>
<th>Limits</th>
<th>MTP/RSA ID/CSJ</th>
<th>Project Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Roadway Projects</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>FM 969</strong></td>
<td>From FM 973 to Hunters Bend Road</td>
<td>1186-01-091</td>
<td>Widen FM 969 from a 2-lane undivided roadway to a 5-lane roadway with sidewalks along one side</td>
</tr>
<tr>
<td><strong>I-35 (Capital Express North)</strong></td>
<td>From SH 45N to US 290 East</td>
<td>0015-10-062 &amp; 0015-13-389</td>
<td>Add north- and SB managed lanes, reconstruct ramps, add auxiliary lanes, and improve frontage roads</td>
</tr>
<tr>
<td><strong>I-35 (Capital Express South)</strong></td>
<td>From US 290 West/SH 71 to SH 45SE</td>
<td>0015-13-077 &amp; 0016-01-113</td>
<td>Add north- and SB managed lanes, reconstruct ramps, add auxiliary lanes, and improve frontage roads</td>
</tr>
<tr>
<td><strong>Slaughter Lane</strong></td>
<td>From Mopac Expressway to Brodie Lane</td>
<td>0914-04-317</td>
<td>Widen to 6-lane roadway with SUP and intersection improvements</td>
</tr>
<tr>
<td><strong>US 183</strong></td>
<td>From 0.46 mile south of Thompson Lane to 0.07 mile SW of Airport Commerce Drive</td>
<td>0265-01-116</td>
<td>Construct SB frontage road that merges with US 183S/71W Direct Connector</td>
</tr>
<tr>
<td><strong>SH 95</strong></td>
<td>From Loop 230 to FM 535</td>
<td>0323-01-028</td>
<td>Widen from 2-lane rural to 3-lane urban roadway</td>
</tr>
<tr>
<td><strong>US 183</strong></td>
<td>From Williamson County Line to SL 1</td>
<td>0151-06-142</td>
<td>Widen from 3 to 4 general purpose lanes</td>
</tr>
<tr>
<td><strong>Slaughter Lane</strong></td>
<td>From MoPac Expressway to Brodie Lane</td>
<td>0914-04-317</td>
<td>Convert 4-lane to 6-lane divided roadway to SUP and intersection improvements</td>
</tr>
<tr>
<td><strong>SH 71</strong></td>
<td>From East of Riverside Drive to US 183</td>
<td>N/A</td>
<td>Construct 3-lane EB frontage road and 1-lane connector lane and WB frontage road.</td>
</tr>
<tr>
<td><strong>FM 973</strong></td>
<td>3 projects between SH 130 to US 183</td>
<td>N/A</td>
<td>Widen to 4-lane divided roadway (6-lane ROW)</td>
</tr>
<tr>
<td><strong>Barton Springs Road</strong></td>
<td>From South Lamar Boulevard to South Congress Avenue</td>
<td>N/A</td>
<td>Widen from a 4-lane undivided to 4-lane divided roadway with ped/bicycle/transit facilities</td>
</tr>
<tr>
<td><strong>South Congress Avenue East 7th Street</strong></td>
<td>From Riverside Drive to Slaughter Lane</td>
<td>N/A</td>
<td>Ped/bicycle/transit improvements</td>
</tr>
<tr>
<td></td>
<td>From I-35 to US 183</td>
<td>N/A</td>
<td>Convert existing facility to a 4-lane divided roadway with ped/bicycle/transit facilities</td>
</tr>
<tr>
<td><strong>East Cesar Chavez</strong></td>
<td>From I-35 to US 183</td>
<td>N/A</td>
<td>Widen from 2-lane undivided roadway to a three-lane roadway with ped/bicycle/transit facilities</td>
</tr>
</tbody>
</table>
Table 3.16-7: Planned Transportation Projects within the RSAs

<table>
<thead>
<tr>
<th>Transportation Facility/Development</th>
<th>Limits</th>
<th>MTP_RSA ID/CSJ</th>
<th>Project Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Pleasant Valley Road</td>
<td>From Cesar Chavez Street to Riverside Drive</td>
<td>N/A</td>
<td>Widen two-lane undivided roadway to a 4-lane roadway with ped/bicycle/transit facilities</td>
</tr>
<tr>
<td>Metropolis Drive</td>
<td>From Burleson Road to US 183</td>
<td>N/A</td>
<td>Convert to a four-lane roadway with ped/bicycle/transit facilities</td>
</tr>
<tr>
<td>RM 1826</td>
<td>From Slaughter Lane to SH 45SW</td>
<td>N/A</td>
<td>Widen to a 4-lane divided roadway</td>
</tr>
<tr>
<td>US 290 West</td>
<td>From RM 1826 to Nutty Brown Road</td>
<td>N/A</td>
<td>Widen to a 6-lane divided roadway</td>
</tr>
</tbody>
</table>

**Transit Projects**

| Orange Line                         | From Tech Ridge Boulevard to Slaughter Lane | N/A            | 21 miles and 22 stations rail line                                                 |
| Blue Line                           | From downtown to the Airport along East Riverside Drive and 4th Street | N/A            | 8.2 miles and 20 stations                                                          |
| Green Line                          | From downtown to east Austin’s Colony Park | N/A            | Regional rail service                                                              |
| Gold Line                           | Downtown                                   | N/A            | Underground rail service                                                           |
| 24 new Park and Rides               | Outlying parts of Austin and nearby cities | N/A            | Projects may include food vendors, charging for electric vehicles, and increased parking |

Source: TxDOT 2021-2024 STIP, CAMPO 2020, Blue Line Cumulative effects Report Draft, Travis County Transportation Plan, Bastrop County Transportation Plan.
Figure 3.16-19. Other Actions within RSAs
3.16.5 Effects Analysis and Mitigation for Resources Subject to Cumulative Effects (Step 3)

This section discusses the overall effects to resources subject to cumulative effects as a result of the proposed project, along with measures that have been taken to mitigate for those effects. As shown in Table 3.16-1, direct and indirect impacts would result from the implementation of the proposed project. It was determined in Section 3.15, guided by the result of the Delphi panel conducted for the study, that the proposed project would not induce development within the AOI; therefore, indirect impacts would only consist of encroachment-alteration impacts and not those caused by induced development.

Based on the previous direct and indirect impact assessments, resources were further evaluated to consider the potential cumulative effects that could occur in the RSAs as a result of the proposed project. The proposed project and other past, present, and reasonably foreseeable future actions were considered in the cumulative effects analysis. The following were identified as part of this analysis: projects under construction and projects that are proposed, planned, or reasonably foreseeable projects discussed in Section 3.16.4. This assessment considered the impacts of the proposed project combined with the impacts of the other projects on resources within all or part of the same area and timeframe. The direct and indirect impacts from the proposed action may result in potential cumulative effects to resources within all or individual RSAs, as discussed below.

Mitigation is generally not offered specifically for cumulative effects. Any potential measures taken to mitigate impacts will not undo adverse impacts of past actions and the original construction of I-35. Instead, mitigation measures for the proposed project aim to minimize the incremental impacts when combined with other actions.

3.16.5.1 Community Resources

3.16.5.1.1 Direct and Indirect Effects

Section 3.6 analyzes the environmental consequences the project would have on affordability, which include gentrification and homelessness; community facilities; displacements; neighborhoods and community cohesion; EJ populations; parkland; and traffic noise.

3.16.5.1.2 Socioeconomic

The proposed project would displace residential and commercial properties. The number of displacements varies by each alternative being considered. Displacements include multiple businesses and services that cater to EJ populations. Displacements are discussed further in the sections below. The indirect impacts report concludes that while changes in land use patterns as a result of ROW acquisition can sometimes lead to further displacement of businesses and residences, the proposed project would not result in induced land use changes. The Delphi panel found that land use regulation—zoning—was the primary constraint on land use change within the AOI and would have implications for both ongoing trends and any potential impacts from the project. The existing potential for future growth in the area is moderate to strong and is expected to continue to follow current trends.
3.16.5.1.3 Affordability

The proposed project would move the mainlanes of I-35 below grade through central Austin. COA’s camping ban, Prop B, approved in May 2021 already forced people experiencing homelessness out of visible camps under existing I-35. TxDOT’s IAH provides opportunity for donation drives benefiting the homeless and engages agencies and nonprofits that support those experiencing homelessness under public involvement. The proposed project would reduce congestion, improve pedestrian and bicycle facilities and connect east and west Austin, particularly the downtown core. These improvements would likely further increase the residential and commercial desirability of the area, raise housing prices, and exacerbate gentrification issues. There will be less covered space to provide campsites for those who are experiencing homelessness. There is also currently low-income and affordable housing within the proposed ROW that would be displaced by the proposed project. The loss of this housing that may not be replaced in kind would mean that affordability and gentrification would continue to be issues for the residents of the area. This is likely to occur regardless of the project’s implementation.

The Delphi panel results show that local planning and community leaders believe that while the proposed project is not likely to increase population growth, the project is also not likely to induce new development within the Indirect Impacts Study Area. There is minimal land available for new development and it would be limited to infill and greenfields, which would be reduced further by the proposed project. This would lead to greater desirability in the area (see Section 3.6) and add to rising housing prices and gentrification further afield from the project.

3.16.5.1.4 Community Facilities

Community facilities within 0.5 mile of the proposed project were assessed as most likely to be directly impacted by the proposed project. Community facilities include fire stations and medical operations, police stations, hospitals and health centers, colleges/universities, schools, places of worship, parks and nature preserves, cemeteries, libraries, veteran’s service center, and multiple BN locations, which give access to restrooms, showers, food, and charging stations for those experiencing homelessness. The proposed project would displace between three and ten community facilities either by full-displacement or due to a loss of access. The displaced community facilities include health centers, including FQHCs that serve uninsured patients, an Austin VA Veteran’s Center, Green Doors, a foster and adoption assistance agency, Safe Kid’s Care, Texas State Independent Living Council, and childcare centers including two Spanish Immersion Preschool. The majority of these are not located in EJ census geographies but may serve EJ populations. The Preferred Alternative (Modified Build Alternative 3) would not displace the VA center, three childcare centers, the foster and adoption assistance agency, Texas State Independent Living Council, or Green Doors.

The direct and indirect impacts to these community resources combine to change the character of portions of the study area. Cluster locations of community facilities that are within a reasonable distance to EJ populations are found in Figure 3.16-17. Affected neighborhoods were identified in Section 3.6. The Cameron Road cluster, identified as cluster 1, overlaps with the St. Johns neighborhood. The area located at the southeast corner of I-35 and US 290 (cluster 2) overlaps with the Highland neighborhood. The East Austin cluster (cluster 3) overlaps with the Downtown, East Cesar Chavez, and Holly neighborhoods. The Montopolis cluster (cluster 4) is located within the Montopolis neighborhood. The South Austin area (cluster 5) overlaps with the St. Edwards and Parker
Lane neighborhoods. Direct impacts to community cohesion due to displacements, traffic noise, and parkland use would be felt most adjacent to the project in EJ clusters 2, 3, and 5. Indirect effects may be felt more in EJ clusters 2 and 4 where displaced residents, businesses, and services may be able to relocate within the RSA.

3.16.5.1.5 Neighborhoods and Community Cohesion

I-35 currently provides a barrier and inhibits community cohesion. Displacements associated with each alternative would have the largest adverse impact on cohesion analyzed for the project (see Section 3.6). Mainlanes are proposed to be constructed below the existing grade allowing for bridges with pedestrian and bicycle stitches and SUPs providing access across I-35 for these modes. A pedestrian and bicycle stitch is an area that separates vehicular traffic from the SUP to increase safety. The addition of pedestrian and bicycle facilities would be a beneficial effect for adjacent neighborhoods and removal of the visual barrier of the raised portions of the facility would reduce the east-west division.

Displacements may disrupt the identity of the affected areas, predominately on individual neighborhoods that have community visions, goals, and plans. Displaced residents and businesses are likely to find it difficult to relocate in the same neighborhood or general area due to increasing housing and real estate prices. Displacements include businesses and services that cater to specific or underserved populations; their relocation or loss would disrupt the services they provide to the community.

3.16.5.1.6 Environmental Justice

The majority of commercial and residential displacements would occur in EJ areas and/or would affect services provided to EJ populations elsewhere in the community study area. Commercial and community facility displacements include medical facilities, childcare centers, and a VA Veteran’s location. Some changes would benefit the community study area as a whole, including SUP along the corridor, additional crossings of I-35, improved travel times and reduced congestion, and a reduction of visual barriers. EJ populations immediately adjacent to the proposed facility would benefit the most from moving the facility below existing grade and enhanced bridges with pedestrian and bicycle stitches. EJ populations north of the Colorado River would experience the most benefits from improved community cohesion, however, populations south of the river would also benefit from the connection SUPs provide.

3.16.5.1.7 Traffic Noise

The Traffic Noise Analysis (2022) found that the majority of the modeled representative receivers would be impacted by increased noise levels. These receivers include residential, commercial, and community facilities. Many receivers are present along the roadway, however, there is little opportunity for mitigation of impacts to these resources. Noise abatement would be incorporated into the final design, where practical.

3.16.5.1.8 Section 4(f) Parkland

There are several parks located along the project corridor, including one at either corner of the I-35 bridge over Lady Bird Lake, the Butler Hike and Bike Trail, and Lady Bird Lake itself. The proposed project would require additional ROW from International Shores_3, located on the southeast side of the I-35 bridge over Lady Bird Lake.
Lake. Construction staging areas would be located in Waller Beach, Edward Rendon Park, Norwood Park, and
International Shores_3. Portions of the Butler Hike and Bike Trail near the I-35 bridge over Lady Bird Lake would
be redirected away from the lake’s shores. The trail would experience periodic and temporary closures for up to
three days at a time throughout the duration of construction. Lady Bird Lake would be used for transportation
and construction purposes near the I-35 bridge.

International Shores_3 would be impacted by the proposed project. While impacts to the trail in the park would
be temporary and would be restored to pre-construction conditions following construction, the principal purpose
of the park of providing an access point to the Butler Hike and Bike Trail would not be met during the 1.5-year
construction duration. Additionally, 0.01 acre of the park would be acquired by TxDOT for ROW. Therefore, it is
anticipated that the proposed project would impair the qualities and functions that qualify International Shores_3
for Section 4(f) protection. It was also determined that the Butler Hike and Bike Trail, Waller Beach, and Edward
Rendon Park are NRHP eligible. Intensive surveys and individual Section 4(f) impacts are currently being
conducted for these resources.

Waller Beach would be permanently impacted by the 1.2-acre acquisition of Section 6(f) protected property for
use during construction of the project. Once the project is complete, TxDOT would continue to own the property
while COA would maintain and operate the TxDOT property along with the rest of the park. The portion of the
Butler Hike and Bike Trail that runs through this park would be detoured temporarily to keep the trail open to
through traffic. A boat dock is proposed just south of the Holiday Inn to provide access to Lady Bird Lake for the
duration of construction of the bridge. Once construction is complete, the boat dock would be rebuilt/converted
for recreational use and left in place. There would be no significant impact to Waller Beach due to the small
portion of the park that would be used, the trail detour to keep traffic open, and the return to city management,
maintenance, and parkland use once the project is complete.

The remaining parks would not be adversely impacted by the proposed project. The main functionality of the
overall park properties would not be impaired, nor would the parks be completely unusable as a result of the
temporary loss of space due to the proposed construction staging areas. All impacts from the staging areas
would be temporary and would be restored to pre-construction conditions before or following the project’s
approximate 6-year construction duration. Therefore, these changes would have no adverse effect. A summary
of impacts to the parks is shown in Table 3.16-8. For more detailed information about Section 4(f) impacts to
parkland, refer to the Section 4(f) Individual Evaluation in Appendix M.
<table>
<thead>
<tr>
<th>Park</th>
<th>Estimated Impact Acreage (Total Park Acreage)</th>
<th>Use</th>
<th>Estimated Duration of Temporary Impacts</th>
<th>Protection</th>
<th>Section 4(f) Impact</th>
</tr>
</thead>
</table>
| Butler Hike and Bike Trail   | Build Alternative 2: Permanent Incorporation 603 feet Temporary Occupancy 1,255 feet Modified Build Alternative 3: Permanent Incorporation 652 feet Temporary Occupancy 1,207 feet | **Permanent**  
  - Proposed ROW in International Shores_3  
  - 6(f) conversion in Waller Beach  
  **Temporary (varies)**  
  - Construction staging areas in Edward Rendon Park and International Shores_3  
  - Closures of trail boardwalk on south shoreline of Lady Bird Lake  
  - Trail detours  
  - NB and SB I-35 sidewalks | Between <6 months to 6 years (entire construction duration), based on location | Section 4(f) Section 6(f) | No significant impact |
| International Shores_3 (SE corner I-35/Lady Bird Lake) (1 acre) | Build Alternative 2: Permanent Incorporation | **Permanent**  
  - Proposed ROW for I-35 improvements  
  - trail impacts would require 6(f) conversion for SUP | 1 – 1.5 years | Section 4(f) Section 6(f) | Significant impact |
Table 3.16-8. Summary of Impacts to Section 4(f) Parks and Recreation Properties Adjacent to Proposed Project

<table>
<thead>
<tr>
<th>Park (total acreage/length)</th>
<th>Estimated Impact Acreage (Total Park Acreage)</th>
<th>Use</th>
<th>Estimated Duration of Temporary Impacts</th>
<th>Protection</th>
<th>Section 4(f) Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waller Beach (NW corner I-35/Lady Bird Lake) (28 acres)</td>
<td>0.01 acre Temporary Occupancy</td>
<td>• Removal of trees, exact count unknown at this time Temporary (1-1.5 years)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>0.70 acre Modified Build Alternative 3: Permanent Incorporation</td>
<td>• Construction staging area – trail impacts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.1 acre Temporary Occupancy</td>
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<td></td>
<td></td>
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<tr>
<td></td>
<td>0.60 acre</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Both Build Alternatives: Permanent Incorporation 1.20 acres (section 6(f) conversion)</td>
<td>Permanent (through 6(f) conversion) and Section 4(f) use</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• New dock and restoration of boat ramp</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Construction staging area</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>o Boat ramp would be closed</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>o 1 picnic table would be removed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>o One cypress tree removal</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Entire duration of construction ~ 6 years</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Section 4(f) and Section 6(f)</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>No significant impact</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table 3.16-8. Summary of Impacts to Section 4(f) Parks and Recreation Properties Adjacent to Proposed Project

<table>
<thead>
<tr>
<th>Park (total acreage/length)</th>
<th>Estimated Impact Acreage (Total Park Acreage)</th>
<th>Use</th>
<th>Estimated Duration of Temporary Impacts</th>
<th>Protection</th>
<th>Section 4(f) Impact</th>
</tr>
</thead>
</table>
| Edward Rendon Park (NE corner I-35/Lady Bird Lake) (73 acres) | Temporary Occupancy 0.20 acre | o Trail impacts  
o Removal of multiple park amenities  
**Temporary (6 years)**  
- Trail detour East Avenue and parking along East Avenue periodically closed during construction  
- One boat ramp would be closed | < 6 months | Section 4(f) and Section 6(f) | No significant impact |
|                           | Both Build Alternatives:  
Temporary Occupancy 0.70 acre | **Permanent**  
Removal of six pecan trees  
**Temporary (6 months)**  
- Trail detour  
- Trail impacts  
- Construction staging area  
  
o 9 picnic tables and 1 bench in park would be removed  
- ADA parking spot would be relocated | | | |

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Table 3.16-8. Summary of Impacts to Section 4(f) Parks and Recreation Properties Adjacent to Proposed Project

<table>
<thead>
<tr>
<th>Park (total acreage/length)</th>
<th>Estimated Impact Acreage (Total Park Acreage)</th>
<th>Use</th>
<th>Estimated Duration of Temporary Impacts</th>
<th>Protection</th>
<th>Section 4(f) Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roy Guerrero Park</td>
<td>None</td>
<td>Proposed permanent outfall on northern shores of the Colorado River across from park. No permanent, temporary, or constructive use impacts to park.</td>
<td>N/A</td>
<td>Section 4(f)</td>
<td>No significant impact</td>
</tr>
<tr>
<td>(Southern shores of Colorado River between South Pleasant Valley Road and US 183) (400 acres)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Norwood Park (SW corner I-35/Lady Bird Lake) (10 acres)</td>
<td>Both Build Alternatives: Temporary Occupancy 0.57 acre</td>
<td>Permanent Four pecan trees would be removed Temporary (6 months to 1 year)</td>
<td>6 months to a year</td>
<td>Section 4(f)</td>
<td>No significant impact</td>
</tr>
<tr>
<td>Lady Bird Lake (south of downtown Austin between</td>
<td>Both Build Alternatives:</td>
<td>Permanent</td>
<td>Entire duration of construction ~ 6 years</td>
<td>Section 4(f)</td>
<td>No significant impact</td>
</tr>
</tbody>
</table>

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Table 3.16-8. Summary of Impacts to Section 4(f) Parks and Recreation Properties Adjacent to Proposed Project

<table>
<thead>
<tr>
<th>Park (total acreage/length)</th>
<th>Estimated Impact Acreage (Total Park Acreage)</th>
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<th>Estimated Duration of Temporary Impacts</th>
<th>Protection</th>
<th>Section 4(f) Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tom Miller Dam and Longhorn Dam</td>
<td>(485 acres)</td>
<td>Permanent Incorporation 0.29 acre Temporary Occupancy 25 acres</td>
<td>Bridge pilings – unknown number until design progresses <strong>Temporary (6 years)</strong> Access to lake shoreline restricted by construction staging areas Sections of open lake restricted from recreation to allow for movement of construction equipment Motorized watercrafts would be used on the lake</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3.16.5.1.9 Cumulative Effects

Potential cumulative effects to the community could result from changes to community facilities, parkland, community cohesion, EJ populations, traffic noise, and displacements. For the purposes of this section, the topics surrounding the potential cumulative effects to the community are all closely related and will be analyzed together. Section 3.6 provides background on the neighborhoods and community facilities within the RSA, which was derived from the community study area. Community facilities and the services they provide would be impacted by displacements and this includes those that are located in EJ census geographies and those that cater specifically to EJ populations and are discussed more in depth below.

