Range of Alternatives
Final Technical Report

I-35 Capital Express Central Project
I-35 from US 290 East to US 290 West/SH 71

Texas Department of Transportation, Austin District

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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.

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Introduction and Existing Roadway

Interstate Highway 35 (I-35) within Travis County is located in a heavily urbanized corridor that consistently ranks within the Top 3 Most Congested Roadways in Texas. It is currently ranked #1, as measured by Texas Transportation Institute (TTI), and is among roadways with the highest annual congestion costs at more than $200M (TTI 2020). The proposed action, called the I-35 Capital Express Central Project, would construct two managed lanes in each direction along I-35 from US Highway 290 (US 290) East to US 290 West/State Highway (SH) 71 for a total distance of approximately 8 miles, including additional direct connectors at I-35/US 290 East, in Austin, Texas in Travis County.

The existing I-35 roadway from US 290 East to US 290 West/SH 71 is located in an urban area with adjacent commercial, residential, institutional, governmental, and parks/open space properties. Within the proposed project limits, I-35 is an access-controlled interstate highway. 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. 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 are located within the project area in “downtown” Austin, defined as 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 right of way (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.

The "range of alternatives" refers to the alternatives discussed in environmental documents. It includes all reasonable alternatives, which must be rigorously explored and objectively evaluated, as well as those other alternatives, which are eliminated from detailed study with a brief discussion of the reasons for eliminating them (40 Code of Federal Regulations [C.F.R.] §1502.14). Reasonable alternatives are those that are “technically and economically practicable or feasible, and meet the purpose and need for the proposed action” (40 C.F.R. § 1502.14). All reasonable alternatives and a no-build alterative will be evaluated in the Environmental Impact Statement (EIS) for the proposed 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.

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 and pedestrians, emergency responders, and transit.

Project History

Beginning as far back as the 1980s, the Texas Department of Transportation (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 illustrating how the project progressed to where it is today.

2011: The I-35 Corridor Advisory Committee released the My35 Plan. The TxDOT Austin District, in coordination with the City of Austin and other partners, launched the Mobility35 program, also known as the I-35 Capital Area Improvement Program (CAIP), which focuses on improvements to I-35 in Williamson, Travis, and Hays counties.

2013: TxDOT released the I-35 CAIP Corridor Implementation Plan for Travis County, which identified various improvements for I-35, including adding lane capacity.

2013–2014: The Downtown Stakeholder Working Group, composed of local governmental entities and community stakeholders, convened for ten monthly meetings and two data digs to evaluate concepts for I-35 in downtown Austin between MLK Jr. Boulevard and Holly Street. The Working Group considered two concepts for downtown: one that would add one managed lane in each direction of I-35 and elevate the southbound 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. The group strongly recommended the latter option of lowering the mainlanes and voiced support for placing "lids", or "caps", on the mainlanes where feasible (TxDOT 2014).

2014: TxDOT initiated the I-35 Future Transportation Corridor (FTC) Planning and Environmental Linkages Study (PEL) (TxDOT 2014a) which resulted in the concept of adding one tolled managed lane in each direction of I-35 from SH 45 North to SH 45 Southeast. The PEL provided opportunities to bring together transportation planning and environmental considerations early in the planning process, which would be integrated into the National Environmental Policy Act (NEPA) process as the project was developed. The goal of the PEL was to develop a purpose and need, determine lane type/mode choice for the corridor, and determine segments of independent utility for future NEPA studies. Agency and stakeholder meetings were held throughout the study, where representatives from TxDOT, Federal Highway Administration (FHWA), the City of Austin and Capital Area Metropolitan Planning Organization (CAMPO) collaborated on the PEL effort. TxDOT also coordinated with Capital Metro Transportation Authority (CapMetro) to discuss their interests in the I-35 corridor and to get input on potential transit access points. Three rounds of public meetings were held to provide citizens information about the

study's progress and to solicit input about the purpose and need, the range of alternatives, recommended lane type alternatives, and segments of independent utility for the FTC.

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 managed high occupancy vehicle (HOV) lanes, and tolled managed through lanes. Of those, the tolled managed lane alternatives (except for the "managed freight-only" and "managed through lane" alternatives) best met the purpose and need — specifically, "to create a more dependable and consistent route for transit, emergency responders, and other motorists." The general purpose lane alternative did not meet the purpose and need because it would not provide more reliable travel times due to the overloaded system utilizing the added capacity. In addition, transit and emergency vehicles would not be able to rely on the corridor as a consistent route for emergency response. The second, detailed analysis, concluded that a managed lane FTC would increase average speeds through the corridor while providing an improved level of service compared to the other alternatives. The study then 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 and were the best alternatives to move forward for further NEPA analysis, along with the no-build. From here, it was determined HOV managed lanes were the next best alternative to meet the Purpose and Need.

2014–2015: TxDOT hosted five Decks Neighborhood Workshops for the I-35 "decks area", defined as from Airport Boulevard to MLK Jr. Boulevard, and to discuss the addition of one managed lane in each direction. Representatives from multiple neighborhoods, the University of Texas (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.

2016–2017: Following the recommendations presented in the PEL to move forward with adding managed lanes in each direction, TxDOT hosted open house meetings and virtual open houses for the three projects in the study area, which extended from FM 1431 to SH 45SE. The projects at that time were called North16 (from RM 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. TxDOT hosted a public open house on Sept. 20, 2016 for the I-35 Central7 project where the public considered two alternatives: a managed lane build alternative (one tolled managed lane in each direction along I-35), which included direct transit access to the managed lanes with two design options in downtown Austin and a no-build alternative. The two design options within downtown Austin were: (1) elevate the southbound 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. Feedback themes included connectivity and ease of movement along and across I-35, preference for lowered option, concern about traffic noise, support for tolled managed lanes, and support for integrating the CapMetro rail/transit line into project design.