As discussed in Section 3.16.2, during the temporal analysis timeframe, Austin has experienced a continued trend of population and economic growth that has spurred residential and commercial development including redevelopment. COA, particularly east Austin, has undergone a transformation of its population. The racial divide created by the 1928 Master Plan proposed the creation of a "negro district" to segregate COA. By the mid-1900s, there included a large Hispanic/Latino population in east Austin also experiencing similar segregation and discrimination. The trend toward gentrification since the 1980s has diminished the diversity of population and forced outmigration. Population growth trends are generally consistent with the State of Texas except for the White population, which increased at a higher rate in east Austin. Population growth of other races have risen much more dramatically when compared to Texas. Affordable housing has become a concern and planning initiatives and services have been implemented to combat the issue. The likelihood of continued development and redevelopment of both commercial and residential properties does not depend on the proposed project. Other large projects, both past and current, have developed along the same trends under population growth and have played a part in the gentrification of east Austin. These include subdivisions and planned communities such as the infill of the Mueller neighborhood as well as shopping centers along I-35 near the northern and southern project limits and other major corridors. Construction of roadways such as MoPac to the west, and US 183 and SH 130 to the east have provided opportunities for major development moving outward from the urban core of COA. The Mueller neighborhood development consisting of single- and multi-family housing, office space, shopping centers, and the Dell Children’s Medical Center on the sight of the former Robert Mueller Municipal Airport began in the mid-2000s. This site redevelopment was planned to include affordable housing and new employers established job opportunities in the area. The neighborhood plan set forth six goals: fiscal responsibility, economic development, east Austin revitalization, compatibility with surrounding neighborhoods, diversity, and sustainability. The site includes a multi-modal network and 140 acres of public parks (APA, 2015). While the Mueller development and goals include affordable housing, according to Redfin.com, the current median sale price in Mueller is $1.1 million (Redfin.com). The construction of MoPac both led to some displacements particularly on the north side of Lady Bird Lake at MoPac. The majority of US 183 and SH 130 were constructed on undeveloped land, resulting in few adverse community impacts. The Plaza Saltillo TOD is a 10-acre mixed-use development with multifamily units, 15.0 percent of which are "deeply" affordable, retail and office space, and open space and public art. Plaza Saltillo is located between 4th and 5th Streets along the light rail Red Line and the primary goal of the TOD was to increase rail and bus ridership, which particularly benefits low-income residents and workers.
Displacements caused by the proposed project and other planned developments within the Community RSAs may lead to a further reduction of affordable housing. There may be an increase in value of both residential and commercial properties as a result of access and proximity to improved transportation options throughout the RSAs. There may also be opportunities for displaced businesses and services to relocate within the RSAs.

Reasonably foreseeable actions include other transportation projects that may require additional ROW and may contribute to additional displacements within the RSA. These transportation projects are also anticipated to contribute to improved mobility and increased capacity. Projects that include SUPs and other pedestrian and bicycle facilities would likely lead to additional connectivity.

The proposed project is one of many planned transportation projects that would improve connectivity within the RSAs. Roadway widening and new location projects will add capacity and increase mobility and access throughout the region. Project Connect and other CapMetro projects, in conjunction with the proposed project, would significantly add to alternative transportation options in Austin.

Direct impacts to community facilities within the Community RSA include the displacement of between three and ten healthcare facilities, childcare centers, a VA Veteran’s center, and Green Doors homelessness assistance. The displacement of community facilities of all types would likely also take place as a result of other reasonably foreseeable actions in addition to the proposed project. This is due in part to the past and current trends of rising property values and gentrification. Additionally, the EJ populations that many of the community facilities serve are also being displaced and moving to the outer “eastern crescent” and beyond the Community RSA. These predominately serve EJ populations and may provide an opportunity for facilities to follow.

While the proposed project would contribute to the past and ongoing trend of the displacement of community facilities within the RSA, it would likely not play a significant role due to these trends in conjunction with impacts of readily foreseeable actions. TxDOT complies with relocation policies; however, these policies do not require or guarantee the relocation within the current community. Any additional direct, indirect, and potential cumulative effects that may occur to community resources by other actions would be addressed by the entity, either private sector or public/local agency, responsible for the development that is impacting the resource. The potential for future transportation projects, private and/or municipal undertakings exists within the Community RSA and additional facilities may be displaced as a result. Displacement by governmental actions generally requires compliance with relocation assistance or acquisition policies. COA has planning and zoning policies or ordinances in place that direct the use of properties.

Displacements from the proposed project and other actions such as the Blue Line from Project Connect, other transportation projects, and other planned developments would significantly change community cohesion within the RSA. Increased access throughout the study area from the development of SUPs, light rail, and other public transit and roadway improvements would improve travel throughout the study area and across Austin in order to access comparable businesses and services that would be displaced. Other planned non-transportation projects include commercial, residential, and mixed-use developments. Most displaced businesses and community facilities occur in these same geographies and many also cater to and serve minority and low-income populations. The proposed project would play a significant role in total displacements within the RSA. Project Connect lines would also result in several displacements near specific station areas along the project’s route,
particularly for park and ride facilities (Reasonably Foreseeable Planned Actions and Environmental Trends, 2022).

TxDOT will act in compliance of the Uniform Act. The Uniform Act contains specific requirements that determine the manner in which a government entity acquires private property for public use when federal funds are used for a project. The purpose of this act is to provide a uniform policy for fair and equitable treatment of persons and businesses displaced as a result of federal and federally-assisted programs in accordance with the following objectives:

- To ensure that owners of real property to be acquired for federal and federally-assisted projects are treated fairly and consistently, to encourage and expedite acquisition by agreements with such owners, to minimize litigation and relieve congestion in the courts, and to promote public confidence in federal and federally-assisted land acquisition programs.

- To ensure that persons displaced as a direct result of federal and federally-assisted projects are treated fairly, consistently, and equitably so that such persons will not suffer disproportionate injuries as result of projects designed for the benefit of the public.

- To ensure that agencies implement these regulations in a manner that is efficient and cost-effective (see Section 3.6).

Every effort will be made to assist facilities that provide vital services in finding a new location, moving, and resuming their operations prior to closing their existing locations. This will help ensure there is no interruption of critical services.

The displacement of residences, commercial property, or community facilities is likely to occur regardless of the construction of the proposed project. Trends show that property values are increasing and residents are increasingly moving toward the outer “eastern crescent” and beyond the RSA. One mitigation measure by other actions is The Project Connect program that includes $300 million for Anti-Displacement Investments to implement initiatives like coordinating capital investments and purchasing property for affordable housing. These funds are planned to be dispersed over the program’s 13-year timeline.

Impacts to the community as a result of increased traffic noise from roadway and transit projects as well as overall construction activities could affect both physical and mental health. Predicted noise levels rise to as high as 77 dB, which is approximately the equivalent of someone shouting from one meter away. Noise barriers are proposed to abate impacts in portions of the Upper Boggy Creek, Hancock, East Cesar Chavez, Downtown, South River City, Riverside, and Parker Lane neighborhoods. Noise impacts were identified at representative receivers along the proposed project and noise barriers were not found to be either feasible or reasonable to abate the majority of them. Traffic noise impacts are available from the Reasonably Foreseeable Environmental Trends and Planned Actions Tech Report conducted for Project Connect’s Blue Line, which found that the project would not play a significant role in overall traffic noise impacts after mitigation. This project intersects the I-35 Capital Express Central Project near East Riverside Drive, and the majority of cumulative noise impacts are likely to occur around this area as a result of the two projects in proximity to one another. Impacted receivers modeled in the Traffic Noise Technical Report (2022) include those located in the Edward Rendon Park, Waller Beach, Northwest...
Greenway, and Sir Swante Palm Neighborhood Parks. Barriers were found to be not reasonable or feasible at any of these locations, therefore, increased traffic noise would be experienced by users of these parks. Impacts from increased traffic noise would be directly mitigated by a combination of noise barrier walls and the depressed sections of the roadway.

Additional impacts to parkland would primarily take place in the East Austin cluster and Downtown, East Cesar Chavez neighborhoods (the Holly neighborhood is not adjacent to the project and would not experience direct impacts). Use of parkland for construction and staging areas would temporarily affect the way the community is able to enjoy recreational areas, particularly near Lady Bird Lake by closing access to portions of parks and the Butler Hike and Bike Trail. Other parks and facilities in the area may see an increase in usage as a result. The recently opened Waterloo Park in downtown and Holly Shores at Town Lake Metro Park in the Holly Neighborhood/East Austin cluster are areas that may offset the temporary closures of parks and trails. Holly Shores Park abuts the Edward Rendon Park, creating a larger and more connected park and trail system. These recreational areas provide nearby alternatives while construction is taking place. The reopening of the parks after construction is complete and the addition of SUPs and the potential implementation of deck plazas and stitches in the future would improve connectivity and healthy recreation opportunities throughout the community. Other projects in the area would also impact parkland. The Blue Line would involve the acquisition of approximately 1.2 acres of the Butler Hike and Bike Trail in Waller Beach Park. The boathouse that is home to the Austin Rowing Club would also be relocated as a result. The Blue Line would also require the acquisition of portions of Norwood Park. Since the impacts that the I-35 Capital Express Central Project would be temporary and new parks have recently been created, they would be minimal in relation to overall cumulative effects to parkland in the RSA.

The Butler Hike and Bike Trail, Edward Rendon Park, and Waller Beach parks have been recommended as NRHP-eligible resources. Impacts to these historic resources include temporary use for construction and noise impacts. Tree removal is anticipated as part of the proposed project in addition to increased traffic noise. Impacts from both this project and the acquired acreage by the Blue Line could have an adverse impact on the historical setting and feeling of the parks. An intensive-level HRSR was completed for these parks and impacts are discussed in greater detail in the reconnaissance-level HRSR and intensive-level HRSR in Appendix L.

The potential cumulative effects to parkland within the RSA would be minimal. Parkland is a Section 4(f) protected property from FHWA projects and impacts must be minimized or mitigated. Additionally, the proposed project would include SUPs along the corridor and would help connect areas of the RSA and provide facilities for pedestrians and bicyclists. This may bring more of the population to within the 5 - 10-minute walking distance from parkland discussed in Section 3.16.3. COA has programs and policies in place to create and protect parkland and the Austin Parks and Recreation, Historic Preservation and Heritage Tourism Program promotes and protects historic and cultural resources in the park system (COA Park Planning, n.d.).

Much of the potential cumulative effects discussed above would occur in EJ census geographies. The proposed project would have a disproportionate direct impact on EJ populations due to the majority of residential, commercial, and community facility displacements in EJ census geographies including those that cater specifically to minority groups and low-income households. However, Modified Build Alternative 3 was designed
to reduce the number of displacements by avoiding impacts to the Aria Grand Affordable housing complex. EJ populations would not be disproportionately impacted by any changes to air quality or traffic noise. EJ populations would also not be disproportionately impacted by construction related impacts. Both EJ and non-EJ populations would experience the benefits of the proposed SUP, additional crossings of I-35, enhanced bridges, and bypass lanes under many intersections.

The effects of residential displacements and relocations would lead to a decrease in housing, including affordable housing. Because the proposed project is not likely to induce development, direct displacements from the proposed project is the main contributing factor leading to a decrease in housing. These trends are ongoing and regardless of implementation of the proposed project, property values are expected to increase and minority and low-income populations are expected to continue their outmigration. Other actions, however, when added to the proposed project are likely to intensify the rising values and may accelerate the movement outward. These actions include the recent Saltillo TOD, transit improvements, and additional parks. Improved access to transit centers, current and planned mixed-use development, and improved active transportation would further increase desirability of the area and reduce housing available for a large portion of the minority and low-income populations of east Austin. This would contribute to the gentrification of east Austin and the migration toward the outer “eastern crescent” or outside of the RSA entirely. The proposed project may play a significant role in this cumulative impact. Measures to minimize impacts and mitigation are discussed below.

The areas with community facilities that are within reasonable distance to EJ populations that were outlined in Section 3.16.3.1.4 may be more susceptible to cumulative effects. These include the areas along Cameron Road, the southeast corner of I-35 and US 290, East Austin, Montopolis, and South Austin.

Cameron Road

Community facilities include schools, places of worship (including some that cater to the Hispanic/Latino population), a library, an Asian Cultural Center, one child afterschool program. There is also a Hispanic/Latino grocery store in this area. This cluster overlaps with the St. John neighborhood. The Cameron Road cluster is not adjacent to the project. The cluster may, however, feel impacts from those who are displaced moving into the neighborhood. This cluster is largely built out and no large-scale projects are planned. The area developed at the same time as US 183, which had little impact on residential displacements.

Southeast Corner of I-35 and US 290

While the area is adjacent to the proposed project, none of the displaced community facilities are located in this neighborhood. Community facilities include parks, schools, a cemetery, a community college, places of worship, and a hospital. There is also a Hispanic/Latino grocery store in the area. This area overlaps with the Windsor Park Neighborhood. Displacements in this cluster/neighborhood include commercial properties and required ROW would include Section 4(f) use. Noise impacts were identified in this neighborhood and no barriers were found to be reasonable or feasible. The cluster is also adjacent to Mueller, which began transforming the area in the early 2000s and is ongoing. Additional site plans and subdivisions are planned in the area. The desirability of living in Mueller or the surrounding areas to be closer to amenities may have an impact on the property values
and prices in the immediate area. However, Mueller does include affordable residential options that may offer homeownership to those displaced by the proposed project and other developments.

**East Austin**

The east Austin area is adjacent to the proposed project. Community facilities include parks, trails, schools, and HHS center. This cluster overlaps with the Downtown, East Cesar Chavez, and Holly Neighborhoods. Displacements in this cluster include residential, commercial, and a childcare center. Required ROW would include Section 4(f) use. Noise impacts were identified in the Downtown and East Cesar Chavez neighborhood. Noise barriers were found to be reasonable or feasible for some impacted receivers Downtown, but none in the East Cesar Chavez neighborhood. Affected parkland is located in this cluster with temporary closures as a result of this project and ROW acquisition for the Blue Line. However, the cluster has also seen recent parkland additions providing alternative recreational areas for residents. Downtown, especially, is expecting new development and redevelopment. These actions, in addition with the recently opened Plaza Saltillo TOD, will likely have a large impact on desirability and property values, increasing the impacts of affordability of those currently living in this cluster. However, the TOD and other transportation projects, such as Project Connect, will further connect the area with the rest of Austin, leading to easier, safer, and more affordable transportation options.

**Montopolis**

The Montopolis area is not adjacent to the proposed project. There would be no displacements in this area. This area is within the Montopolis Neighborhood. While the cluster is not adjacent to the project, it is located in the outer “eastern crescent” and may experience impacts due to those who are displaced moving into the neighborhood, continuing the trend that has been taking place. There are some small, planned site plans and subdivisions for this cluster, which may help alleviate impacts from the influx of additional residents.

**South Austin**

Community facilities in the large South Austin cluster include Saint Edwards University, schools, parks, a hospital, and places of worship (including several that cater to the Hispanic/Latino population). This cluster overlaps with Saint Edwards and Parker Lane Neighborhoods. Required ROW in this cluster would include Section 4(f) use. Noise impacts were identified in both neighborhoods. Noise barriers were found to be reasonable or feasible for some impacted receivers in Parker Lane, but none in the St. Edwards neighborhood. The cluster is adjacent to US 290 West/SH 71 and the majority of planned development is located along the corridor. Planned transportation projects in and near the cluster include widening roadways, adding lanes, and adding pedestrian, bicycle, and transit facilities. These projects, which could result in further displacements and traffic noise increases, would also increase accessibility and safety for all modes of transportation.

Each of the neighborhoods has a neighborhood plan, giving the public an opportunity to have input and planning to guide the growth and opportunities for their neighborhoods. Developments, primarily subdivisions and site plans, are located within each of the clusters above. The Blue and Orange Lines both run through downtown and include potential tunnels in cluster 3 and the Orange Line also runs along the western edge of cluster 5. Roadway
projects in or near the clusters include roadway widening and pedestrian and bicycle facilities and include the I-35 Capital Express North and South projects. Potential cumulative effects are not limited to these clusters or neighborhoods and would be experienced throughout the RSA, particularly in East Austin.

Design refinements have been made to reduce the overall number of displacements, particularly in the Modified Build Alternative 3, however impacts would still disproportionately impact EJ populations. Section 3.6 concludes that the project would not have a disproportionately high or adverse impacts to air quality or traffic noise. Construction impacts would also disrupt EJ and non-EJ populations similarly. Beneficial impacts would include other and reasonably foreseeable transportation actions that include facilities for pedestrians and bicyclists. Planned projects under Project Connect would add public transit facilities that would improve access, particularly for EJ populations as they are most likely to use these alternative modes of transportation. The proposed I-35 Capital Express Central project would also improve access by adding pedestrian and bicycle facilities. This beneficial impact of the proposed project would enhance the connectivity and facilities already in place in Mueller and the Plaza Saltillo TOD and the Blue Line to further connect east Austin with downtown, the UT campus, and other areas west of I-35.

The community, particularly in east Austin, has a history of being marginalized from the outset with the creation of the “Negro District” in the 1920s through the present with ongoing gentrification since the 1980s. East Austin also has a strong sense of cultural identity that is continuously threatened with changes and impacts of development within the RSA. Rising property values. Cultural displacement is a concern and affects the stability of the community. These changes are an ongoing trend in COA and it is important that the I-35 Capital Express Central project does not disproportionately add to the socioeconomic and cultural impacts.

The inclusive community engagement for the proposed I-35 Capital Express Central project over the past decade provided the opportunity for the community to get involved in the planning and design process through meetings, workshops, and a design charrette. Feedback was incorporated into the design and included depressed sections of the roadway and wider buffers for bicyclists and pedestrians to increase safety and provide the opportunity for the cap and stitch study and potential implementation (see Section 3.6). The depressed lanes are anticipated to reduce noise impacts. The proposed project incorporated public involvement feedback and made design changes in order to minimize harmful impacts to the community overall. Design modifications to reduce ROW acquisition and existing elevated structures, which have noise and visual barrier impacts, would be removed and replaced with depressed mainlanes. Table 3.16-9 shows project changes made in response to public comments. In March 2022, design refinements aimed at reducing impacts were implemented in response to stakeholder engagement. Further mitigation for community impacts are currently being developed.
### Table 3.16-9: Project Changes in Response to Public Comment

<table>
<thead>
<tr>
<th>Public Comment / Involvement Effort</th>
<th>Project Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014 – three public meetings held to provide the public information about study and solicit input about purpose and need, range of alternatives, recommended lane type alternatives, and SIU for FTC</td>
<td>PEL resulting in concept of adding one tolled managed lane in each direction of I-35 from SH 45 North to SH 45 Southeast</td>
</tr>
<tr>
<td>2014 – 2015 – five “Decks Neighborhood Workshops”</td>
<td>Workshops focused on desire to remove the decks, concern about super streets concepts, neighborhood cut-through traffic, access to local businesses and neighborhoods, traffic noise, and exit configuration</td>
</tr>
<tr>
<td>January 2020 design charrette to solicit input from stakeholders for additional input to be considered during development of further build alternatives</td>
<td>Resulted in access-controlled frontage road system option</td>
</tr>
<tr>
<td>Public and agency comments</td>
<td>Four additional evaluation criteria added to alternatives evaluation: air quality impacts; measuring person-carrying capacity along mainlanes and managed lanes; annual cost of travel; and accommodation of the CapMetro service plan at east-west crossings.</td>
</tr>
<tr>
<td>Input from Community Groups including DAA, Reconnect Austin, and Rethink35</td>
<td>East-west crossing was enhanced to include wider bridge structures including a 20-foot buffer between bicyclists and pedestrians</td>
</tr>
<tr>
<td>Input from Community Groups including DAA, Reconnect Austin, and Rethink35</td>
<td>Considering deck plaza areas to be designed as green spaces within urban core between Cesar Chavez Street and 12th Street and at Dean Keeton Street near the UT campus.</td>
</tr>
<tr>
<td>Public and agency comments</td>
<td>Need statement was changed to reflect that the current highway has resulted in “safety and operational deficiencies” that “impact crash rates and peak period travel times”. Statement also included that impacts are incurred by “all users, including emergency response vehicles and transit”</td>
</tr>
</tbody>
</table>
### Table 3.16-9: Project Changes in Response to Public Comment

<table>
<thead>
<tr>
<th>Public Comment / Involvement Effort</th>
<th>Project Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public and agency comments</td>
<td>Purpose statement changed to reflect the project would address demand by “prioritizing the movement of people, goods, and services through and across the corridor”</td>
</tr>
<tr>
<td>Title VI, EJ, and LEP requirements</td>
<td>Participation of minority, low-income, and underserved populations in project decision-making process. Efforts documented in compliance with Title VI, EJ, and LEP requirements and guidance</td>
</tr>
</tbody>
</table>

The design changes in the table are intended to minimize the impacts that the proposed project have on the community while still serving the purpose and need. The anticipated effects are reconnecting the community with the removal of the upper decks of existing I-35 and enhanced east-west crossings for bicyclists and pedestrians. There is also an opportunity to create cap and stitches over depressed sections that would provide the community with additional connectivity, green space, cultural, and economic efforts. The implementation and use of these areas is still in the planning process.

In addition to the design of the project to minimize the footprint, incorporate facilities for all modes of transportation, and provide opportunity for increased connectivity, TxDOT is working with the affected community to incorporate east Austin’s heritage into the design of the project.

As part of the I-35 Capital Express Central project, TxDOT includes the Live35 (Locally Influenced Visual Enhancements), an aesthetic design program to capture unique details of the history, heritage, and culture of neighborhoods and districts along the I-35 corridor and incorporate them into the design of the project’s aesthetic elements. Research for this program was conducted by Texas A&M Transportation Institute and Huston Tillotson University. Feedback from residents, including stories and pictures about what they love and feel make their neighborhood unique, would be used as a guide to understanding the architecture, history, and culture. The neighborhoods identified to include are Windsor Park, Mueller, Upper Boggy Creek, Sixth Square, 11th and 12th Street Districts, East Cesar Chavez Neighborhood, Riverside, Parker Lane Area, North Loop, Hyde Park, Hancock, UT, Medical/Innovation Area, Downtown Areas, and South River City NPA. The character of these neighborhoods would inspire the designs, materials, colors, textures, size, and location of the aesthetic elements. This program is ongoing.

Depressed sections of I-35 mean an opportunity to reconnect east Austin and downtown. A cap and stitch is being considered by DAA and COA once the proposed project is completed. The ULI Advisory Services panel Report (2020) outlines a proposal of 11 acres of caps in three locations: Cesar Chavez Street to 4th Street, 6th Street to 8th Street, and 11th Street to 12th Street. The report was the culmination of engaging the community through 14 events to collect public input. The cap over the lowered portions of I-35 would serve multiple functions.
including green space, stormwater systems, and accommodating buildings. The stitches would accommodate active users with sidewalks and bicycle lanes as well as seating areas and green space. Implementation of the cap and stitch would add connection between east Austin and COA’s parks and trail system. The panel recommends that the cap and stitch be culturally appropriate and serve the community. These measures are also anticipated to help reduce any noise impacts in the proposed locations (DAA & ULI, 2020).

Impacts to EJ populations are anticipated to occur regardless of the construction of the proposed project. The conditions and trends section above outlines the ongoing changes and gentrification that have been taking place in COA and the Community RSA. COA implemented a resolution for the right to stay and right to return programs for east Austin in 2021 (COA, 2018c). The resolution intends to help “alleviate and make reparations for Austin’s years of racist zoning, inequitable development, and total disregard of the residents of the eastside” (Resolution to Adopt Right to Stay and Right to Return Programs for East Austin). The program’s policies would allow working-class families currently living in gentrifying areas to find permanent and affordable places to stay and displaced families with historic ties to the neighborhood to be preferred candidates for affordable units (Planetizen, 2021).

Additional CapMetro services under Project Connect and residential and mixed-use development near the project and throughout the RSA may help offset the impacts of relocating. These ‘other actions’ may keep EJ populations in or near their neighborhoods and near community facilities. There are existing measures in place to manage the effects of reasonably foreseeable actions within the RSAs. COA has zoning districts and other land development ordinances in place to ensure permitted uses are developed. The Imagine Austin Comprehensive Plan guides the growth of COA based on seven building block policies: Land Use and Transportation, Housing and Neighborhoods, Economic, Conservation and Environmental, City Facilities and Services, Societal, and Creativity (Image Austin, 2018). There are also multiple assistance programs available to low-income residents. COA employs measures such as grants, loans, and regulations to implement affordable housing projects (Imagine Austin, 2018). TDHCA provides low-income housing tax credits to developers to include low-income rental units with an offset of up to 9 percent of its federal tax liability (COA, Inclusive Planning & Program Delivery, n.d.). The proposed project would play a significant role in effects on EJ populations due to the high number of displacements of residences and businesses within EJ census geographies and the high number of displaced businesses and services that cater to low-income and minority populations. The proposed project would also play a significant role in providing improved alternative modes, particularly active modes, of transportation to EJ populations. The proposed project includes SUPs along I-35 and would connect east Austin at various locations, improving the safety and mobility of users of these facilities. In conjunction with other transportation projects, particularly Project Connect transit projects, more options would be available to low-income and minority populations, which are less likely to own their vehicle and more likely to be users of active and public transportation.

Project Connect in partnership with CapMetro and COA will work to ensure that future development near transit corridors supports the overall quality of life and equitable outcomes for all area residents. As stated in Section 3.16.3, Project Connect will direct $300 million towards community-identified projects to redress past harms stemming from displacement and prevent future displacement. The $300 million will be used for land acquisition, economic mobility investments, and affordable housing financing tools in order to prevent
displacement caused by Project Connect. While not a mitigation measure for the proposed project specifically, this initiative will help alleviate the unintended impacts of displacements within the RSA (COA, n.d.).

To help alleviate pressures of ongoing development and redevelopment, planning initiatives include TODs like Plaza Saltillo to provide centers for more sustainable and livable communities that are walkable with increased access to alternate modes of transportation. This type of development creates denser neighborhoods to support ridership, includes the creation of public space, promotes a diverse mix of housing types to accommodate a more diverse population of ages and income levels, increases cohesion and connectivity with surrounding neighborhoods, and strives to make the area economically viable and valuable to residents, employers, developers, COA, and transit agencies. All TOD districts within the RSAs, except for the Convention Center District, have Station Area Plans and Regulating Plans that guide compatible development that supports existing and future transit (COA, Transit Oriented Development, n.d.).

The proposed project has been designed to minimize impacts and mitigation measures are in place with ongoing discussions and planning. When taken into consideration with other actions, past trends, and ongoing gentrification, the project is expected to have moderate cumulative effects. The changes that are occurring in east Austin have been impacting the area for decades and is expected to continue regardless of improvements to I-35. The proposed project, along with other actions, would result in the displacement of residences, commercial properties, and community facilities. Displacements have changed the character of the community since the initial construction of I-35 and with industrial districts encroaching on neighborhoods. Any additional potential cumulative effects that may take place in the community would be addressed by the entity, either private sector or public/local agency, responsible for the development that is impacting the resource. The potential for future transportation projects, private and/or municipal undertakings exists within the Community RSA. COA and Travis County have planning and zoning policies or ordinances in place that future developers would need to adhere to during the development planning phase.

### 3.16.5.2 Historic Resources

#### 3.16.5.2.1 Direct and Indirect Effects

ROW acquisition would have adverse effects on six properties that have been determined NRHP eligible for Build Alternative 2: EBBC Main Office (Austin Chronicle) at 4000 North I-35, Dura Tune Service Station at 3810 North I-35, Haster House (currently home to The Glass Coffin) at 3009 North I-35, residence at 4505 North I-35 and residence at 4503 North I-35 in the Delwood II Historic District, and the Roberts House at 3509 North I-35; and would have adverse effects on four properties that have been determined NRHP eligible for Modified Build Alternative 3: EBBC Main Office (Austin Chronicle), Dura Tune Service Station, Haster House, and Roberts House. These resources are all recommended eligible under Criterion C for architecture. The EBBC Main Office (Austin Chronicle) is also eligible under Criterion A in the area of Commerce and the Dura Tune Service Station is also eligible under Criterion A in the area of Transportation. The Delwood II Historic District is also eligible at the local level under NRHP Criterion A in the area of Community Planning and Development. These resources would all be displaced and removed by the proposed project; however, these are not community facilities nor are they businesses or services that cater to marginalized populations. It was also determined that the Butler Hike and Bike Trail, Waller Beach Park, and Edward Rendon Park are NRHP eligible. Individual Section 4(f) impacts are
currently being analyzed for these resources. Please refer to Table 3.16-8 for a summary of impacts to Section 4(f) parklands. The proposed project would have no adverse effect on the majority of the historic resources within the APE. According to the Delphi panel survey results, induced development is not anticipated as a result of the proposed project and, therefore, no historic properties or districts would be indirectly impacted as a result of induced development. For more detailed information about Section 4(f) impacts to parkland, refer to the Section 4(f) Individual Evaluation in Appendix M.

Table 3.16-10. Summary of Impacts to Section 4(f) Historic Properties Adjacent to Proposed Project

<table>
<thead>
<tr>
<th>Historic Resource</th>
<th>Impact</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Town Lake Park System – Waller Creek to Fiesta Gardens Sections</td>
<td>Please refer to Table 3.16-8 for a summary of impacts</td>
<td>Please refer to Table 3.16-8 for a summary of impacts</td>
</tr>
<tr>
<td>Dura Tune Service Station (0.29 acre)</td>
<td>Build Alternative 2</td>
<td>Building would be displaced</td>
</tr>
<tr>
<td></td>
<td>Acquisition of 0.19 acre</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Modified Build Alternative 3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Acquisition of 0.20 acre</td>
<td></td>
</tr>
<tr>
<td>EBBC Main Office (0.33 acre)</td>
<td>Build Alternative 2</td>
<td>Building would be displaced</td>
</tr>
<tr>
<td></td>
<td>Acquisition of 0.26 acre</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Modified Build Alternative 3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Acquisition of entire 0.33-acre parcel</td>
<td></td>
</tr>
<tr>
<td>Haster House (0.18 acre)</td>
<td>Both Build Alternatives</td>
<td>House and shed would be displaced</td>
</tr>
<tr>
<td></td>
<td>Acquisition of entire parcel</td>
<td></td>
</tr>
<tr>
<td>Delwood II Historic District (.44.29 acres)</td>
<td>Build Alternative 2</td>
<td>Residences on acquired properties would be displaced</td>
</tr>
<tr>
<td></td>
<td>Acquisition of 0.29 percent of historic district.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Acquisition of 0.04 acre from property at 4505 North I-35</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.04 acre of property at 4503 North I-35</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Modified Build Alternative 3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>No impacts</td>
<td></td>
</tr>
<tr>
<td>Roberts House (0.25 acre)</td>
<td>Both Build Alternatives</td>
<td>Roberts House and associated garage would be displaced</td>
</tr>
<tr>
<td></td>
<td>Acquisition of entire parcel</td>
<td></td>
</tr>
</tbody>
</table>
3.16.5.2.2 Cumulative Effects

The proposed project was designed to minimize harm to historic resources overall. Design modifications identified during project development would reduce ROW acquisition. The existing elevated structures carrying the I-35 upper deck main lanes, which now cause noise and visual impacts to historic resources would be removed and replaced with depressed mainlanes. Traffic noise impacts have been identified for receivers representing the NRHP-eligible Butler Hike and Bike Trail, Waller Beach, and Edward Rendon Park resources. In relation to other actions, the proposed project is not likely to have a significant adverse impact on historic resources after mitigation measures are applied. Projects that are subject to Section 106 like the proposed project and the Blue Line project have ongoing consultation to address potential adverse effects and potential mitigation activities. Private developments are more likely to play a significant role in adverse impacts.

Austin’s HLC reviews applications for historic zoning cases, certificates of appropriateness and tax exemption applications for city landmarks, and sign and building permits in historic districts. If a property is a local landmark, a contributing property in a local historic district or a National Register historic district, a historic review application must be submitted for exterior alterations, additions, permanent site work, signs, and new construction. The HLC review process ensures that alterations and additions are historically compatible with the resource, therefore protecting historic resources. These reviews would apply to all projects that may potentially have an impact on historic resources. Additionally, the commission reviews permits for demolition and relocation of resources that are not historic but are at least 45 years old. This is a way to identify and protect resources that are not currently listed or determined eligible (COA, Historic Review Process Chart, n.d.). All federal actions need to go through the Section 106 process.

3.16.5.2.3 Mitigation of Cumulative Effects

Direct impact mitigation measures have not been identified at this time for the demolition of the six identified historic structures and impacts to the three NRHP-eligible parks and will be developed in compliance with Section 106 of the National Historic Preservation Act of 1966 as amended. Section 106-focused public involvement and consultation is ongoing. Actions by federal agencies will be subject to review to minimize harm and mitigate adverse effects. Actions by private developers and property owners will still need to comply with COA’s preservation commission review process and city ordinances.

3.16.5.3 Ecological Resources

3.16.5.3.1 Direct and Indirect Effects

TPWD EMST data shows that over 99 percent of the project area is mapped as urban vegetation, with less than 1.0 percent being mapped as a combination of open water, agriculture, Edwards Plateau savannah, woodland, and shrubland, riparian, and disturbed prairie vegetation. Field investigations determined that the majority of the project area is accurately mapped as urban with only a small portion of riparian occurring along the hike and bicycle trail at Lady Bird Lake and at the proposed outfall structure location downstream of Longhorn Dam. A species analysis has been completed for the proposed project (May 2022). Coordination with TPWD regarding state-listed threatened and endangered species or SGCN would occur prior to the implementation of the
proposed project. Appropriate BMPs for state-listed species or SGCNs would be included in the Environmental Permits, Issues, & Commitments (EPIC) Sheet.

Wildlife occurring within the proposed project area has adapted to the existing urban development of central Travis County. Construction of the proposed project would potentially impact wildlife in the project area through the removal of vegetation or structures that provide habitat for wildlife. Mobile species would be expected to leave the proposed project area of either build alternative as construction activities are initiated. Less mobile species or species sheltering in vegetation or structures within the proposed project area could be injured or killed by construction activities. The conversion of existing developed and landscaped conditions to roadway ROW would cause a loss of habitat and could cause further fragmentation of remaining habitat areas. Wildlife remaining in areas immediately adjacent to the proposed project area would be expected to adapt to the changed conditions (e.g., increased or decreased traffic movements and noise levels). Existing conditions in much of the urbanized area within the Ecological RSAs have similar fragmented conditions for ecological resources. Development within the Ecological RSAs is anticipated with or without the completion of the proposed project and similar additional fragmentation of habitat is expected in undeveloped areas throughout the Ecological RSAs.

TPWD’s NDD records indicate seven SGCN species have been documented within a 1.5-mile buffer of the project area: Texas map turtle, Guadalupe bass, Heller’s marbleseed (*Onosmodium helleri*), Texas fescue (*Festuca versuta*), Texas garter snake, Texas milk vetch, and Net-leaf bundleflower (*Desmanthus reticulatus*). No observations of any SGCN occurred during site visits within the project area. Induced growth is not anticipated as a result of this project; therefore, impacts from induced growth to these resources is considered insignificant.

**3.16.5.3.2 Cumulative Effects**

The implementation of the proposed project would permanently impact vegetation and wildlife habitat as well as potential SGCN habitat. Past and present trends indicate that with the increased population within and around Austin, infill of open areas within the project area and sprawl outside of the project area occurs. With the continued influx of people into the greater Austin area, it is anticipated that continued growth and cumulative effects to undeveloped lands would occur resulting in the conversion of natural vegetation, wildlife habitat, and potential threatened and endangered species habitat to urban/suburban areas, transportation uses, or other man-made developments with or without the completion of the proposed project.

Similar conditions for the ecological resources are expected in undeveloped areas throughout the Ecological RSAs. The conversion of undeveloped land to commercial, residential, or transportation uses as a result of development is anticipated within the Ecological RSAs with or without the completion of the proposed project. The direct impacts associated with this project, in addition to population growth, and other potential infrastructure developments in the project vicinity would contribute to a cumulative impact of loss or fragmentation of vegetative and wildlife habitat as well as potential SGCN habitat within the Ecological RSAs. The majority of the wildlife within the project area and Ecological RSAs have adapted to urban/suburban conditions and would continue to adapt to potential future urban/suburban conditions or may relocate to remaining undeveloped areas within the Ecological RSAs. Additionally, based on past trends, population...
projections, and limited available undeveloped land, foreseeable actions would likely be limited to small areas surrounding the proposed project and would not have a significant impact within the Ecological RSAs.

Habitat for three SGCN (Guadalupe bass, caddisfly, and Correll's false dragon-head) and the five listed freshwater mussel species are located within Ecological RSA 1 (100-Year Floodplain). There would be direct impacts to 37.1 acres of the 100-year floodplain as a result of the implementation of the proposed project. Additionally, 173.1 acres of planned developments are located within Ecological RSA 1. Minimal indirect or cumulative effects are anticipated as these habitats would most likely be avoided or minimized from future development as previous trends depict such floodplain and riparian areas have experienced little development and have been avoided or minimized by design modifications since the development of the proposed project began.

Habitats for a federal candidate species (Monarch Butterfly), federally-proposed species (tricolored bat) and four SGCNs (slender glass lizard, Texas garter snake, tree dodder, and cave myotis bat) are located within Ecological RSAs 2 and 3, which have an overlap of Riparian MOU and one or more habitats. Similar to the trends of floodplains, riparian areas have experienced little development and have been avoided or minimized by design modifications since the development of the proposed project began. These species may relocate to riparian areas, in which future development is unlikely, and are anticipated to have minimal impacts due to development of the proposed project or other foreseeable projects.

The habitat for two SGCNs (plateau spot-tailed earless lizard and Texas fescue) includes Edwards Plateau Savannah, Woodland, and Shrubland and Disturbed Prairie (Ecological RSA 4). The proposed project and planned developments would impact approximately 575.5 acres of habitat for these two species. Remaining suitable habitat for these two species includes 9,026.9 acres or 94.0 percent of the total Ecological RSA, which would remain. Ecological RSA 4 do not overlap floodplain or riparian areas which have primarily been avoided since the planning of the project began. However, the habitats of these species are located near the outer limits of Ecological RSAs which are less likely to be developed by infill and outward sprawl that has been observed in past and present trends in the greater Austin area. Due to the location of potential habitat, anticipated cumulative impacts due to development of the proposed project or other foreseeable projects is minimal for these species. A summary of these impacts is seen in Table 3.16-11.
### Table 3.16-11: Ecological RSA Description

<table>
<thead>
<tr>
<th>Ecological Resources RSA ID</th>
<th>MOU Habitat Type</th>
<th>Total Acreage</th>
<th>Direct Impacts of Proposed Project Acreage</th>
<th>Planned Development Acreage</th>
<th>Potential Induced Growth Acreage</th>
<th>Cumulative Effects Acreage</th>
<th>Remaining Acreage (Percentage)</th>
<th>Subject to Cumulative Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>RSA 1</td>
<td>100-Year Floodplain</td>
<td>6,665.5</td>
<td>37.1</td>
<td>173.1</td>
<td>N/A</td>
<td>210.15</td>
<td>6,455.4 (96.9%)</td>
<td>Minimal cumulative effects anticipated</td>
</tr>
<tr>
<td>RSA 2</td>
<td>All except Urban High Intensity (Common Vegetation Name)</td>
<td>52,438.0</td>
<td>185.4</td>
<td>1,908.1</td>
<td>N/A</td>
<td>2,093.5</td>
<td>50,344.5 (96.0%)</td>
<td>Minimal cumulative effects anticipated</td>
</tr>
<tr>
<td>RSA 3</td>
<td>Crosstimmer Woodland and Forest; Disturbed Prairie; Edwards Plateau Savannah, Woodland, and Shrubland; Post Oak</td>
<td>13,938.1</td>
<td>2.6</td>
<td>648.9</td>
<td>N/A</td>
<td>651.5</td>
<td>13,286.5 (95.3%)</td>
<td>Minimal cumulative effects anticipated</td>
</tr>
</tbody>
</table>
### Table 3.16-11: Ecological RSA Description

<table>
<thead>
<tr>
<th>Ecological Resources RSA ID</th>
<th>MOU Habitat Type</th>
<th>Total Acreage</th>
<th>Direct Impacts of Proposed Project Acreage</th>
<th>Planned Development Acreage</th>
<th>Potential Induced Growth Acreage</th>
<th>Cumulative Effects Acreage</th>
<th>Remaining Acreage (Percentage)</th>
<th>Subject to Cumulative Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>RSA 4</td>
<td>Edwards Plateau Savannah, Woodland, and Shrubland; Disturbed Prairie</td>
<td>9,602.4</td>
<td>1.3</td>
<td>574.2</td>
<td>N/A</td>
<td>575.5</td>
<td>9,026.9 (94.00%)</td>
<td>Minimal cumulative effects anticipated</td>
</tr>
</tbody>
</table>
3.16.5.3.3 Mitigation of Cumulative Effects

The proposed project would result in direct impacts including alteration of vegetation within existing ROW, proposed ROW, and drainage easements. However, according to TPWD EMST data and field verification 99 percent of the project area is mapped as urban vegetation, with less than 1 percent being mapped as a combination of open water, agriculture, Edwards Plateau savannah, woodland, and shrubland, riparian, and disturbed prairie vegetation. Very limited natural vegetated areas are located within the project area. Such natural vegetated areas that would be altered for the construction of the proposed project may have potential wildlife habitat or threatened and endangered species habitat. Future impacts to ecological resources would be assessed and addressed for each individual project that might involve federal funds, including TxDOT projects. Other privately funded land development projects would not be expected to prepare publicly available environmental documentation. The only exception would be developments that were required to meet federal requirements such as Section 404 permitting through the USACE and adherence with the ESA. Such federal requirements apply to otherwise non-federal projects. Continued development in the project area and Ecological RSAs is expected with or without the completion of the proposed project and would likely result in the conversion of vegetation, wildlife habitat, and potential threatened and endangered species habitat on undeveloped land to residential, commercial, and light industrial uses.