As studies have progressed on I-35 between US 290 East and US 290 West/SH 71, TxDOT identified a need for more than one managed lane in each direction. Further study revealed that 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. Therefore, two managed lanes in each direction are currently being considered in the EIS process.

January 2020: 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 personnel, Mobility35 General Engineering Consultant staff, representatives from the City of Austin Transportation Department, Central Texas Regional Mobility Authority, CapMetro, CAMPO, FHWA, UT Austin, and Downtown Austin Alliance. The access-controlled frontage road system, a design option currently being studied, resulted from this collaboration.

April 2020: In early 2020, the I-35 Capital Express Central Project was partially funded with a $560 million allocation of the estimated $4.9 billion construction cost. On April 30, 2020, the Texas Transportation Commission approved an amendment to the 2020 Unified Transportation Program (UTP), a 10-year plan to guide transportation project development, that allocated an additional $3.4 billion of funding to the I-35 Capital Express Central Project. In April 2020, the CAMPO Transportation Policy Board approved reallocating $633 million in funding to the I-35 Capital Express Central Project. The remaining $307 million was allocated to the project in the 2021 UTP. This project is currently fully funded in the UTP ($4.9 billion). Tolling is not currently a funding option and tolled lanes are not currently under consideration (TxDOT 2021).

Range of Alternatives

Possible build alternatives for the I-35 Capital Express Central Project include three alternatives, which start with the above assumptions, including: adding two non-tolled managed lanes in each direction, removing the upper decks on I-35 (between Airport Boulevard and MLK Jr. Boulevard), and lowering I-35 through downtown (between MLK Jr. Boulevard and Holly Street). Moreover, because we are now in a non-tolled environment under the 2021 UTP, the current project is considering HOV, two or more (2+) occupants, which meets the eligibility requirement for this project. Each 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 of one managed lane to/from US 290 and one managed lane to/from I-35 to the north. The first alternative would construct lowered mainlanes and tunneled managed lanes between Airport Boulevard and MLK Jr. Boulevard, and between Riverside Drive and Oltorf Street. 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 at the same level as mainlanes. The second build alternative would construct lowered mainlanes and lowered managed lanes between Airport Boulevard and Cesar Chavez Street, and between Riverside Drive and Oltorf Street. The third alternative would be similar to Alternative 2, but

with managed lanes that overpass Airport Boulevard, at approximately the same elevation as the existing upper decks, and at Woodland Avenue, at the same elevation as the existing mainlanes. All build alternatives would include: removing the upper deck in each direction from Airport Boulevard to Martin Luther King Jr. Boulevard; reconstructing the bridge across Lady Bird Lake; improving bicycle and pedestrian paths; accommodating current and future CapMetro routes; on-site and off-site drainage facilities. All the build alternatives are being evaluated for their ability to accommodate locally funded enhancements, which could include deck plazas or caps. Potential design options currently being considered for all build alternatives include: a downtown bypass system; an access-controlled frontage road system; local enhancements including a downtown boulevard concept; and direct transit access at Riverside Drive and Dean Keaton Street. Table 1 below describes the alternatives.

Although it does not meet the need and purpose of the project, the no-build alternative is still an option and will be carried forward, through the EIS as a baseline for comparison. At the end of the EIS process, if the no-build alternative is the selected alternative, I-35 within the project limits, from US 290 East to US 290 West/SH 71, would continue to exist as it does today and would continue to receive standard, routine maintenance. By 2045, I-35 traffic within the project limits is expected to reach 303,700 vehicles per day, an increase of approximately 47 percent over 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, if the no-build alternative is selected, the proposed bicycle/pedestrian facilities would not be constructed.

Table 1. Range of Alternatives

Alternative	Description
No Build	Standard, routine maintenance
Build 1 Managed Lanes Tunnel Section	Two tunneled managed lanes* and lowered mainlanes in each direction with additional flyovers at I-35 and US 290 East. *Tunnel = two levels below frontage roads and cross streets and one level below mainlanes* ** Only northbound managed lanes tunneled through downtown*
Build 2 Managed Lanes Lowered Section	Two lowered managed lanes and lowered mainlanes in each direction with additional flyovers at I-35 and US 290 East. *Lowered = one level below frontage roads and cross streets and same level as mainlanes*
Build 3 Managed Lanes Lowered Section, Modified at Airport Boulevard and Woodland Avenue.	Two lowered managed lanes and lowered mainlanes in each direction with additional flyovers at I-35 and US 290 East. Managed lane overpasses at Airport Boulevard and Woodland Avenue.

Evaluation of Alternatives

The draft alternatives evaluation criteria will be used to compare the alternatives (Build Alternatives and the No Build Alternative) ability to meet the project purpose and need; high-level engineering criteria such as constructability, right of way needs, complexity of utility relocation and preliminary project costs; and an evaluation of environmental resources. The results of this alternatives evaluation will be presented in an open house later in 2021. After this evaluation, reasonable alternatives will be identified for further evaluation to be carried forward in the Draft Environmental Impact Statement. In the Draft Environmental Impact Statement, further evaluation will be conducted involving a detailed analysis of each Build Alternative as compared to the No Build Alternative. The preferred alternative, including the environmental analyses of project alternatives, will be presented to the public at the Public Hearing.

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