Any additional direct, indirect, and cumulative effects that may occur to ecological resources would be addressed by the entity, either private sector or public/local agency, responsible for the development that is impacting the resource. The potential for future transportation projects, private and/or municipal undertakings exists within the Ecological RSAs. COA and Travis County have permitting, planning, and zoning policies or ordinances in place that future developers would need to adhere to during the development planning phase. Such regulations and policies would make potential cumulative effects to ecological resources insignificant.

3.16.6 Conclusion

The I-35 Capital Express Central project was considered in conjunction with other actions to assess the role it would play in the potential cumulative effects to community, ecological, and historic resources. Conditions and trends were considered to help determine the significance of impacts to each resource. Overall, regardless of alternatives, the proposed project would follow and continue the trends and conditions of resources in their respective RSAs. Community and Ecological resources have been adversely affected by past and current projects as well as the general growth and development of Austin, and trends anticipate similar effects to these resources with or without the construction of the proposed project. Historic resources are protected by federal, state, and local regulations and all reasonably foreseeable actions would need to comply. Design elements were incorporated to reduce direct and cumulative effects, no induced growth is anticipated, and mitigation measures regulated by program and policy oversight are in place to further minimize any adverse cumulative effects that may result from the proposed project or other foreseeable actions. TxDOT is coordinating with agencies for final determination of adverse impacts and potential mitigation for Section 4(f) protected historic properties and parks and recreational properties. For the No Build Alternative, there would be no cumulative effects. The current development trends are anticipated to continue if the proposed project is not implemented.
3.17 Construction Phase Impacts

Construction of the project is anticipated to cause short-term impacts to traffic and transportation facilities, noise and vibration, air quality, biological resources, hazardous materials, water resources, and lighting. Additionally, the construction of the project will require three drainage tunnel launch sites as described in Section 3.6.10.3.1 and 3.6.10.3.2. Construction phase impacts for Build Alternative 2 and Modified Build Alternative 3 are discussed by resource. Impacts for both build alternatives would be similar, but the differences are noted in this section. Both build alternatives would require approximately 6 years for construction. For the No Build Alternative, there would be no construction phase impacts. Both permanent and temporary impacts are discussed below.

3.17.1 Traffic Patterns and Sequencing

A detailed traffic control plan would be developed prior to construction to minimize traffic disruption and describe how access would be maintained for vehicles, and people who walk and bicycle using the facility during construction. Temporary increases in traffic congestion would be expected; however, access to adjacent properties would be expected to remain open as much as possible. Changes in traffic patterns would be communicated by roadside signs and displays; these changes would be communicated to emergency responders (e.g., police, fire, EMS, and others) and public service providers prior to implementing the change. Traffic control during construction would proceed in accordance with the Texas Manual on Uniform Traffic Control Devices and TxDOT’s Work Zone Standards. Cross-street bridges are currently being considered along the project to provide local access across the highway during the construction stage.

Construction sequencing is similar for both build alternatives as follows (this information is preliminary and subject to change as this project continues to develop). Construction is anticipated to begin in spring 2024 and is expected to last approximately 8 years. For the No Build Alternative, there would be no construction phase impacts.

- Phase 1 - I-35 from SH 71/Ben White Boulevard to south of Holly Street (anticipated construction starting in spring 2024 with a 7-year duration). This phase includes a new bridge across Lady Bird Lake along with the proposed I-35 improvements and drainage connections.
- Phase 2 – Pedestrian bridge and MLK Jr. Boulevard bridge for east and west connectivity over I-35 to allow access while construction is underway. Anticipated construction starting spring 2024 with a 2-year duration.
- Phase 3 – Drainage connections (anticipated construction starting in spring/summer 2024 with a 2-year duration). Initially the project will need new drainage connections for the proposed I-35 improvements from Airport Boulevard to 9th Street.
- Phase 4 - Includes a separate drainage tunnel from I-35 East along Cesar Chavez Street with an outfall into the Colorado River and another drainage tunnel along I-35 from south of Holly Street to north of MLK Jr. Boulevard (anticipated construction starting summer 2024 with a 3-year duration).
- Phase 5 - Railroad (CapMetro Red Line) at 4th Street with pedestrian bridge, a railroad (Airport Boulevard Red Line and shoofly, are new bridge crossings to allow railroad operation while construction on I-35 is
underway. Included with this phase is the I-35 from MLK Jr. Boulevard to Airport Boulevard SB deck retrofits providing additional capacity that may be needed to improve mobility during construction as well as the NB deck demolition project (anticipated construction starting fall 2024 with a 3-year duration).

- Phase 6 – I-35 from MLK Jr. Boulevard to 51st Street (anticipated construction starting summer 2026 with a 5-year construction duration).
- Phase 7 – I-35 from 51st Street to US 290E (anticipated construction starting in late summer 2026 with a 2-year duration).
- Phase 8 – I-35 from south of Holly Street to north of MLK Jr. Boulevard (anticipated construction start in summer 2026 with a 6-year duration).

3.17.2 Transit Impacts

Both build alternatives would impact the CapMetro Red Line as follows:

- Red Line tracks near Airport Boulevard – A temporary track would be constructed early, which would allow the Red Line to remain open. There would be short-term closures (days at a time) required during construction, but long-term closures are not required.
- Red Line tracks near Airport Boulevard – Additional ROW acquisition would be required to build the temporary track. The temporary track may be removed after the proposed Red Line is constructed or can remain in place as a parallel track used for future expansion.
- Red Line tracks at 4th Street – The line would be temporarily closed (length of time to be determined) once impacted by proposed construction activities (i.e., mainlane excavation). A construction feasibility analysis is also being conducted for building the proposed project at the Red Line tracks at 4th Street because of the low vertical clearance here between the existing track and the existing mainlane bridge.

3.17.3 Protected Lands

The Butler Hike and Bike Trail would be temporarily closed (with detours provided) throughout construction. Additional park areas would be temporarily used for construction staging. More information on construction impacts to protected lands can be found in Section 3.9 and in Appendix M (Individual Section 4(f) Evaluation).

3.17.4 Water Resources

Minor impacts to water resources during construction may occur, including temporary and permanent fill impacts to WOTUS; however, controls and BMPs detailed in the SW3P would be used to minimize, to the extent practicable, the discharge of pollutants in stormwater associated with construction activity and (certain) non-stormwater discharges. The SW3P would include measures to control erosion and limit the discharge of pollutants to surface waters and groundwater. Erosion control measures may include, but are not limited to, the installation of silt fencing, mulching, erosion control blankets, and berms.

Upon selection of an alternative, a PCN for NWP 58 for Utility Line Activities for Water and Other Substances would be submitted to the USACE for the proposed drainage outfall structure at the Colorado River. An RGP 8 for
Minor Structures would be submitted to the USACE for the construction of a proposed boat dock and ramp at Lady Bird Lake. It is anticipated that the Preferred Alternative would meet the terms and conditions of NWP 14 without PCN for crossings at Tannehill Branch and Lady Bird Lake, and meet the terms and conditions of NWP 58 without PCN for drainage outfall structures at Harpers Branch, and at the north and south ends of the proposed I-35 bridge structure.

CFR, Title 33, §323.3 (c)(2) states that the placement of pilings in WOTUS that do not or would not have the effect of a discharge of fill material shall not require a Section 404 permit. Bridge piers that are adequately spaced so that they would not impede water flow or cause sedimentation would not have the effect of a discharge of fill. However, if construction of piers would require temporary fill (e.g., equipment within the OHWM), then a regulated activity would likely occur and require authorization from the USACE under Section 404 of the CWA. More information on water resources can be found in Section 3.10.

3.17.4.1 Clean Water Act Section 402

Since TPDES CGP authorization and compliance (and the associated documentation) occur outside of the environmental clearance process, compliance is ensured by the policies and procedures that govern the design and construction phases of the project. The Project Development Process Manual and the PS&E Preparation Manual require an SW3P be included in the plans of all projects that disturb 1 or more acre. The Construction Contract Administration Manual requires that the appropriate CGP authorization documents (NOI or site notice) be completed, posted, and submitted, when required by the CGP, to TCEQ and the MS4 operator. It also requires that projects be inspected to ensure compliance with the CGP.

The PS&E Preparation Manual requires that all projects include Standard Specification Item 506 (Temporary Erosion, Sedimentation, and Environmental Controls), and the “Required Specification Checklists” require Special Provision 506-003 on all projects that need authorization under the CGP. These documents require the project contractor to comply with the CGP and SW3P, and to complete the appropriate authorization documents.

3.17.5 Biological Impacts

3.17.5.1 Vegetation

Construction of any of the proposed project build alternatives would impact herbaceous, shrub, tree, and other plantings throughout the project area through site preparation activities. Clearing and grading would remove the existing vegetative cover and replace it with mostly impervious cover associated with travel lanes, entrance and exit ramps, and frontage roads. Open areas occurring within the proposed project areas of both build alternatives would likely be planted with herbaceous vegetation that would be routinely maintained by mowing. Construction of either Build Alternative 2 or Modified Build Alternative 3 would result in some tree removal within a small portion of wooded areas of nearby parks to allow for construction equipment and utility work within a drainage easement along the I-35 bridge over Lady Bird Lake. The other vegetated areas of the parks that are within the proposed alternative ROWs are currently maintained open areas that would be minimally impacted by proposed project construction. Tree removal would be necessary along the banks of the Colorado River for the necessary
drainage outfall structure of both build alternatives as well as on all four quadrants of I-35 and Lady Bird Lake. More information on vegetation can be found in Section 3.11.

3.17.5.2 Wildlife and Habitat

Construction of any of the proposed project build alternatives would potentially impact wildlife in the project areas through the removal of vegetation or structures that provide habitat for wildlife. Mobile species would be expected to leave the proposed project area of either alternative as construction activities are initiated. Less mobile species or species sheltering in vegetation or structures within the proposed project areas could be injured or killed by demolition activities, movements of heavy construction equipment, debris removal, or any required dewatering. The conversion of existing developed and landscaped conditions to roadway ROW could cause a loss of habitat. Increased impervious cover associated with the proposed project may introduce additional roadway pollutants to which wildlife could be directly exposed or that might degrade the quality of habitat adjacent to the proposed project areas. Wildlife remaining in areas adjacent to the proposed project areas would be expected to adapt to the changed conditions (e.g., increased or decreased traffic movements and noise levels).

General design and construction BMPs are in place between TxDOT and TPWD to reduce impacts to the state’s natural resources. During the construction phase, the following would be implemented.

- Employees and contractors will be provided information prior to start of construction to educate personnel of the potential for all state-listed threatened species or other SGCN to occur within the project area and should be advised of relevant rules and regulations to protect plants, fish, and wildlife.
- Contractors will be informed to avoid harming all wildlife species if encountered and allow them to safely leave the project site. Due diligence should be used to avoid killing or harming any wildlife species in the implementation of transportation projects.
- Direct animals away from the construction area with the judicious use and placement of sediment control fencing to exclude wildlife. Exclusion fence should be buried at least 6 inches and be at least 24 inches high, maintained for the life of the project, and removed after construction is completed. Contractors should examine the inside of the exclusion area daily to determine if any wildlife species have been trapped inside the area of impact and provide safe egress opportunities prior to initiation of construction activities.
- Apply hydromulching and/or hydroseeding in areas for soil stabilization and/or revegetation of disturbed areas around wetlands and in riparian areas.
- If erosion control blankets or mats will be used, the product should not contain netting, but should only contain loosely woven natural fiber netting in which the mesh design allows the threads to move, thereby allowing expansion of the mesh openings. Plastic netting should be avoided.
- Project staging areas, stockpiles, temporary construction easements, and other project-related sites should be situated in previously disturbed areas to avoid or minimize impacts to sensitive or unique habitats including intact native vegetation, floodplains, riparian corridors, wetlands, playa lakes, and habitat for wildlife species.
• When lighting is added, consider wildlife impacts from light pollution and incorporate dark-sky practices into design strategies. Minimize sky glow by focusing light downward, with full cutoff luminaries to avoid light emitting above the horizontal. The minimum amount of nighttime lighting needed for safety and security should be used.

Taxa-specific mitigation strategies would be employed to avoid, minimize, and/or compensate for potential impacts to SGCN. Taxa-specific BMPs would be implemented for the Preferred Alternative. In addition, the contractors would be notified of potential occurrences of SGCNs within the project area and to avoid harming any of the species, whenever possible. More information on wildlife and habitat can be found Section 3.11.

3.17.6 Hazardous Materials

If hazardous constituents are unexpectedly encountered in the soil and/or shallow groundwater during construction operations, appropriate measures for the proper assessment, remediation, and management of the contamination would be initiated in accordance with applicable federal, state, and local regulations. In the event of an accidental spill of hazardous materials, TxDOT would work with other agencies and its contractors to secure the scene and implement appropriate spill response measures. Standard spill response procedures are outlined in 30 T.A.C. Chapter 327. The following general procedures would be followed to minimize hazardous materials impacts during the project:

• Additional investigations, including regulatory file reviews, site visits, and subsurface investigations would be conducted for the sites of concern during project development. These investigations would be performed as needed to identify potential hazardous materials impacts in consideration of project design and ROW requirements.

• Management plans, special provisions, and/or other contingencies would be developed as necessary to handle hazardous materials and/or petroleum contamination according to applicable state, federal, and local regulations per TxDOT Standard Specifications. Hazardous items that require special handling would be removed only by qualified contractors with appropriate licensing, certifications, and/or authorizations having documentation of prior acceptable work.

• In accordance with TxDOT specifications, construction contractors would be required to stop work and immediately notify the engineer in the event that potentially hazardous materials are encountered, an odor is identified, or significantly stained soil is visible. In addition, contractors and maintenance personnel are required by standard specification to follow all applicable regulations regarding discovery and response for hazardous materials encountered during the construction process.

The LPST sites and tank systems would be addressed during the ROW negotiation and acquisition process. Coordination with property owners, tank owners, operators, and TCEQ for these sites would be an ongoing process up to, and during, construction.

The proposed project would include the excavation and construction of pier and structure support locations. Excavation in these areas may increase the potential of encountering hazardous materials contamination during construction. Additional subsurface environmental investigation services would need to be coordinated by TxDOT.
ENV Hazardous Materials Group to determine whether possible contamination might be encountered during construction in the vicinity of the identified medium- and high-risk sites. If hazardous constituents were confirmed, then appropriate soils and/or groundwater management plans for activities within those areas would be developed.

For any of the sites located adjacent to, or within, the footprint of the Preferred Alternative, impacts associated with hazardous materials would most likely occur during construction and would be related to activities within or near existing hazardous materials sites. However, risks would be potentially minimized by coordinating with TxDOT ENV Hazardous Materials Group to conduct additional assessment for the moderate and high-risk sites identified in the ISA Form. Additional assessment would be conducted prior to construction in accordance with TxDOT guidance.

Regulated sites create the potential to contaminate properties adjacent to them if disturbed during construction, posing a risk for the acquisition of those properties. However, risks would be potentially minimized by coordinating with TxDOT ENV Hazardous Materials Group to conduct additional assessment for the moderate and high-risk sites identified in the ISA Form.

Additional assessment could include regulatory file reviews, Phase 1 Environmental Site Assessments, and/or subsurface investigations, as appropriate to resolve or address hazardous materials concerns, considering project design and ROW requirements relative to the sites. Additional assessment would be conducted prior to construction in accordance with TxDOT guidance.

During the utility coordination phase, determinations would be required to make necessary adjustments and/or relocate pipelines. Location and depth of pipelines that would remain in place would need to be marked on the ground (in the field) prior to construction activities to prevent accidental damage to or rupture of the pipelines. TxDOT would take proper precautions to avoid impacts related to petroleum pipelines. More information on hazardous materials can be found in Section 3.13.

### 3.17.7 Noise Impacts

Noise associated with the construction of the project is difficult to predict. Heavy machinery, the major source of noise in construction, is constantly moving in unpredictable patterns. However, construction normally occurs during daylight hours when occasional loud noises are more tolerable. Provisions will be included in the plans and specifications that require the contractor to make every reasonable effort to minimize construction noise through abatement measures such as work-hour controls and proper maintenance of muffler systems. A quantitative assessment of construction noise will be conducted in the FEIS for any noise-sensitive areas where there is the potential for construction operations to cause an extended disruption of normal activities due to noise. More information on Traffic Noise can be found in Section 3.14.

### 3.17.8 Light Pollution

The facility would be adequately lighted for safety and security during construction. During construction, light pollution could be reduced by minimizing the need for artificial lighting by scheduling construction during daytime.
hours to the extent practicable. Construction for the project could occur during nighttime hours. The contractor would need to close the traffic lanes during off-peak hours (both during the day and night) in order to perform the work with minimal disruption. During nighttime construction, light trespass, light clutter, and over-illumination would be minimized to the best extent possible by screening, effective programming of work, directional lighting, and type of lights used.

3.18 Relationship Between Short-Term Uses of Man’s Environment and the Maintenance and Enhancement of Long-Term Productivity

Transportation improvements are based on comprehensive planning, which considers the need for present and future traffic requirements within the context of present and future land use development. The local short-term impacts and use of resources by the proposed action is consistent with the maintenance and enhancement of long-term productivity for the area. Each of the reasonable alternatives identified in Section 2.2 above would involve short-term uses of the built environment, as detailed elsewhere in Chapter 3.0. Aside from the construction-phase impacts discussed in Section 3.17, which would be temporary, most of the environmental impacts discussed for the reasonable alternatives elsewhere in Chapter 3.0 would be, for purposes of this environmental analysis, permanent in the sense that the Build Alternatives would be expected to serve the intended transportation function indefinitely. In other words, each of the reasonable alternatives would permanently convert the pre-existing natural and human-made resources to a transportation use; those resources would no longer exist and therefore would no longer contribute to the maintenance and enhancement of the environment’s productivity. The reasonable alternatives would, however, enhance the “productivity” of the transportation system, which would have long-term benefits for users of the transportation system, such as decreased congestion, improved mobility, increased safety, increased connectivity, improved bicycle and pedestrian options, and improved emergency response times. Construction-related employment would help to offset the short-term loss of employment due to displacements and relocations. These benefits offered by the long-term productivity of this project should offset the short-term adverse effects on the natural, physical, and human environments.

Under the No Build Alternative, there would be no short-term uses of the built environment, but also no transportation-related benefits, and so the transportation-related problems discussed in Section 1.1 above would persist.

3.19 Irreversible or Irretrievable Commitments of Resources

Implementation of the proposed action involves a commitment of a range of natural, physical, human, and fiscal resources. As stated elsewhere in Chapter 3 of this DEIS, each of the reasonable alternatives identified in Section 2.2 above would irreversibly and irretrievably commit natural and human-made resources to a transportation use. Land used for the project would be considered an irreversible commitment during the period that the land is used for a transportation purpose. The commitment of land to project ROW would require between approximately 41.7 and 45.2 acres depending on which of the alternatives is selected. This land includes residential and business properties, driveways, and natural areas. Additionally, each of the reasonable alternatives would irreversibly and irretrievably commit energy resources, such as the fossil fuels that would be consumed by the construction equipment. Additionally, either reasonable alternative would irreversibly and irretrievably expend considerable amounts of fossil fuels, labor, and highway construction materials such as...
cement, aggregate, and bituminous material. Additionally, large amounts of labor and natural resources are used in the fabrication and preparation of construction materials. These materials are generally not retrievable. Any construction would also require a substantial one-time expenditure of both state and federal funds, which are not retrievable. The decision to commit these resources for construction of the proposed project would be based on the concept that residents in the area and others would benefit from the project through decreased congestion, improved mobility, increased safety, increased connectivity, improved bicycle and pedestrian options, and improved emergency response times.

Under the No Build Alternative, there would be no irreversible or irretreivable commitment of resources, but also no transportation-related benefits, and so the transportation-related problems discussed in Section 1.1 above would persist.

3.20 Possible Conflicts Between the Proposed Action and the Objectives of Federal, Regional, State, and Local Land Use Plans, Policies and Controls for the Area Concerned

Neither of the reasonable alternatives identified in Section 2.2 above would involve known conflicts with the objectives of federal, regional, state, tribal, or local land use plans, policies and controls for the area concerned.

3.21 Energy Requirements and Conservation Potential of Various Alternatives and Mitigation Measures

Both of the reasonable alternatives identified in Section 2.2 above would require the consumption of energy, both in terms of construction and operation of the project. Energy, in the form of various fossil fuels and electricity, would be necessary during construction, maintenance, and future repair of the project. ROW clearing; road base grading and preparation; construction of bridges; and travel lane ramp installations would require varying levels of energy inputs. Following construction, routine maintenance of the ROW and travel lanes, and roadway repairs conducted on an as-needed basis, would also require energy inputs. Petroleum fuels are currently the primary type of energy required for construction, maintenance, and repair activities. Changing vehicle and fuel technology such as electric or hydrogen fuel options may alter the use of petroleum fuels in the future. Necessary fuel supplies would be expected to be available from fuel storage or vending sources in the area. Electrical demand for the Preferred Alternative would not affect the electrical supply characteristics of the region.

Regarding operation, roadway traffic would likely be the largest contributor to energy consumption over the lifetime of the facility. Energy consumption related to use of the facility would be dependent on vehicle efficiency, which includes such variables as roadway geometry, surface conditions, weather conditions, and traffic flows. Vehicle and fuel technology would likely reduce the need for future petroleum products in operational energy requirements in ways that cannot be accurately estimated now. However, each reasonable alternative would increase energy efficiency over existing conditions by decreasing congestion, improving mobility, and diverting cut-through traffic from neighborhood streets and onto the new, more efficient facility.

Energy conservation measures that would be implemented for the Preferred Alternative include construction of bicycle and pedestrian facilities along and across the corridor. The proposed project would improve pedestrian
and bicycle connectivity to the existing transit options and accessibility would be increased for those traveling on foot or by bicycle. Construction of HOV managed lanes to be utilized by transit would also conserve energy. Other energy conservation measures include energy efficient lighting and incorporation of TxDOT’s Transportation Systems Management and Operations Austin District Program Plan (TxDOT, 2018), which may include consideration for connected and autonomous vehicles.

Under the No Build Alternative, there would be no use of energy for construction; however, energy would continue to be expended in the operation and future maintenance and repair of the existing facility. Additionally, under the No Build Alternative, no transportation-related benefits would be realized, and so the transportation-related problems discussed in Section 1.1 above would persist. Additionally, under the No Build Alternative, there would be no bicycle and pedestrian improvements along and across the corridor; no improved connections to CapMetro and other transit stops; no energy efficient lighting; and no incorporation of ITS. More detail on specific mitigation can be found in project mitigation tables provided in Section 3.25.

3.22 Natural or Depletable Resources Requirements and Conservation Potential of Various Alternatives and Mitigation Measures

As stated elsewhere in Chapter 3 of this EIS, the reasonable alternatives identified in Section 2.2 above would deplete natural and depletable resources, including energy resources, such as the fossil fuels that would be consumed by the construction equipment. Natural or depletable resource conservation requirements and mitigation measures that would be implemented include BMPs and other mitigation measures for vegetation and wildlife, water resources, air quality, noise, and GHGs. More detail on specific mitigation can be found in project mitigation tables provided in Section 3.25.

Under the No Build Alternative, there would be no use of natural or depletable resources for construction, but also no transportation-related benefits, and so the transportation-related problems discussed in Section 1.1 above would persist.

3.23 Urban Quality, Historic and Cultural Resources, and the Design of the Build Environment, including the Reuse and Conservation Potential of Various Alternatives and Mitigation Measures

The project’s impacts to urban quality, historic and cultural resources, and the design of the built environment are addressed in Section 3.6 (“Community Impacts”), Section 3.7 (“Visual/Aesthetic Qualities”), and Section 3.8 (“Cultural Resources”). Mitigation measures relating to these areas are included in Section 3.25.

3.24 Greenhouse Gas and Climate Change

Climate change relates to transportation in two ways: transportation related GHG emissions may contribute to climate change, and the potential effect changing climate has on the transportation system (White House 2021b). As a result, members of the public are frequently interested in understanding how TxDOT is responding to the changing climate and how activities may contribute to climate change.
In addition to TxDOT Statewide On-Road Greenhouse Gas Emissions Analysis and Climate Change Assessment Technical Report (TxDOT, 2018a), TxDOT also conducted a project-level Greenhouse Gas Analysis and Climate Change Assessment Technical Report (Appendix V). This Technical Report includes 1) an overview of GHGs and climate change, 2) a project-level GHG analysis, 3) a project-level assessment of climate change, 4) resiliency risk assessment, 5) incomplete or unavailable information for specific climate change impacts, and 6) results and conclusions. A summary of key project-level or TxDOT program-level strategies for addressing the impacts of a changing climate is also disclosed and summarized below. TxDOT’s goal is to provide information regarding climate change and GHG emissions to the public and to provide information for consideration during the environmental analysis of the proposed project.

The Earth has gone through many natural changes in climate over time. However, since the industrial revolution began in the 1700s, atmospheric concentration of GHG emissions has continued to climb, primarily due to humans burning fossil fuel (e.g., coal, natural gas, gasoline, oil and/or diesel) to generate electricity, heat and cool buildings, and power industrial processes, vehicles, and equipment. According to the Intergovernmental Panel on Climate Change, this increase in GHG emissions is projected to contribute to future changes in climate (Solomon 2007; Stocker 2013).

GHGs include both naturally occurring and anthropogenic gases, such as carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydro-chlorofluorocarbons, perfluorocarbons, and sulfur hexafluoride (SF₆). The accumulation of GHGs in the atmosphere influences the long-term range of average atmospheric temperatures (EPA 2022d). These gases trap the energy from the sun and help maintain the temperature of the Earth’s surface, creating a process known as the greenhouse effect.

The effect each GHG has on global warming is a combination of the amount of their emissions and their global warming potential (GWP). GWP is a measure of how much energy the emissions of 1 ton of a gas will absorb over a given period of time, relative to the emissions of 1 ton of CO₂. The larger the GWP, the more a given gas warms the earth compared to CO₂ over that time period. CH₄ and N₂O have substantially higher GWPs than CO₂. GHG emissions are typically presented in terms of metric tons of carbon dioxide equivalent (CO₂E), which are calculated as the product of the mass emitted of a given GHG and its specific GWP.

GHGs differ from other regulated air pollutants in that GHG emissions in the atmosphere do not directly cause adverse human health effects. Rather, the environmental effects of GHG emissions result from changes in global temperatures and climate, which in turn can have indirect effects on the environment, infrastructure, and human health. Appendix V provides additional detail regarding the methodologies, data, and assumptions used for this GHG analysis and climate change assessment.

3.24.1 Project-Level GHG Emission Analysis

GHG emissions for the proposed project alternatives were estimated using FHWA’s Infrastructure Carbon Estimator, version 2.1.3 (FHWA 2020). The ICE 2.1.3 was developed by FHWA to estimate the lifecycle energy and GHG emissions from transportation infrastructure construction, maintenance, and operation. Five categories of GHG emissions from each proposed project alternative were modeled. Details of the GHG emission estimation, assumptions, and results are provided in Appendix V.
• **Material**: Includes the upstream emissions associated with materials extraction, production, chemical reaction, and raw material transportation.

• **Transportation**: Includes upstream emissions associated with the fuel used in transportation of materials to site.

• **Construction**: Includes the emissions from energy and fuel used in construction equipment.

• **O&M**: Includes the emissions from routine maintenance of the infrastructure, such as vegetation management, roadway repair and rehabilitation, and other routine maintenance.

• **Usage**: Includes emissions from vehicle operation on roadways, including vehicle travel delay during construction.

Construction information, materials for each infrastructure type, as well as limitations of the model are provided in Appendix V.

The estimated total lifecycle GHG emissions and the annualized GHG emissions by emission category for each proposed project alternative are summarized in Table 3.24-1. For information and comparison purposes, the GHG emissions for vehicle operations under 2018 existing conditions were estimated. The 2018 GHG emissions were 373,344 MT CO$_2$E, estimated by multiplying the 2018 VMT on the existing roadways by the 2018 vehicle emission factors from ICE 2.1.3.

Table 3.24-1: Total Lifecycle and Annualized GHG Emissions by Emission Category by Alternative

<table>
<thead>
<tr>
<th>Emission Category</th>
<th>No Build Alternative</th>
<th>Build Alternative 2</th>
<th>Modified Build Alternative 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total MT CO$_2$E</td>
<td>Annualized MT CO$_2$E/year</td>
<td>Total MT CO$_2$E</td>
</tr>
<tr>
<td><strong>Materials</strong></td>
<td>0</td>
<td>0</td>
<td>227,668</td>
</tr>
<tr>
<td><strong>Transportation</strong></td>
<td>0</td>
<td>0</td>
<td>10,135</td>
</tr>
<tr>
<td><strong>Construction</strong></td>
<td>0</td>
<td>0</td>
<td>76,456</td>
</tr>
<tr>
<td><strong>O&amp;M</strong></td>
<td>18,606</td>
<td>930</td>
<td>56,358</td>
</tr>
<tr>
<td><strong>Usage (VMT)</strong></td>
<td>7,374,840</td>
<td>368,742</td>
<td>7,838,340</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>7,393,446</td>
<td>369,672</td>
<td>8,208,956</td>
</tr>
</tbody>
</table>

NOTE: Annualized GHG emissions were calculated by dividing the total lifecycle GHG emissions by 20 years.

The time frame for annualization of GHG emissions is 20 years to be consistent with the proposed project operation between the 2030 opening year and 2050 design year. The modeled lifecycle GHG emissions are presented in units of MT CO$_2$E, which are calculated as the summed product of the mass of a given GHGs and their GWPs.
As shown in Table 3.24-1, vehicle operation emissions, i.e., emissions from vehicle travel on the roadways in the proposed project area, are the predominant source of GHG emissions estimated for each alternative. Vehicle operation emissions accounted for over 99 percent of total GHG emissions estimated for the No Build Alternative, 95 percent for Build Alternative 2, and 93 percent for Modified Build Alternative 3.

Future on-road GHG emissions may be affected by changes that may alter where people live and work and how they use the transportation system, including but not limited to 1) the results of federal policy including tailpipe and fuel controls, 2) market forces and economics, 3) individual choice decisions, 4) acts of nature (e.g., pandemic) or societal changes, and 5) other technological advancements. Such changes cannot be accurately predicted due to the inherent uncertainty in future projections related to demographics, social change, technology, and inability to accurately forecast where people work and live (TRB, 2007).

3.24.2 Mitigation Measures

Strategies that reduce on-road GHG emissions fall under four major categories:

- Federal engine and fuel controls under the CAA implemented jointly by EPA and USDOT, which includes Corporate Average Fuel Economy standards;
- “Cash for clunker” programs, which remove older, higher-emitting vehicles from roads;
- TSM, which improves the operational characteristics of the transportation network (e.g., traffic light timing, pre-staged wrecker service to clear accidents faster, or traveler information systems); and
- TDM which provides reductions in VMT (e.g., transit, rideshare, and bicycle and pedestrian facilities) and requires personal choice decisions.

TxDOT has implemented programmatic strategies that reduce GHG emissions including 1) travel demand management projects and funding to reduce VMT, such as bicycle and pedestrian facilities, 2) traffic system management projects and funding to improve the operation of the transportation system, 3) participation in the national alternative fuels corridor program, 4) clean construction activities, 5) clean fleet activities, 6) CMAQ funding, 7) transit funding, and 8) statewide campaigns to reduce tailpipe emissions.

Even though both Build Alternatives would have higher estimated GHG emissions than the No Build Alternative, Build Alternative 2 and Modified Build Alternative 3 have greater potential for mode shift (increase transit with BRTs and active transportation options with SUP), while there is no expanded mode shift with the No Build Alternative. Increased mode shift away from single-occupant vehicles would reduce emissions more than the above estimates, but mode shift cannot be accurately quantified at this time. GHG emissions for all alternatives in future years would potentially be lower due to future technology improvements (fleet electrification) and future vehicle emission standards. In addition, the major changes in mode shift, such as we saw during the pandemic, cannot at this time be accurately reflected in the future years traffic forecast, so if more individuals choose transit or work-from-home options, GHG emissions for all of the alternatives in the future years would be lower.
3.24.3 TxDOT and a Changing Climate

TxDOT has strategies that address a changing climate in accordance with TxDOT and FHWA design, asset management, maintenance, emergency response, and operational policies and guidance. The flexibility and elasticity in TxDOT transportation planning, design, emergency response, maintenance, asset management, and operation and maintenance of the transportation system are intended to consider any number of changing scenarios over time. Additional details are in Appendix V.

3.24.3.1 Project-Level Assessment of Climate Change

This section provides a project-level assessment of the potential for climate change to result in impacts to the proposed project. The assessment evaluates available information on the historic and projected climate variables that might affect the proposed project area of the I-35 Capital Express Central Project, Austin, and Travis County. In the Austin area, climate predictions indicate that the region will be warmer, drier, and subject to periodic extreme weather events (COA, 2018a). For transparency, several major sources of data limitations and uncertainty exist in climate projections and those are discussed in Appendix V.

3.24.3.2 Climate Change Risk Workshop

A climate change risk workshop was held on June 23, 2022, with participants from across environmental, engineering, and design disciplines. Following the presentation of the climate change risk concept, the group discussed and described how each factor may influence the major components of the I-35 Capital Express Central Project.

Following the workshop, the risk narratives were developed into a project-level climate change risk register and assessment for the project. A second meeting was held across environmental, engineering, and design disciplines on July 15, 2022, before finalizing the risk register and assessment. Table 3.24-2 is a summary of climate parameters, risk/hazard, and the overall risk ranking. For the complete Climate Change Risk Register and Assessment by Climate Parameter table with discussions, please see Appendix V.

Table 3.24-2: Summary Table Results from the Climate Change Risk Register and Assessment by Climate Parameter

<table>
<thead>
<tr>
<th>Climate Parameters</th>
<th>Risk/Hazard</th>
<th>Risk Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased Temperature</td>
<td>Drier soils, expansion, and cracking of materials</td>
<td>Low</td>
</tr>
<tr>
<td>High Temperature Extremes</td>
<td>Vehicle Durability</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>Photochemical Smog, decreased visibility</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>Network power failure due to excess demands</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>Health effects</td>
<td>Low</td>
</tr>
<tr>
<td>Low Temperature Extremes</td>
<td>Accumulation of winter precipitation</td>
<td>Low</td>
</tr>
</tbody>
</table>
Table 3.24-2: Summary Table Results from the Climate Change Risk Register and Assessment by Climate Parameter

<table>
<thead>
<tr>
<th>Climate Parameters</th>
<th>Risk/Hazard</th>
<th>Risk Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extreme Precipitation Events</td>
<td>Flooding</td>
<td>Low-Moderate</td>
</tr>
<tr>
<td></td>
<td>Expansion and cracking of materials, water sheeting on roadways</td>
<td>Low</td>
</tr>
<tr>
<td>Increased CO2</td>
<td>Durability of Structures</td>
<td>Low</td>
</tr>
<tr>
<td>Wildfire</td>
<td>Wildfire Risk</td>
<td>Low</td>
</tr>
</tbody>
</table>

3.24.3.3 Predicted Climate Change Impacts to the Proposed Project

From the risk analysis, no high or extreme risks were identified for the proposed project. All risks are predicted to be low to medium with programmatic and enhanced risk controls strategies in place. The use of concrete for the HOV managed lanes and mainlanes, and the majority of bridges and SUP allows the components to be more resilient to potential changes and requires less maintenance and therefore less impact to the facility users.

TxDOT also has strategies and funding to address a changing climate in accordance with TxDOT and FHWA design, maintenance, emergency response, and operational policies and guidance. The flexibility and elasticity in TxDOT transportation planning, design, emergency response, maintenance, asset management, and operation and maintenance of the transportation system are intended to consider any number of changing climate scenarios over time.

3.25 Project Benefits and Proposed Mitigation

The following section describes the proposed benefits associated with the proposed project, as well as the anticipated regulatory commitments and current mitigation proposals. The proposed commitments and mitigation measures are subject to change and would be updated as project development and coordination continues. The most updated version of the proposed project commitments will be included in the FEIS and ROD.

Input from the public, Participating and Cooperating agencies (including COA), and community groups (including neighborhood associations) aided in the development of the Preferred Alternative. Based on this input, the project was modified to remove the upper decks, minimize ROW impacts, provide enhanced east/west crossings (wider bridges), wider SUPs, and the ability for the project infrastructure to provide the support needed for future deck plazas (to be funded by others). If implemented, the proposed project design would provide benefits to the project area and surrounding communities, these benefits are outlined below.

In addition to the anticipated benefits as a result of the proposed action and the required commitments that will be implemented as a result of exiting policy and regulations, TxDOT is committed to the implementation of additional mitigation measures to reduce impacts to the local community and environmental resources in the project corridor.
<table>
<thead>
<tr>
<th>#</th>
<th>Category</th>
<th>Requested By</th>
<th>Proposed Improvement</th>
<th>Anticipated Benefits</th>
<th>Timing/Phase of Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Safety and mobility/congestion relief/ access</td>
<td>Public and agencies during scoping, COA, neighborhood associations, community groups</td>
<td>Increased SUPs along corridor</td>
<td>Additional and safer facilities for people who walk and bicycle along and across I-35. Increased mobility could increase accessibility to businesses and facilities for all communities, including underserved or vulnerable populations, as well as reduce congestion. SUPs may also play a role in reducing GHG in the region by encouraging more bicycle and pedestrian trips rather than by vehicles.</td>
<td>After construction</td>
</tr>
<tr>
<td>2</td>
<td>Safety and mobility/congestion relief</td>
<td>Community groups, COA</td>
<td>Added managed lanes, improved ramping</td>
<td>Congestion relief along the corridor. More reliable mobility for all users, including transit, police, fire, and EMS responders.</td>
<td>After construction</td>
</tr>
<tr>
<td>3</td>
<td>Safety and mobility</td>
<td>Community groups, COA</td>
<td>Improved emergency response times.</td>
<td>Improved mobility may lead to improved response times for first responders.</td>
<td>After construction</td>
</tr>
<tr>
<td>4</td>
<td>Safety and mobility</td>
<td>Community groups, COA</td>
<td>Building to current design standards</td>
<td>Enhanced safety and mobility</td>
<td>Design phase</td>
</tr>
<tr>
<td>5</td>
<td>Mobility/congestion relief</td>
<td>Public and agencies during scoping, COA neighborhood associations, community groups, DAA and Reconnect Austin</td>
<td>Improved transit facilities and access</td>
<td>The proposed managed lanes would be accessible to multiple multi-modal transit options, such as busses, van/carpools, or ride sharing, to reduce the overall lane miles traveled within the corridor.</td>
<td>After construction</td>
</tr>
<tr>
<td>#</td>
<td>Category</td>
<td>Requested By</td>
<td>Proposed Improvement</td>
<td>Anticipated Benefits</td>
<td>Timing/Phase of Construction</td>
</tr>
<tr>
<td>----</td>
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<td>------------------------------------------------------------------------------</td>
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<td>-----------------------------</td>
</tr>
<tr>
<td>6</td>
<td>Congestion relief</td>
<td>Community groups, COA</td>
<td>Bypass lanes provided under many intersections</td>
<td>Allows for improved mobility by eliminating the need for some vehicles to stop at the bypassed signalized intersections.</td>
<td>After construction</td>
</tr>
<tr>
<td>7</td>
<td>Connectivity/community cohesion</td>
<td>Public and agencies during scoping, COA, neighborhood associations, community groups, DAA and Reconnect Austin.</td>
<td>Enhanced bridges across corridor</td>
<td>Wider, safer crossings for pedestrians connecting east/west Austin and providing landscaping and pedestrian amenities, including 20-foot buffer and 10-foot SUP buffers between vehicles and pedestrians.</td>
<td>After construction</td>
</tr>
<tr>
<td>8</td>
<td>Community cohesion</td>
<td>Public and agencies during scoping, COA, neighborhood associations, community groups, DAA and Reconnect Austin.</td>
<td>Design accommodates for possibility of deck plazas that could potentially be built by others.</td>
<td>TxDOT has included support structures to facilitate the installation of deck plazas over the proposed I-35 facility. These caps would reduce the visibility of the I-35 main and managed lanes and provide open space for people who walk and bicycle. In some areas, if constructed, the caps would allow pedestrians to cross the entire I-35 corridor without having to cross any lanes of traffic. Caps and stitches would be funded by others. Construction phasing would be determined through coordination between TxDOT, COA, and the selected contractor.</td>
<td>Caps and stitches would be funded by others. Construction phasing would be determined through coordination between TxDOT, COA, and the selected contractor.</td>
</tr>
<tr>
<td>9</td>
<td>Community cohesion</td>
<td>Public and agencies during scoping, COA, neighborhood associations, community groups</td>
<td>Reduced ROW and displacement (residential and business) Impacts</td>
<td>Through innovative design changes the ROW and associated displacements required to construct the proposed project has been reduced.</td>
<td>Design phase</td>
</tr>
</tbody>
</table>
### Table 3.25-1: Benefits Associated with the Implementation of the Proposed Action (Preferred Alternative)

<table>
<thead>
<tr>
<th>#</th>
<th>Category</th>
<th>Requested By</th>
<th>Proposed Improvement</th>
<th>Anticipated Benefits</th>
<th>Timing/Phase of Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Community cohesion</td>
<td>Public, community groups, DAA and Reconnect Austin</td>
<td>Boulevard concept (frontage roads only)</td>
<td>Would remove split frontage road system and bring the two frontage roads together on one side of the facility, above the lowered main and managed lanes, to form a more traditional boulevard appearance at ground level.</td>
<td>After construction</td>
</tr>
<tr>
<td>11</td>
<td>Community cohesion/ Traffic Noise</td>
<td>Community groups, public and agency input, COA, neighborhood associations</td>
<td>Removal of upper decks</td>
<td>Reduces the visual barrier between east and west Austin. Anticipated to reduce noise volumes to surrounding neighborhoods.</td>
<td>After construction</td>
</tr>
<tr>
<td>12</td>
<td>Community cohesion/ Traffic Noise/ Air Quality</td>
<td>Community groups, public and agency input, COA, neighborhood associations, DAA and Reconnect Austin</td>
<td>Depressing/lowering areas of highway</td>
<td>Reduces visual barrier created by highway between east and west Austin. Decreased traffic noise and air pollution within these areas.</td>
<td>After construction</td>
</tr>
</tbody>
</table>
### Table 3.25-2: Commitments Required by Policy or Regulation

<table>
<thead>
<tr>
<th>#</th>
<th>Category</th>
<th>Impact</th>
<th>Commitments</th>
<th>Timing/Phase of Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Community Impacts: Travel</td>
<td>Temporary road closures and</td>
<td>• Provide safe and efficient connections to and around neighborhoods during</td>
<td>Final design/ during construction</td>
</tr>
<tr>
<td></td>
<td>Patterns and Access</td>
<td>traffic detours</td>
<td>construction for all modes of transportation, including bicycles and</td>
<td></td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>pedestrians.</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>• Provide advanced notice of temporary road closures and traffic detours.</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>• Maintain access to properties during construction.</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Community Impacts: Traffic</td>
<td>Traffic noise impacts near</td>
<td>Construct noise barriers, where feasible, reasonable, and approved by</td>
<td>Final design/ during construction</td>
</tr>
<tr>
<td></td>
<td>Noise</td>
<td>residential areas, parks, open</td>
<td>landowners adjacent to the proposed noise barriers. Any subsequent project</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>spaces, and recreational areas</td>
<td>design changes may require a re-evaluation of preliminary noise barrier</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>proposals. The final decision to construct the proposed noise barriers</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>would not be made until completion of the proposed project design, utility</td>
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<td></td>
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<td></td>
<td>evaluation, and polling of adjacent property owners during traffic noise</td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>workshops.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Community Impacts: Construction</td>
<td>Temporary noise impacts during</td>
<td>Implement BMPs to minimize noise during construction, as per FHWA’s</td>
<td>During construction</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>through abatement measures, such as work-hour controls and proper</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>maintenance of muffler systems.</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Transportation: Hike and Bike</td>
<td>Temporary trail closures and</td>
<td>• Provide safe and efficient connections to hike and bicycle trails and</td>
<td>Final design/ during construction</td>
</tr>
<tr>
<td></td>
<td>Trails</td>
<td>detours during construction</td>
<td>allow for planned future trails.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Coordinate with COA to provide advanced notice of temporary trail</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>closures and detours during construction.</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Transportation: Bus Services</td>
<td>Temporary displacement of bus</td>
<td>• In cooperation with CapMetro, install temporary bus stops outside of the</td>
<td>Pre-construction/ during construction</td>
</tr>
<tr>
<td></td>
<td></td>
<td>stops during construction</td>
<td>proposed ROW and as close as possible to the original bus stop location.</td>
<td></td>
</tr>
<tr>
<td>#</td>
<td>Category</td>
<td>Impact</td>
<td>Commitments</td>
<td>Timing/Phase of Construction</td>
</tr>
<tr>
<td>----</td>
<td>-------------------------------</td>
<td>-------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>6</td>
<td>Transportation: Bus Services</td>
<td>Bus stop displacements and relocations</td>
<td>In cooperation with CapMetro, design new and re-established bus stop locations in accordance with the ADA requirements.</td>
<td>Final Design</td>
</tr>
<tr>
<td>7</td>
<td>Safety</td>
<td>Potential temporary impacts to emergency response travel time during construction</td>
<td>Coordinate with city and county officials to minimize disruptions to emergency services during construction.</td>
<td>Final design/pre-construction/during construction</td>
</tr>
<tr>
<td>8</td>
<td>Relocations and Displacements</td>
<td>All Displacements</td>
<td>Provide language translation services for displaced individuals, families, businesses, and nonprofit organizations.</td>
<td>During property acquisition</td>
</tr>
<tr>
<td>9</td>
<td>Relocations and Displacements</td>
<td>All Displacements</td>
<td>Relocation Assistance:</td>
<td>During property acquisition</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Assign relocation assistance counselor that would 1) determine need for assistance and 2) provide current listings of other available replacement housing.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Provide counseling to get assistance from other available sources to minimize hardships in adjusting to new location.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Provide information concerning other federal, state, and local housing programs offering assistance</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Relocations and Displacements</td>
<td>Owner occupants of less than 90 days and tenants</td>
<td>Compensation:</td>
<td>During property acquisition</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Owner occupants of less than 90 days and tenants may be eligible for down-payment assistance</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Relocations and Displacements</td>
<td>All owner occupant displacements (residences, businesses, schools,</td>
<td>Notification:</td>
<td>During property acquisition</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
### Table 3.25-2: Commitments Required by Policy or Regulation

<table>
<thead>
<tr>
<th>#</th>
<th>Category</th>
<th>Impact</th>
<th>Commitments</th>
<th>Timing/Phase of Construction</th>
</tr>
</thead>
</table>
| 12 | Relocations and Displacements  | All tenant occupant displacements (residences, businesses, schools, places of worship and other nonprofit facilities) | - Provide tenant occupants with relocation notification package. Assign relocation assistance counselor.  
- Provide a relocation booklet explaining tenant entitlements under the relocation assistance program.  
- Tenants have a minimum of 90 days from date of written notice before TxDOT would acquire property. | During property acquisition |
| 13 | Relocations and Displacements  | Residential displacements owner and tenant occupants                  | Relocation Assistance:  
- Ensure residents would not be required to move unless at least one comparable replacement dwelling is available.                                                                                           | During property acquisition |
| 14 | Relocations and Displacements  | Residential displacements owner and tenant occupants                  | Compensation:  
- Compensate any person(s) whose property needs to be acquired, in accordance with the Uniform Act of 1970, as amended; 49 CFR Part 24, Subparts C through F; Title VIII of the Civil Rights Act of 1968 (Federal Fair Housing Act); HUD Amendment Act of 1974, and TxDOT policies and procedures. | During property acquisition |
Table 3.25-2: Commitments Required by Policy or Regulation

<table>
<thead>
<tr>
<th>#</th>
<th>Category</th>
<th>Impact</th>
<th>Commitments</th>
</tr>
</thead>
</table>
|   |                                 | Residential Displacements: Owner Occupants of less than 90 days and tenant occupants | • Provide reimbursement of moving costs and certain related expenses incurred in moving and related incidental expenses, not to exceed the amount of the approved rental assistance supplement. INCIDENTAL expenses for replacement housing include the reasonable costs of loan applications, recording fees, and certain other closing costs.  
• Provide just compensation for property.  
• Provide Replacement Housing Payments as Purchase Supplements or Down Payment Assistance to purchase comparable decent, safe, and sanitary replacement dwelling. |
| 15| Relocations and Displacements   |                                                                                     |                                                                                                                                  |

During property acquisition
### Table 3.25-2: Commitments Required by Policy or Regulation

<table>
<thead>
<tr>
<th>#</th>
<th>Category</th>
<th>Impact</th>
<th>Commitments</th>
<th>Timing/Phase of Construction</th>
</tr>
</thead>
</table>
| 16 | Relocations and Displacements   | Residential displacements                   | **Relocation Assistance:**  
  • Assist residents at public housing, as defined by the Uniform Act of 1970, as amended; 49 CFR Part 24, Subparts C through F, to find comparable replacement housing.  
  • Ensure tenant occupant would not be required to move unless at least one comparable replacement dwelling is available within their financial means. | During property acquisition  |
|    |                                 | Affordable Housing                          |                                                                                                                                                                                                          |                              |
| 17 | Relocations and Displacements   | Non-Residential Displacements (businesses, schools, places of worship and other nonprofit facilities) | **Relocation Assistance**  
  • Assign relocation assistance counselor to help with relocation planning.  
  • Explore and provide advice about possible sources of funding and assistance from other local, state and federal agencies. | During property acquisition  |
| 18 | Relocations and Displacements   | Non-Residential Displacements (businesses, schools, places of worship and other nonprofit facilities) | **Compensation:**  
  • Provide reimbursement of moving costs and certain related expenses incurred in moving.  
  • Personal Property- Provide payment for the actual direct loss of tangible personal property or the purchase of substitute personal property that is incurred as a result of the move or discontinuance of the operation.  
  • Searching Expenses for Replacement Property: Reimburse for actual reasonable expenses incurred in searching for a replacement property, not to exceed $2,500.  
  • Reestablishment Expenses for Replacement Site: A small business (not more than 500 employees), may be eligible to | During property acquisition  |
<table>
<thead>
<tr>
<th>#</th>
<th>Category</th>
<th>Impact</th>
<th>Commitments</th>
<th>Timing/Phase of Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>receive a payment, not to exceed $25,000 for expenses actually incurred in relocating and reestablishing at a replacement site.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| 19 | Relocations and Displacements    | • Medical facilities Displacements  
• CommUnityCare – David Powell Health Center  
• CommUnityCare – Hancock Walk-In Care  
• Dr. Emilio Torres  
• Dr. Wong Eye Center  
• Pediatric Care of Austin (Austin Medial Building) | Reimburse cost of relicensing fees and medical licenses at new location.                                                                                                                                  | During property acquisition  |
| 20 | Relocations and Displacements    | Billboards and Advertisement Sign Displacements                                                                                           | Compensation:  
• Provide relocation payment for moving personal property and related expenses.  
• Reimburse for actual reasonable expenses incurred in searching for a replacement sign site, not to exceed $2,500. | During property acquisition  |
| 21 | Historic Resources - Section 106 | Four properties adversely affected:  
• EBBC Main Office (*Austin Chronicle*)  
• Haster House  
• Dura Tune Service Station  
• Roberts House | Coordination with the THC/Texas SHPO and the Section 106 consulting parties is ongoing.                                                                                                               | Final design/pre-construction/during construction |
### Table 3.25-2: Commitments Required by Policy or Regulation

<table>
<thead>
<tr>
<th>#</th>
<th>Category</th>
<th>Impact</th>
<th>Commitments</th>
<th>Timing/Phase of Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>22</td>
<td>4(f) Protected Resources – Historic Sites</td>
<td>Five properties impacted:</td>
<td>Coordination with the THC/SHPO and the Section 106 consulting parties is ongoing.</td>
<td>Final design/pre-construction/during construction</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• EBBC Main Office (<em>Austin Chronicle</em>)</td>
<td>Butler Hike and Bike Trail mitigation is discussed under parkland 4(f) discussion below.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Roberts House</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Haster House</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Dura Tune Service Station</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Butler Hike and Bike Trail</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Final design/pre-construction/during construction</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>4(f) Protected Resources – Parkland</td>
<td>Temporary Construction Impacts</td>
<td>Coordination with COA to identify potential mitigation for the proposed impacts to 4(f) parkland is ongoing. More details on the current purposed mitigation for impacts to 4(f) parkland resources can be found in the Section 4(f) Individual Evaluation document located in Appendix M of this document.</td>
<td>Final design/pre-construction/during construction</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 0.70 acre - International Shores_3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 0.20 acre - Waller Beach Metro Park</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 0.70 acre - Edward Rendon Park</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 0.57 acre - Norwood Tract</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 1,207 ft - Butler Hike and Bike Trail</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• 25 acres of shoreline and open water in Lady Bird Lake</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Permanent Impacts:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 0.10 acre - International Shores_3</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• 0.29 acre – Lady Bird Lake</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 1.20 acre - Waller Beach</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table 3.25-2: Commitments Required by Policy or Regulation

<table>
<thead>
<tr>
<th>#</th>
<th>Category</th>
<th>Impact</th>
<th>Commitments</th>
<th>Timing/Phase of Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>6(f) Protected Resources - Waller Beach Metro Park</td>
<td>Approximately 1.20 acres of conversion of parkland for the use of the construction of the proposed I-35 bridge at Lady Bird Lake.</td>
<td>TxDOT is working with COA to identify a potential replacement property or properties that are at least equal in fair market value and reasonably equivalent in usefulness and location to compensate for the approximately 1.20-acre conversion of Waller Beach Park. When a suitable replacement property or properties are identified, it or they would need to be approved by TPWD and the NPS as part of a formal conversion proposal. If a potential replacement property or properties is/are identified prior to the release of the FEIS, then it/they would be described in the FEIS. Formal NPS approval of the conversion proposal and replacement property or properties cannot occur until after the ROD for this project (see 36 CFR 59.3(b)(7)).</td>
<td>Post ROD</td>
</tr>
<tr>
<td>25</td>
<td>6(f) Protected Resources – Edward Rendon Park</td>
<td>Approximately 0.70 acre of temporary use of parkland for the use of construction of the proposed I-35 bridge at Lady Bird Lake.</td>
<td>If the NPS agrees that the temporary use of Edward Rendon Sr. Metro Park does qualify as a “conversion” under Section 4(f), then no replacement property will be required. After the temporary non-conforming use is concluded (6 months), the land would be restored for public recreation use without substantial residual impacts on the site.</td>
<td>Final design/pre-construction/during construction</td>
</tr>
</tbody>
</table>

*Proposed commitments will be subject to change and updated as project development and coordination continues. The most updated version of the proposed project commitments will be included in the ROD.*
Table 3.25-3: Proposed Mitigation

<table>
<thead>
<tr>
<th>#</th>
<th>Category</th>
<th>Impact</th>
<th>Mitigation*</th>
<th>Timing/Phase of Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Community Impacts – Ongoing Coordination and Feedback with the Community</td>
<td>EJ Impacts/Construction Impacts</td>
<td>As an extension of the existing VOICE meetings that are currently being held for the proposed project, TxDOT would develop a community advisory committee for the project as it moves into construction phases. These meetings would be held to communicate to the public progress of the implementation of mitigation measures for the project, construction updates, as well as to receive feedback from the public on these actions. As discussed in Section 3.6.10, construction impacts to EJ communities would be mitigated by extensive communication of traffic pattern changes, maintaining access for vehicles, pedestrians, and bikes. TxDOT is allocating $10 million to CapMetro to maintain bus service during construction and would be constructing the Red Line crossings at Airport Blvd. and 4th Street, as well as the MLK Jr. Blvd. pedestrian crossing prior to when construction on the proposed facility would begin so east-west crossings are maintained.</td>
<td>Life of the project.</td>
</tr>
<tr>
<td>2</td>
<td>Community Impacts – Community Cohesion</td>
<td>EJ Impacts/Community Cohesion/Construction Impacts</td>
<td>TxDOT would commit $9.4 million to maintain existing CapMetro services during construction.</td>
<td>Pre-Construction/ During Construction</td>
</tr>
<tr>
<td>3</td>
<td>Community Impacts – Community Cohesion</td>
<td>EJ Impacts/Community Cohesion/Construction Impacts</td>
<td>TxDOT would accelerate construction of the proposed bicycle and pedestrian facilities at the CapMetro Red Line and MLK Jr. Boulevard intersections to promote/maintain east-west connections within the project corridor during construction.</td>
<td>Pre-Construction/ During Construction</td>
</tr>
</tbody>
</table>
### Table 3.25-3: Proposed Mitigation

<table>
<thead>
<tr>
<th>#</th>
<th>Category</th>
<th>Impact</th>
<th>Mitigation*</th>
<th>Timing/Phase of Construction</th>
</tr>
</thead>
</table>
| 4  | Relocations and Displacements – EJ | Displacements of healthcare facilities that serve low-income, minority populations, or otherwise underserved communities:  
• CommUnityCare – David Powell Health Center  
• CommUnityCare – Hancock Walk-In Care  
• Dr. Emilio Torres  
• Dr. Wong Eye Center  
• Pediatric Care of Austin (Austin Medical Building) | In addition to the required mitigation measures listed in Table 3.25-2, TxDOT would:  
• Offer the opportunity for advance acquisition of property.  
• Allow occupants, during the relocation process, to remain in the existing facility for an agreed amount of time negotiated between the property owner and TxDOT to allow for the continuation of healthcare of services to the community.  
• Offering assistance (shuttle service, CapMetro passes) to commute to medical appointments  
• Federal regulations allow rental assistance supplement to residential tenants, but not for business tenants. As mitigation to the eight businesses within EJ areas who are tenants, TxDOT is offering rental assistance supplement to these businesses that serve a specific community. Rental assistance supplement includes finding a comparable business location and opportunity for additional rental price differential over what they are currently paying, within limits, for 42 months. | Pre-Construction |
| 5  | Relocations and Displacements – EJ | Displacements of community facilities that serve low-income, minority populations, or otherwise underserved communities: | In addition to the required mitigation measures listed in 3.25-2, TxDOT would:  
• Offer the opportunity for advance acquisition of property. | Pre-Construction |
### Table 3.25-3: Proposed Mitigation

<table>
<thead>
<tr>
<th>#</th>
<th>Category</th>
<th>Impact</th>
<th>Mitigation*</th>
<th>Timing/Phase of Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Relocations and Displacements – EJ</td>
<td>Impacts to people experiencing homelessness.</td>
<td>Through TxDOT existing IAH program, a project specific coordination plan would be developed to communicate advance notification of construction operations and perform assessments for BN services and eligibility for housing.</td>
<td>Pre-Construction/ During Construction</td>
</tr>
<tr>
<td>7</td>
<td>Relocations and Displacements – EJ</td>
<td>Displacement of people experiencing homelessness.</td>
<td>In coordination with TxDOT’s existing IAH program, TxDOT would partner and coordinate with the local HUD Leadership Committee of Continuum of Care (comprising non-profits serving the homeless community such as Integral Care, The Other Ones Foundation [TOOF] etc.) to identify opportunities to</td>
<td>Pre-Construction/ During Construction</td>
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</tbody>
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### Table 3.25-3: Proposed Mitigation

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<thead>
<tr>
<th>#</th>
<th>Category</th>
<th>Impact</th>
<th>Mitigation*</th>
<th>Timing/Phase of Construction</th>
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</thead>
<tbody>
<tr>
<td>8</td>
<td>Relocations and Displacements – EJ</td>
<td>Interruption of BN services under existing I-35 Bridges provided to those experiencing homelessness.</td>
<td>In coordination with TxDOT’s existing IAH program, TxDOT would partner and coordinate with the local HUD Development Leadership Committee of Continuum of Care (comprised of non-profits serving the homeless community such as Integral Care, The Other Ones Foundation [TOOF] etc.) to identify opportunities to provide relocation services and access to shelter and rehousing services for people experiencing homelessness within the project corridor. TxDOT would assign a dedicated staff member for this effort for the duration of construction.</td>
<td>Pre-Construction/During Construction</td>
</tr>
</tbody>
</table>
| 9  | Relocations and Displacements – EJ | Displacement of housing that potentially provides more affordable rental rates  
• Avalon Apartment Complex (24 units) | • Offer the opportunity to request advance acquisition of property.  
• Offer the same relocation services for renters as are provided to owner occupant displacements.  
• Work with COA Housing and Planning department to identify and leverage surplus ROW or funding that could be used to support COA’s “Preference Policy” or other efforts of the Displacement Prevention Division to mitigate for | Pre-Construction |
Table 3.25-3: Proposed Mitigation

<table>
<thead>
<tr>
<th>#</th>
<th>Category</th>
<th>Impact</th>
<th>Mitigation*</th>
<th>Timing/Phase of Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Economic Conditions-</td>
<td>Business displacements and employment loss</td>
<td>TxDOT would facilitate opportunities to promote hiring individuals from the local communities, for general employment and for project construction, such as job fairs, job placement programs, job training, including as-needed assistance from TxDOT’s Disadvantaged Business Enterprise Supportive Service Program. TxDOT would conduct at least two job fairs within the project corridor during the construction phase. TxDOT would provide the facility for the contractor to conduct the job fairs that will provide opportunities for all local residents to learn about the different types of employment that could be available on the construction project and to apply for employment. The job fair would occur prior to the start of construction and would include appropriate outreach to the minority and low-income communities affected by the project, including postings at the Workforce Solutions of the Capital Area, the Texas Workforce Commission, the grocery store.</td>
<td>Pre-Construction/ During Construction</td>
</tr>
</tbody>
</table>

- Gentrification impacts and lack of affordable housing by repurposing surplus ROW or providing financial support.
- TxDOT would oversee the development and implementation of a grant assistance program for community-based groups, government stakeholders, and local institutions to aid in the identification of funding resources, assist in grant writing, grant administration, and provide other technical assistance as necessary.
### Table 3.25-3: Proposed Mitigation

<table>
<thead>
<tr>
<th>#</th>
<th>Category</th>
<th>Impact</th>
<th>Mitigation*</th>
<th>Timing/Phase of Construction</th>
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<tbody>
<tr>
<td></td>
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<td>stores within the project limits, City Hall, and other similar locations.</td>
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<tr>
<td>11</td>
<td>Relocation and Displacements</td>
<td>Group/Program Informational Workshops</td>
<td>Conduct workshops with residential property owners and renters who would be displaced to provide</td>
<td>Ongoing/After construction</td>
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<td></td>
<td></td>
<td></td>
<td>• information: Explaining the acquisition process</td>
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<td></td>
<td></td>
<td></td>
<td>• Explaining the relocation process</td>
<td></td>
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<td></td>
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<td></td>
<td>• Explaining the appraisal process</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>• Title Information and review of documents</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>• Property tax &amp; exemption impacts</td>
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<td></td>
<td></td>
<td></td>
<td>• Moving and move planning</td>
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<td></td>
<td>• First Time Homebuyer seminars</td>
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<td></td>
<td></td>
<td>• Escrow process and title clearing</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>• How to get social services and benefits</td>
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<td></td>
<td></td>
<td></td>
<td>• How to select a real estate agent</td>
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<td></td>
<td></td>
<td></td>
<td>• How to check your credit and improve your score</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>• Household budgeting</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Visual and Aesthetics</td>
<td>Aesthetic improvements along highway.</td>
<td>Through Live35, an aesthetic design program implemented for the proposed project, TxDOT would work with residents and key stakeholders to capture unique details of the history, heritage, and culture of neighborhoods for incorporation into project’s aesthetic elements as well as proposed cultural (Section 106) and community mitigation plans. The first Live35 meetings would</td>
<td>Ongoing/After construction</td>
</tr>
</tbody>
</table>
### Table 3.25-3: Proposed Mitigation

<table>
<thead>
<tr>
<th>#</th>
<th>Category</th>
<th>Impact</th>
<th>Mitigation*</th>
<th>Timing/Phase of Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>Community Impacts - Community Cohesion</td>
<td>EJ Impacts/Community Cohesion/ Construction Impacts</td>
<td>TxDOT would commit $100 million to the implementation of enhanced aesthetic treatments at east-west crossings.</td>
<td>During Construction/Post Construction</td>
</tr>
<tr>
<td>14</td>
<td>Community Cohesion</td>
<td>EJ Impacts/Construction Impacts</td>
<td>TxDOT has included support structures in the design to facilitate the possible installation of deck caps over the proposed I-35 facility by other entities, such as COA, as a separate project. TxDOT would oversee the development and implementation of a grant assistance program for community-based groups, government stakeholders, and local institutions to aid in the identification of funding resources, assist in grant writing, grant administration, and provide other technical assistance as necessary.</td>
<td>Pre-Construction/During Construction</td>
</tr>
</tbody>
</table>

*Proposed mitigation will be subject to change and updated as project development and coordination continues. The most updated version of the proposed project mitigation will be included in the ROD.*
4.0 Public Involvement and Agency Outreach

4.1 Summary of Public Involvement and Agency Outreach Conducted To-Date

TxDOT has worked with community and agency stakeholders to create an engaging public involvement process. The project team has collected feedback regarding the scope, the purpose and need, proposed alternatives, and other information. In addition to required outreach, TxDOT has engaged additional forms of outreach extensively to ensure that key stakeholders were not missed during the COVID-19 pandemic, which began in March 2020. This section provides documentation for all public and agency involvement efforts to date, including public and agency scoping meetings, agency coordination, public meetings, stakeholder meetings, as well as other outreach methods. Each of these activities is discussed below. Chapter 2 contains a project history which includes information about public outreach conducted prior to the NOI.

4.1.1 Notice of Intent

An NOI was published in the Federal Register on Wednesday, August 12, 2020. TxDOT issued this notice to advise the public that an EIS would be prepared for the I-35 Capital Express Central Project on I-35 from US 290 East to SH 71/Ben White Boulevard. In August 2020, letters were sent to federal, state, regional, and local agencies and elected officials with the NOI attached to introduce the I-35 Capital Express Project and solicit input on it.

4.1.2 Agency Coordination Plan

In accordance with 23 USC § 139(g), TxDOT, as lead agency, prepared a coordination plan for the project. This plan established a schedule and process for coordinating public and agency participation and comment during the environmental review process. TxDOT invited the following agencies and Native American tribes to be cooperating or participating agencies:

<table>
<thead>
<tr>
<th>Agency</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Army Corps of Engineers</td>
<td>Cooperating</td>
</tr>
<tr>
<td>U.S. Environmental Protection Agency</td>
<td>Cooperating</td>
</tr>
<tr>
<td>National Park Service</td>
<td>Cooperating</td>
</tr>
<tr>
<td>Texas Parks and Wildlife Department</td>
<td>Participating</td>
</tr>
<tr>
<td>Capital Area Metropolitan Planning Organization</td>
<td>Participating</td>
</tr>
<tr>
<td>Central Texas Regional Mobility Authority</td>
<td>Participating</td>
</tr>
<tr>
<td>Travis County</td>
<td>Participating</td>
</tr>
</tbody>
</table>
### Table 4-1. Cooperating and Participating Agencies

<table>
<thead>
<tr>
<th>Agency</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>City of Austin</td>
<td>Participating</td>
</tr>
<tr>
<td>Capital Metropolitan Transportation Authority</td>
<td>Participating</td>
</tr>
<tr>
<td>University of Texas</td>
<td>Participating</td>
</tr>
<tr>
<td>Federal Transit Administration</td>
<td>Participating</td>
</tr>
<tr>
<td>U.S. Department of Agriculture, Natural Resources Conservation Service</td>
<td>Cooperating</td>
</tr>
<tr>
<td>U.S. Department of Housing and Urban Development</td>
<td>Cooperating</td>
</tr>
<tr>
<td>U.S. Fish and Wildlife Service</td>
<td>Cooperating</td>
</tr>
<tr>
<td>Texas Commission on Environmental Quality</td>
<td>Participating</td>
</tr>
<tr>
<td>Texas Department of Housing and Community Affairs</td>
<td>Participating</td>
</tr>
<tr>
<td>State Historic Preservation Officer/Texas Historical Commission</td>
<td>Participating</td>
</tr>
<tr>
<td>Lower Colorado River Authority</td>
<td>Participating</td>
</tr>
<tr>
<td>Williamson County</td>
<td>Participating</td>
</tr>
<tr>
<td>Hays County</td>
<td>Participating</td>
</tr>
<tr>
<td>Mescalero Apache Tribe</td>
<td>Cooperating</td>
</tr>
<tr>
<td>Apache Tribe of Oklahoma</td>
<td>Cooperating</td>
</tr>
<tr>
<td>Tonkawa Tribe of Indians of Oklahoma</td>
<td>Cooperating</td>
</tr>
<tr>
<td>Kiowa Indian Tribe of Oklahoma</td>
<td>Cooperating</td>
</tr>
<tr>
<td>Comanche Nation of Oklahoma</td>
<td>Cooperating</td>
</tr>
<tr>
<td>Alabama-Coushatta Tribe of Texas</td>
<td>Cooperating</td>
</tr>
<tr>
<td>Seminole Nation of Oklahoma</td>
<td>Cooperating</td>
</tr>
<tr>
<td>Wichita and Affiliated Tribes</td>
<td>Cooperating</td>
</tr>
<tr>
<td>Caddo Nation of Oklahoma</td>
<td>Cooperating</td>
</tr>
</tbody>
</table>
4.1.3 Agency Scoping Meetings

To date, two agency scoping meetings were conducted to share information and ask for comments during the course of the EIS process: November 2020 (Agency Scoping Meeting #1) and March 2021 (Agency Scoping Meeting #2). These meetings served as a forum for disseminating information about the project and for obtaining agency input on the scope of issues to be addressed during the preparation of the DEIS from participating and cooperating agencies.

Agency Scoping Meeting #1

- **Topic:** Virtual Meeting hosted to present and request comments on the coordination plan/schedule; project purpose and need; range of alternatives
- **Date:** November 12, 2020
- **Attendance:** 52 people
- **Comment Period:** November 12 through December 31, 2020
- **Feedback:** 109 comments received (available on MyCapEx.com)

Agency Scoping Meeting #2

- **Topic:** Virtual Meeting hosted to present and request comments on how the alternatives will be analyzed; and revised versions of the coordination plan/schedule, project purpose and need, range of alternatives.
- **Date:** March 11, 2021
- **Attendance:** 55 people
- **Comment Period:** March 11 through April 9, 2021
- **Feedback:** 3 comments received (available on MyCapEx.com)

4.1.4 Public Meetings

To date, two public scoping meetings and one open house/public meeting were conducted to engage the community, share information and ask the community for its comments during the course of the EIS process: November 2020 (Scoping Meeting #1), March 2021 (Scoping Meeting #2), and August 2021 (Public Meeting). This was an open process conducted to identify the major and important issues for consideration during the development of an EIS.

Public Scoping Meeting #1

- **Topic:** Virtual Meeting hosted to present and request comments on the coordination plan/schedule; project purpose and need; range of alternatives
- **Date:** November 12, 2020
4.0 Public Involvement and Agency Outreach

- Notifications: Meeting announcements were published in *The Austin-American Statesman, Community Impact Newspaper, El Mundo* (Spanish), community calendars, Twitter, TxDOT.gov, and My35CapEx.com. Postcards were distributed to approximately 29,700 addresses. Radio announcements were made on six area radio stations (KUT 90.5, BOB FM 103.5, KLBJ 99.7, Majic 95.5, Majic 95.5, KLZT 107.1, and KAZI 88.37). Emails and letters were sent to local, state, and federal elected/public officials including participating and cooperating agencies. E-blasts were sent project mailing list.

- Comment Period: November 12 through December 31, 2020

- Materials: This meeting included a pre-recorded video presentation, maps, drawings, and other project information was available at Mobility35openhouse.com for review.

- Spanish-language contents: The virtual public scoping meeting website contained information in Spanish, including the short video and presentation, which provided information about the project location and proposed project scope, the proposed project purpose and need, the environmental process and timeline, the proposed range of alternatives, and how to provide feedback. Other Spanish-language information available on the website included a project fact sheet and comment form.

- Feedback: TxDOT received 2,285 comments (available on MyCapEx.com). Comment themes included air quality, build alternatives, capacity, climate change, comment period, community engagement, construction impacts, context-sensitive solutions, design speed, direct transit connections, equity, railroad/bicycle/pedestrian crossings, health, homelessness, intersection bypass lane system, impacts, local plans, pedestrian/bicycle improvements, purpose and need, ramping, ROW, roadway elevation, transportation demand management/ITS/connective vehicles, traffic demand, toll alternative, transit operations, trucks, and tunnel. (See Appendix E for comment themes from this meeting.)

### Public Scoping Meeting #2

- Topic: Virtual Meeting hosted to present and request comments on how the alternatives will be analyzed; and revised versions of the coordination plan/schedule, project purpose and need, range of alternatives.

- Date: March 11, 2021

- Notifications: Meeting announcements were published in *The Austin-American Statesman, Community Impact Newspaper, El Mundo* (Spanish), community calendars, Twitter, TxDOT.gov, and My35CapEx.com. Postcards were distributed to approximately 29,700 addresses. Radio announcements were made on six area radio stations (KUT 90.5, BOB FM 103.5, KLBJ 99.7, Majic 95.5, Majic 95.5, KLZT 107.1, and KAZI 88.37). Meeting advertisements were displayed on internal placards in 50 CapMetro buses and on the outside of 3 CapMetro buses. Emails and letters were sent to local, state, and federal elected/public officials including participating and cooperating agencies. E-blasts were sent project mailing list.

- Comment Period: March 11 through April 9, 2021.

- Materials: This meeting was a continuation of the first public scoping meeting, held November through December 2020.
Spanish-language contents: The virtual public scoping meeting website contained information in Spanish, including the video and presentation, which provided information about the project location and proposed project scope, the Alternatives Evaluation Criteria, the revised project purpose and need statement, the environmental process and timeline, the proposed range of alternatives and design options, and how to provide feedback. Other Spanish-language information available on the website included the Alternatives Evaluation Matrix, a project fact sheet, an online comment form, and information about how to provide feedback.

Feedback: TxDOT received 1,427 comments (available on MyCapEx.com). Comment themes included alternative evaluation criteria, aesthetics, build alternatives, community engagement, deck plazas, design speed, history of I-35, homelessness, induced demand, do not build, pedestrian/bicycle connectivity, purpose and need, Light Rail Red Line crossings, ROW, traffic demand modeling, transit operations, trucks, and tunneling. (See Appendix E for comment themes from this meeting.)

Public Meeting

Following the two public scoping meetings, a public meeting was held to present and request comments on the results of the alternatives evaluation, findings from independent study of the community alternatives and proposed build alternative layouts.

Notifications: Meeting announcements were published in The Austin-American Statesman, Community Impact Newspaper, El Mundo (Spanish), community calendars, Twitter, TxDOT.gov, and My35CapEx.com. Postcards were distributed to approximately 45,842 addresses. Radio announcements were made on six area radio stations (KUT 90.5, BOB FM 103.5, KLBJ 99.7, Majic 95.5, Majic 95.5, KLZT 107.1, and KAZI 88.3). Emails and letters were sent to local, state, and federal elected/public officials including participating and cooperating agencies. E-blasts were sent project mailing list.

In-person Public Meeting, hosted by TxDOT, to present and request comments on the results of the alternatives evaluation, findings from independent study of the community alternatives and proposed build alternative layouts.

- Date: August 10, 2021
- Location: Davage-Durden Student Union, Huston-Tillotson University
  900 Chicon Street
  Austin, Texas 78702
- Attendance: 117 attendees

A virtual public meeting was also available for the public to view the meeting materials and comment virtually via My35CapEx.com.

- Date: August 10 through September 24, 2021
- Attendance: 23,466 participants online

Comment Period: August 10 through September 24, 2021
Feedback: TxDOT received 4,426 comments (available on MyCapEx.com). Comment themes included aesthetics, air quality, Build Alternative 1, alternatives too similar, bicycle and pedestrian safety, burying or tunneling, business and residential displacements, do not widen, deck plazas, climate change, community alternatives, crash rates, east-west connectivity, racial justice, induced demand, keeping upper decks, reduced speed limits, lowered lanes, more lanes, Mount Calvary Cemetery, No Build Alternative, public transit, rerouting traffic, rerouting to SH 130, and sound walls/noise barriers. (See Appendix E for comment themes from this meeting).

- Spanish-language contents: The virtual public meeting website as well as the in-person public meeting contained information in Spanish, including a presentation and handouts, which provided information about the project location and proposed project scope, the proposed design, the project purpose and need, the results of the alternatives evaluation process, the environmental process and timeline, comments received, and how that feedback has been incorporated. Other Spanish-language information available on the website included a project fact sheet, an online comment form, and information about how to provide feedback.

4.1.5 Environmental Justice Outreach (including Limited English Proficiency (LEP))

TxDOT is making extensive efforts to conduct outreach to underserved populations (elderly, minority, geographically dispersed/transient populations, LEP, physically and visually impaired, etc.) with the aim of keeping these underserved populations informed and educated about the proposed project and associated impacts and benefits.

The goal is to reach out to these underserved populations and neighborhoods to help them stay included and informed through the I-35 Capital Express Central Project process and they are given ample opportunities to participate in the discussion and planning of the proposed improvements.

An extensive stakeholder list was created to reach underserved populations. The project team uses this stakeholder list to inform underserved communities and to get input on our initial community outreach approach. Prior to implementation of public involvement outreach, the project team met with several community groups and members to ensure these important stakeholders are being reached. One example from this outreach was conducting walking tours with the Active Mobility Working Group from COA. These walking tours helped inform bicycle and pedestrian groups of proposed improvements included in the proposed project, especially on the widened bridges. The Active Mobility Working Group included community members that are considered elderly, physically and visually impaired, and who seek to be representatives for these populations. The project team conducted eight of these walking tours.

One approach to reach underserved and diverse groups is by holding pop-up events in high-traffic areas. Although TxDOT is invited to participate at a number of events, the project team purposely worked with local businesses, non-profit, and government entities to participate specifically at locations where underserved and underrepresented groups gather, shop, and frequent. At pop-up events, tables were set up to provide information about the updated alternatives, gather input and document concerns, and allow underserved populations to talk directly with TxDOT and provide their feedback on the project impacts. In addition, design team members were
available to discuss the project’s aesthetic elements such as proposed shade structures, landscaping, and areas for possible murals or panels. Several of the locations were in Spanish-speaking areas so a translator was on hand to communicate and share this information with the Spanish-speaking community.

- Pop-up Events
  - East Communities YMCA - July 28, 2021
  - South Congress Transit Center - July 30, 2021
  - North Lamar Transit Center – August 2, 2021
  - Rainbow Shops (Capital Plaza) – August 6, 2021
  - Citi Trends (Airport) – March 22, 2022.
  - Goodwill Central Texas, Airport Location – March 24, 2022.
  - Spring Fling at Branch Park Pavilion – April 23, 2022.
  - The Future of Downtown at Waterloo Amphitheater – June 1, 2022.
  - Juneteenth - June 18, 2022.

Coordination efforts were extended to the following groups: Fiesta Market, MT Market (Asian grocery store), Ranch 99 (Asian grocery store), and El Rancho Supermercado.

- Statistics
  - 242 people reached, including many not previously aware of the project.

- Limited English Proficiency Inclusivity

  - To foster communication with Spanish-speaking populations, TxDOT project team provided Spanish translation for materials, invitations and Spanish-speaking staff were present at all virtual and in-person public meetings. We based our outreach on Census data. As Census data is self-reported, an individual’s ability to speak English represents the respondent’s own perception about their ability to speak English. Seven of the 134 block groups included no LEP population. The remaining 127 block groups contained an LEP population between 0.45 percent and 51.7 percent. Of the LEP populations within the Community Study Area, the majority spoke Spanish (15.0 percent), followed by Asian and Pacific languages (0.7 percent), other Indo-European languages (0.5 percent), and other languages (0.3 percent). During the field investigations, signs in Spanish and Asian languages were observed within the Community Study Area confirming the presence of these LEP populations. In addition to the LEP population reflected in the Census data.

  - TxDOT also included the opportunity for requests for translation assistance in public meeting notifications. TxDOT did not receive any requests for interpretation services; however, eight conversations were held in Spanish during pop-up meetings over the last year to provide information and gather feedback about the project. We also provided the multi-language display board at our in-person meetings if there were any participants who attended and did not speak English.
4.1.6 Additional Outreach

4.1.6.1 Website
TxDOT established a website for the I-35 Capital Express Central Project at www.My35CapEx.com. The website provides up-to-date project information, meeting materials, environmental documents, and contact information, among other elements. It also supports digital engagement mechanisms. The project team ensures the website supports the needs of the project. All outreach materials encourage stakeholders to visit the website for more information.

4.1.6.2 Newsletter and Social Media
A database of stakeholders interested in receiving updates about the I-35 Capital Express Central project has been maintained by the project team. The database includes residents, businesses, neighborhood groups, elected officials, professional membership organizations and other stakeholders (Appendix W is a list of stakeholders). The project team builds upon the list of stakeholders by offering meeting and event attendees the option to sign up for updates. Visitors to the www.My35CapEx.com website also can sign up for email updates as well as the quarterly Mobility35 E-Newsletter.

Tweets about upcoming events and opportunities to provide feedback about the I-35 Capital Express Central Project are frequently utilized as part of the social media outreach. These tweets include the day, time, and location of the public meeting. In addition, they include links to the project page. Comments made on social media were not included or evaluated as part of the decision-making process for the DEIS. Twitter is available for and intended to encourage public dialogue about the study and was provided for outreach and informational purposes only.

4.1.6.3 Working Group Meetings
TxDOT created a series of working group meetings called VOICE meetings for the Capital Express Central Project. These meetings provided an opportunity to inform the community of important updates and for community members to give input and ask questions about various topics pertaining to the project. Input from these meetings has assisted TxDOT in refining the alternatives in several meaningful and important directions, including additional at-grade crossings, increased bicycle and pedestrian accommodations, and the development of Modified Build Alternative 3. TxDOT will continue to host VOICE meetings throughout the remainder of this project. TxDOT has hosted seven VOICE meetings since spring of 2021 with membership open to anyone, without limitation. Targeted outreach for the meetings included minority populations, low-income populations, people with LEP, elderly populations, children, and people with disabilities.

Topics addressed during the meetings included: safety for people who walk and bicycle, traffic, construction impacts, mobility justice and racial issues, urban boulevards, communications, and community engagement. Notifications were sent through a mobile-friendly format and provided information about how to access the virtual meeting platform. These notifications included invitations posted on NextDoor, TxDOT Twitter account, e-blasts to community members who signed up to be on the project email distribution list and on the project website.
To date, TxDOT has hosted the following seven VOICE meetings:

- **VOICE #1 – Project Overview.** VOICE Meeting 1 was a presentation about NEPA guidelines along with an overview of the I-35 Capital Express Central Project. Attendees broke into smaller groups to ask questions about the NEPA process and provide input about topics for future VOICE meetings. Feedback from this meeting assisted TxDOT in gauging the community’s interest in and understanding of this important project, and also understanding the topics of importance for the public, specifically air quality, health and equity, noise and noise barriers, and impacts to parklands.
  - Location: Virtual Zoom meeting
  - Date: April 15, 2021
  - Attendance: 126 participants

- **VOICE #2 – Corridor Improvements and Bicycle/Pedestrian Accommodations.** Participants were given a recap of the VOICE #1 meeting along with public feedback about future topics for these meetings. The project team defined the partner agencies along with roles and responsibilities and explained what would be studied as part of the DEIS. Attendees then broke into smaller groups to provide input on bicycle/pedestrian accommodations being considered within the project. Comments from this meeting helped inform the project team of areas of concern for bicyclists and pedestrians; particular crossings that are needed or that need improvement; and features of bicycle/pedestrian facilities such as barriers, lighting, and ADA compliance features.
  - Location: Virtual Zoom meeting
  - Date: May 26, 2021
  - Attendance: 114 participants

- **VOICE #3 – Deck Plaza and Stitch Program.** TxDOT was joined by COA and the DAA to share information with participants about the opportunities for deck plazas and stitches within the project limits. The meeting began with an overview of the feedback heard from participants at the VOICE #2 meeting. A question-and-answer session was provided for participants pertaining to the information shared. Feedback and input from this meeting instructed the project team on areas where the community thinks deck plazas and/or stitches would be most effective. This allowed TxDOT to further coordinate design with COA and the DAA, which would allow for deck plazas and stitches to be funded and constructed by others, and to include the analysis of the support infrastructure and proposed footprint for these areas with the DEIS.
  - Location: Virtual Zoom meeting
  - Date: July 12, 2021
  - Attendance: 96 Public Attendees, 30 Staff Attendees

- **VOICE #4 – Topic: August Public Feedback and ROW Information.** The project team presented feedback received from the August 10, 2021, Public Meeting and the features of the concepts suggested by the community. In addition, TxDOT clarified the design speed and potential displacements within the project limits, and presented information about the acquisition process. The project team also described the aesthetics program for the project, Live35 and reviewed the environmental impacts addressed in the DEIS. Participants were encouraged to participate in a question-and-answer session.
  - Location: Virtual Zoom meeting
4.0 Public Involvement and Agency Outreach

- Date: September 30, 2021
- Attendance: 50 Public Attendees, 28 Staff Attendees

- VOICE #5 – Topic: Aesthetics – Design Elements and Corridor History and Culture. The project team provided attendees with a project overview, next steps, program logistics, and an overview of the cultural and historical elements of the project area along with possible locations for urban design development. Participants then joined smaller breakout sessions to review the possible design elements and provide TxDOT with further input. Comments from this meeting helped the project team understand which cultural and historical elements are important to the community and to verify that they are evaluated according to federal and state requirements in the DEIS.
  - Location: Virtual Zoom meeting
  - Date: December 14, 2021
  - Attendance: 42 Public Attendees

- VOICE #6 – Topic: Changes to Alternatives Based on Community Input. During this hybrid (live-stream online and in-person meeting held simultaneously) meeting, the project team discussed the modified alternatives, which introduced the Modified Build Alternative 3 concept including the proposed boulevard section, project updates, and reviewed community feedback and input to date. The meeting outlined changes to the proposed build alternatives that TxDOT implemented based on community feedback. Information boards were shown at the venue and were also available to online participants. Attendees at both the in-person and virtual meeting were encouraged to ask questions and provide feedback about the information presented. TxDOT selected the Central Austin Public Library for the in-person option, as it is a central location along the corridor, is accessible by transit and COA provided free parking for the event. Feedback from this event was used to further refine Build Alternative 2 and Modified Build Alternative 3 and display and highlight the differences between the two revised alternatives.
  - Hybrid Meeting, in-person with a live stream provided for those that registered.
  - In-person Meeting Location:
    - Austin Central Library
    - 710 W. Cesar Chavez Street
    - Austin, Texas 78701
  - Date: January 25, 2022
  - Attendance: 300 Public Attendees (260 virtual, 40 in-person), 44 Staff Attendees

- VOICE #7 – Topic: Bicycle/Pedestrian Accommodations, Widened Bridges, and SPUI Workshop. This in-person meeting with a virtual component allowed the project team to present information regarding the bicycle/pedestrian accommodations being proposed within the project. In-person participants visited a series of stations with the following topics: Single-Point Interchanges, Enhanced Bridges and SUPs, and Bicycle/Pedestrian Bridges. The attendees were able to draw on maps and schematics. In addition, they were encouraged to write on sticky notes to provide comments on each topic. TxDOT selected Hutson-Tillotson University, a historically Black university, in the heart of Austin, because it allows communities on the east side that are often underserved and underrepresented to attend this event. Comments from this event informed refinement of the alternatives to improve crossing points, neighborhood access, concerns about SUP/sidewalk tunnels and lighting, and separation between bicycle/pedestrian lanes from vehicular traffic.
Neighborhood Meetings: Since the beginning of the EIS, TxDOT has engaged in 36 neighborhood meetings and TxDOT continues to provide outreach and collect feedback about the I-35 Capital Express Central Project to neighborhood associations and gatherings. There were certain neighborhoods TxDOT met with on more than one occasion, and this is indicated in Table 4.2 with an asterisk.

Table 4-2. Neighborhood Meetings

<table>
<thead>
<tr>
<th>Neighborhood Associations</th>
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<tbody>
<tr>
<td>Austin Neighborhoods Council</td>
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<tr>
<td>Mueller Neighborhood Association*</td>
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<tr>
<td>Central Wilshire Neighborhood Association*</td>
</tr>
<tr>
<td>North Loop Neighborhood Association</td>
</tr>
<tr>
<td>Cherrywood Neighborhood Association*</td>
</tr>
<tr>
<td>Organization of Central East Austin Neighborhoods</td>
</tr>
<tr>
<td>Delwood 2 Neighborhood Association</td>
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<tr>
<td>Schieffer Willowbrook Neighborhood Association</td>
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<tr>
<td>East Cesar Chavez Neighborhood Association*</td>
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<tr>
<td>South Austin Neighborhood Association</td>
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<tr>
<td>East Cesar Chavez Neighborhood Plan Contact Team</td>
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<tr>
<td>South River City Citizens Neighborhood Association*</td>
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<tr>
<td>Guadalupe Neighborhood Development Corporation</td>
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<tr>
<td>Southeast Combined Neighborhood Plan Contact Team</td>
</tr>
<tr>
<td>Hancock Neighborhood*</td>
</tr>
<tr>
<td>The North Central I-35 Neighborhood Coalition</td>
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<tr>
<td>Holy Cross Neighborhood Association</td>
</tr>
<tr>
<td>Wells Branch Neighborhood Association</td>
</tr>
<tr>
<td>Mueller Commission*</td>
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<tr>
<td>Windsor Park Neighborhood Association*</td>
</tr>
</tbody>
</table>

Stakeholder Meetings

- Since the beginning of the EIS, TxDOT has engaged in 85 meetings with stakeholder groups such as COA advisory committees including the Bike Advisory Committee, Pedestrian Advisory Committee, Urban Transportation Committee, and the Mobility Committee. TxDOT also met with community organizations with specific interests like People Organizing to Demand Environmental and Economic Justice (PODER), the National Association for the Advancement of Colored People (NAACP), business organizations such as the Austin Chamber of Commerce and minority chambers of commerce, and individual stakeholders with vested interests along the corridor. We also have conducted 42 meetings with property owners whose property or properties may be impacted by the project, or with those who have requested meetings to learn about project updates and provide
input. **Appendix W** is a compiled list of stakeholders that have requested ongoing project updates or have shared contact information with the project team.

- Elected Official Meetings

  - As **Table 4-3** shows, TxDOT has hosted 40 meetings with 2 elected officials to provide details about the I-35 Capital Express Central Project and provide an opportunity for their feedback.

<table>
<thead>
<tr>
<th>Texas State Government</th>
<th>City of Austin</th>
<th>Travis County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Texas State Rep. Celia Israel</td>
<td>Austin City Council Member Ann Kitchen</td>
<td>Travis County Commissioner Brigid Shea</td>
</tr>
<tr>
<td>Texas State Rep. Donna Howard</td>
<td>Austin City Council Member Kathie Tovo’s Office</td>
<td>Travis County Commissioner Jeff Travillion</td>
</tr>
<tr>
<td>Texas State Rep. Gina Hinojosa’s Office</td>
<td>Austin City Council Member Alison Alter</td>
<td>Travis County Commissioner Margaret Gomez</td>
</tr>
<tr>
<td>Texas State Rep. Sheryl Cole</td>
<td>Austin City Council Member Chito Vela</td>
<td>Travis County Judge Andy Brown</td>
</tr>
<tr>
<td>Texas State Rep. Vikki Goodwin</td>
<td>Austin City Council Member Casar and Assistant City Manager Fiandaca</td>
<td></td>
</tr>
<tr>
<td>Texas State Sen. Judith Zaffirini</td>
<td>Austin City Council Member Leslie Pool</td>
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<tr>
<td>Texas State Sen. Sarah Eckhardt</td>
<td>Austin City Council Member Mackenzie Kelly</td>
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<td></td>
<td>Austin City Council Member Natasha Harper-Madison</td>
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<td>Austin City Council Member Paige Ellis</td>
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<td></td>
<td>Austin City Council Member Sabino Renteria</td>
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<td></td>
<td>Austin City Council Member Vanessa Fuentes</td>
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<td></td>
<td>Austin Mayor Steve Adler</td>
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</tr>
</tbody>
</table>

- Cross-Agency Meetings - TxDOT has hosted 11 cross-agency meetings to coordinate with other agencies on their current projects and update those agencies on the I-35 Capital Express Central Project. Agencies included COA Transportation Department, CapMetro, CAMPO, the DAA, UT, FHWA, and the Texas Turnpike Authority.

- TxDOT’s Initiative Against Homelessness - TxDOT has been convening with service providers, agencies, and elected leaders since 2017 as part of the agency’s IAH. The goals of the initiative are to share information
on upcoming construction activities and community resources, to assess specific needs for assisting individuals experiencing homelessness, and to identify possible opportunities for temporary and permanent shelter or housing alternatives. Although this is an overall TxDOT initiative, there are some specific points in which the I-35 Capital Express Central Project team conducted outreach to this underserved population. Section 3.6.4.3.1 has information on Camp Esperanza, a state-sanctioned mitigation measure for the Mobility 35 Program, including the proposed project, to assist those experiencing homelessness, communicate upcoming construction project impacts, assess individuals for needed services, and transition them to more permanent housing.

4.2 Summary of Submitted Alternatives, Information, and Analyses and Major Points of View on Environmental Impacts

During the scoping process for the project, several groups/entities submitted concepts or alternatives for consideration. Table 4-4 lists all alternatives submitted by the public and others during the scoping process and a brief description of each. These alternatives are further described in Chapter 2. Comment themes received on all alternatives can be reviewed in Appendix E.

### Table 4-4. Alternatives Submitted by the Public and Others During Scoping Process

<table>
<thead>
<tr>
<th>Alternative</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reconnect Austin</td>
<td>Proposes to depress the highway and cover with a six-lane boulevard from MLK Jr. Boulevard to Holly Street. The boulevard would reconnect downtown with east Austin and moving the boulevard into the middle of the ROW would reclaim land on the edge of TxDOT ROW, thus allowing for construction of offices, shops, and housing, which, as taxable land, would generate revenue. The alternative proposes that removing high-speed roads from the surface would decrease the number of roadway injuries and fatalities, making walkable new districts safer for pedestrians and other vulnerable road users.</td>
</tr>
<tr>
<td>Rethink35</td>
<td>Proposes to replace the central section of I-35 with a six-lane urban boulevard. Traffic would slow as it approaches the boulevard section and speed up again as it heads north and south of downtown. Cross streets in the downtown area would provide east-west connectivity options and reclaimed ROW would provide new development space and reduce north-south traffic volume and noise levels. The purchase of access rights and available land for development would be similar to those from Reconnect Austin.</td>
</tr>
<tr>
<td>DAA/ULI</td>
<td>Proposes revamping I-35 using a narrower ROW than what TxDOT proposes to depress mainlanes; providing frontage roads overhanging the mainlanes that are designed as low speed urban boulevards (with both travel and parking lanes); and providing caps and stitches along the entire project. Caps are large structural covers that run north to south over the I-35 ROW; and stitches would include travel lanes, widened sidewalks, bicycle lanes and other open space connecting the deck plazas.</td>
</tr>
</tbody>
</table>
Table 4-4. Alternatives Submitted by the Public and Others During Scoping Process

<table>
<thead>
<tr>
<th>Alternative</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Redesignate 130</td>
<td>Rerouting traffic, including trucks, from I-35 to SH 130; tolling I-35; eliminating tolls on SH 130; and redesignating SH 130 as I-35 are all similar concepts that have been proposed by the public and others over time.</td>
</tr>
</tbody>
</table>

In addition to the alternatives in Table 4-4, the TTI’s independent evaluation of the community concepts (described in Table 4-1 and Chapter 2) was also provided to TxDOT during the scoping process. This study provided an objective evaluation of the feasibility of each concept as a standalone alternative, including traffic and cost analyses of each (Appendix T). In response to this report, TxDOT presented the TTI’s findings to the public at the Public Meeting in August 2021, and redesigned Build Alternative 2 and Modified Build Alternative 3 to include aspects and features of the concepts, especially those from the DAA/ULI concept. Chapter 2 provides further details on these modifications.

The public and agencies have also provided suggestions throughout the scoping process including that TxDOT “consider past, present and potential future equity impacts through an equity impact assessment.” In response, TxDOT is conducting additional studies on equity that went above and beyond the normal scope of a traditional CIA. The additional studies focus on transportation equity and access and are included in Section 3.6.12 and Appendix K of the DEIS.

During the scoping process, the public and agencies were given three distinct periods of time to formally comment on the project, including at Scoping Meeting #1 held in November 2020, Scoping Meeting #2 held in March 2021, and at the Public Meeting held in August 2021. Comment themes are included in Appendix E and can also be viewed online at: https://my35capex.com/projects/i-35-capital-express-central/. At the scoping meetings, the public and agencies were able to comment on the project purpose and need, the Agency Coordination Plan and schedule, and the Range of Alternatives report, as well as how the alternatives would be analyzed. Major comments and observations made at these meetings included:

- Include additional design alternatives with deck plazas cross-street amenities, and/or urban boulevard concept;
- Align with local plans;
- Prioritize and measure safety, including safety for people who walk and bicycle as well as vehicles;
- Explore financing options including fee-managed lanes;
- Evaluate impacts to community health and equity;
- Include an analysis of climate change and GHGs;
- Support for and facilitation of enhanced transit operations and connections;
Environmental impacts of the proposed build alternatives were shared at the virtual and in-person public meeting held in August 2021. The TTI's findings on the community concepts, described in Table 4-4, were also shared at the meeting. Major comments made at this meeting included:

- Build Alternatives 2 and 3 are too similar.
- Widening I-35 would displace too many businesses and residences.
- The project would continue to divide east and west Austin and promote systematic racism.
- The project would induce demand and cause more congestion.
- The highway should be covered or buried.
- Concerns over air quality impacts of the proposed build alternatives.
- Concerns over the project's impacts to the climate.
- Concerns that people who walk and bicycle are not safe and do not have access to cross I-35.
- A desire for caps to be built along the project.
- Support for connecting with transit and Project Connect.
- Support for more lanes.
- Support for lowered lanes.
- Support for keeping the upper decks.
- A desire to reroute traffic to SH 130.
- Concern over noise impacts by the build alternatives.
5.0. List of Federal Permits, Licenses, and Other Authorizations Needed for the Preferred Alternative

5.1. Water Resources

The following are federal permits required for water resources within the Preferred Alternative. Section 3.10.1 contains further information on water resources permitting and requirements.

- Section 404 of the CWA permit from USACE
- NWP 58 for Utility Line Activities for Water and Other Substances from USACE
- RGP 8 for Minor Structures from USACE
- NWP 14 for Linear Transportation Projects from USACE

5.2. Protected Lands

The following are authorizations required for protected lands, including Section 4(f) and Section 6(f) resources, within the Preferred Alternative. Section 3.9 contains further information on protected lands and authorization requirements.

- Section 4(f) Individual Evaluation approval by TxDOT. Approval of the Individual Evaluation will be included with the FEIS/ROD.
- Section 6(f) Temporary Non-conforming Use approval by NPS. A temporary non-conforming use form has been submitted to TPWD. It is anticipated that TPWD will coordinate the temporary non-conforming use form for approval by NPS prior to the FEIS/ROD.
- Section 6(f) Permanent Land Use Conversion approval by NPS. Coordination with COA is ongoing. TxDOT and COA have identified a list of potential replacement properties for conversion and are negotiating with landowners to determine the best option for converting the replacement property to parkland. Once formalized, the final approval package will be coordinated through TPWD and ultimately provided by the NPS, following publication of the FEIS/ROD.
6.0. Names and Qualifications of Persons Preparing the EIS or Conducting Independent Evaluation of the EIS

Texas Department of Transportation (TxDOT) – Austin District

- Akila Thamizharasan, P.E., PTOE, PMP, Advance Project Development Director, 30 years’ experience
- Andy Blair, Environmental Program Manager, 15 years’ of experience
- Eric Bennett, P.E., Alternative Delivery Director, 26 years’ of experience
- Heather Ashley-Nguyen P.E., Transportation Planning and Development Director, 22 years’ experience
- Joseph Goessling, P.E., CFM, District Hydraulics Engineer, 13 years’ experience
- Michelle Cooper, P.E., Project Manager, 28 years’ experience
- Mike Arellano, P.E., Deputy District Engineer, 25 years’ experience
- Shirley Nichols, Environmental Supervisor, 32 years’ experience
- Sonya Hernandez, P.G., Environmental Program Manager, 18 years’ experience
- Tommy Abrego, P.E., Mobility35 Program Manager, 12 years’ experience
- Tracy White, Ph.D., Natural Resources SME, 12 years’ of experience
- Tucker Ferguson P.E., District Engineer, 34 years’ experience

TxDOT Environmental Affairs Division

- Doug Booher, Environmental Affairs Division Director, 28 years’ experience
- Dennis Palafox, Natural Resources SME, 40 years’ of experience
- Eric Oksanen, Archeology SME, 26 years’ experience
- Jackie Ploch, Greenhouse Gas and Climate SME, 37 years’ experience
- Lindsey Kimmitt, Environmental Specialist, 17 years’ experience
- Mario Mata, Jr., Water Resources SME, 17 years’ of experience
- Michael Chavez, Environmental Affairs Division Deputy Director, 24 years’ experience
- Michelle Lueck, Section 4(f) SME, 26 years’ of experience
- Nicolle Kord, Indirect and Cumulative Impact SME, 15 years’ experience
- Patrick Lee, Environmental Program Manager, 14 years’ of experience
- Ray Umscheid, Traffic Noise SME, 16 years’ experience
- Rebekah Dobrasko, Cultural Resource Management Section Director, Historic Resources SME, 20 years’ experience
- Spencer Ward, Community Impacts SME, 4 years’ experience
- Terry Dempsey, Hazardous Materials SME, 40 years’ of experience
6.0. Names and Qualifications of Persons Preparing the EIS or Conducting Independent Evaluation of the EIS

1. Tim Wood, Air Quality SME, 11 years’ experience
2. Jacobs Engineering
   - Angela McMurray, AICP, Mobility 35 GEC Environmental Team, 16 years’ experience
   - Mike Lee, P.E., Mobility35 GEC Program Manager, 27 years’ experience
   - Randy Poucket, P.E., Mobility35 GEC Capital Express Central Coordinator, 28 years’ experience
   - Stephanie Messerli, P.E., AICP, Mobility35 GEC Program Manager, 28 years’ experience
   - Tricia Bruck-Hoyt, PMP, AICP, Mobility35 GEC Environmental Lead, 20 years’ experience
3. HDR, Inc.
   - Adam Roberts, Environmental Scientist, 15 years’ experience
   - Adam Yeeles, Ph.D., Social Scientist, 18 years’ experience
   - Bryan Deringer, Roadway CAD Technician, 18 years’ experience
   - Bryan Martin, P.E., CFM, Water Resources Senior Project Manager, 24 years’ experience
   - Bryan Elkan, P.E., Utilities Task Leader, 18 years’ experience
   - Colin Mucci, P.E., Transportation Engineer, 12 years’ experience
   - Daniel Ortiz, P.E., Transportation Engineer, 9 years’ experience
   - Esther Chitsinde, Environmental Planner, 8 years’ experience
   - Freda Agbecha, Transportation EIT, 4 years’ experience
   - Gabriel Villarreal, P.E., Transportation Engineer, 20 years’ experience
   - John McPherson, Environmental Planner, 30+ years’ experience
   - Justin Word, P.E., Transportation Engineer, 25 years’ experience
   - Kristine Lloyd, QC Reviewer, 30 years’ experience
   - Matthew G. Best, P.E., PTOE, Traffic Task Leader, 15 years’ experience
   - Madison Gordey, Environmental Planner, 3 years’ experience
   - Margot Greer, Environmental Planner, 7 years’ experience
   - Phaisarn Cwatanaphol, P.E., Schematic Design Lead, 30 years’ experience
   - Roberto Gutierrez, Transportation EIT, 3 years’ experience
   - Sang Ki Lee, Transportation Engineer, 4 years’ experience
   - Sara Moren, Environmental Scientist, 18 years’ experience
   - Shane Valentine, P.G., Environmental Task Leader, 25 years’ experience
   - Steven Dong, Technical Editor, 20 years’ experience
6.0. Names and Qualifications of Persons Preparing the EIS or Conducting Independent Evaluation of the EIS

1. Terri Asendorf Hyde, Deputy Environmental Task Leader, 17 years’ experience
2. William Brudnick, P.E., Project Manager Schematic and Environmental, 35 years’ experience
3. CP&Y
   - Angela Gillmeister, GISP, GIS Analyst, 10 years’ experience
   - Daniel Wanke, GIS Analyst, 2 years’ experience
   - Darren Dodson, Environmental Planner, 22 years’ experience
   - Jeffrey Rivas, AICP, Environmental Planner, 3 years’ experience
   - John McGlone, GISP, GIS Analyst, 8 years’ experience
   - Leigh Raderschadt, AICP, Environmental Planner, 9 years’ experience
   - Melissa Cross, AWB, Biologist, 6 years’ experience
4. Mead & Hunt
   - Alex Borger, Architectural Historian, 7 years’ experience
   - Dusty Nielsen, Technical Editor, 15 years’ experience
   - Emily Pettis, Senior Architectural Historian, 23 years’ experience
   - Lauren Kelly, Architectural Historian, 1 year experience
   - Mackenzie Machuga, Architectural Historian, 1 year experience
   - Rick Mitchell, AICP, Senior Architectural Historian, 29 years’ experience
5. Rifeline
   - Frances L. Jordan J.D., Public Involvement Lead, 11 years’ experience
   - Lynda Rife, Public Involvement Consultant, 35 years’ experience
   - Melissa Hurst, Public Involvement Consultant, 17 years’ experience
   - Shelley Law, Community Outreach Manager, 4 years’ experience
6. Danielle Skidmore Consulting, PLLC
   - Danielle Skidmore, P.E., Drainage Engineer, 26 years’ experience
7. Stantec
   - Ami Parikh, Transportation Planner, 13 years of experience
   - Ben Janik, GIS Lead, 11 years’ experience
   - Haley Collins, AICP, Transportation Planner, 9 years’ experience
   - Holly Bagot, Environmental Planner, 6 years’ experience
   - L. Ashley McLain, AICP, Senior Planner, 25 years’ experience
1. Larsen Andrews, Environmental Planner, 3 years’ experience
2. Mitchell Ford, Architectural Historian, 1 year experience
3. The Estes Group (TEG)
4. Tony Estes, P.E., Mobility35 GEC Schematic Lead, 16 years’ experience
7.0 References


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——— 1985. Municipal Maintenance Agreement. May be inspected or copied at TxDOT Austin District Office

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Travis County Appraisal District. N.d. www.traviscad.org.


