

1. INTRODUCTION

The Texas Department of Transportation (TxDOT) and the Central Texas Regional Mobility Authority (Mobility Authority) are proposing improvements to U.S. Highway 290 (US 290)/State Highway 71 (SH 71) West through Oak Hill (the Oak Hill Parkway, or the OHP Project). The project corridor extends along US 290 from State Loop 1 (Loop 1 or MoPac) to west of Ranch-to-Market (RM) 1826 for a distance of approximately 6.15 miles, which includes a transition to the west of Circle Drive. The project also includes the interchange on SH 71 from US 290 to Silvermine Drive, a distance of approximately 1.31 miles. Bicycle and pedestrian facilities would be provided via a shared-use path and/or sidewalks along the entire project length. Two upstream detention ponds and a number of water quality treatment ponds are proposed within the OHP Project corridor. The proposed project corridor is within the City of Austin (COA), Travis County, Texas.

TxDOT and the Mobility Authority are serving as joint lead agencies (state and local agencies, respectively). The metropolitan planning organization for the region is the Capital Area Metropolitan Planning Organization (CAMPO).

The proposed project is included in the CAMPO 2040 Regional Transportation Plan (RTP) as a principal arterial/tolled facility with non-tolled frontage roads. The CAMPO 2040 RTP was locally adopted by the Transportation Policy Board on May 11, 2015. The facility is also included in CAMPO's fiscal year (FY) 2017–2020 Transportation Improvement Program (TIP) as an added capacity, tolled facility with frontage roads. (The TIP with amendments was adopted on July 6, 2016.) However, with TxDOT's and the Mobility Authority's decision to move forward with non-tolled mainlanes in March 2018, TxDOT is coordinating with CAMPO to update their 2040 plan. Environmental studies, traffic and revenue studies, and final engineering for the proposed project are listed in the FY 2017–2020 *Statewide Transportation Improvement Program (STIP)*, which was approved by the Federal Highway Administration (FHWA) on December 19, 2016.

In compliance with the National Environmental Policy Act (NEPA), TxDOT and the Mobility Authority are conducting an environmental study to examine the potential impacts to the social and natural environment. In addition to evaluating the potential environmental effects, TxDOT and the Mobility Authority are committed to studying transportation needs of the public in reaching a decision that is in the best overall public interest. The NEPA project development process is an approach to balanced transportation decision-making that takes into account the potential impacts on the human and natural environment and the public's need for safe and efficient transportation; this process is documented through the completion of an environmental impact statement (EIS).

The analyses included in the OHP Project DEIS represent a comprehensive evaluation of potential project-related effects on a broad range of resources. In order to ensure that these analyses were focused and relevant, the project team identified a spatially consistent "project area," which covered the physical footprint of existing and proposed right-of-way, shared-use

paths, detention ponds, and construction easements. For several resource categories, a broader “study area” was developed to support individual analyses that required a more comprehensive or wider-ranging discussion. Additionally, the OHP DEIS references a number of technical reports that provide resource-specific analyses including detailed technical data, field survey findings, and relevant background information. These technical reports are used to support information and conclusions contained in the DEIS. As the DEIS summarizes the most up-to-date analyses for each resource area, the findings in this document supersede any discrepancies that may exist between what is presented in the DEIS and what was previously analyzed in the technical report. Prior to the release of the FEIS, the air and noise technical reports will be revised to reflect the change in traffic data which may occur due to TxDOT’s and the Mobility Authority’s decision to move forward with non-tolled mainlanes.

1.1 Logical Termini and Independent Utility

Federal regulations require that federally funded transportation projects have logical termini (23 Code of Federal Regulations [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 termini of the proposed project are MoPac to RM 1826 with a transition to Circle Drive and SH 71 from US 290 to Silvermine Drive. MoPac is a major crossroad in southwest Austin, and therefore is a logical eastern endpoint for the project. RM 1826 serves as a major traffic generator along US 290 due to the proximity of the Seton Southwest Hospital and Austin Community College (ACC): Pinnacle Campus, and therefore is the logical western endpoint. However, in order to accommodate the required transition from a freeway to a non-freeway facility along US 290, the transition from RM 1826 to Circle Drive was included in the project design. Similarly, Silvermine Drive serves as the northern logical endpoint along SH 71 due to the distance required for transition of direct connectors originating from US 290 east of the intersection of US 290 and SH 71, locally known as the “Y.”

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 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. The proposed OHP Project would provide functioning roadways with the ability to provide efficient and effective transportation without further construction at any of the roadway termini. The OHP Project’s purpose and need is discussed in detail below (see **Section 2.0**).

Additionally, 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. Constructing the proposed project between these termini would result in a useable transportation improvement and a reasonable expenditure of public funds even if no additional roadway improvements are constructed in the area. The project would stand alone, be independently

functional, and serve a substantial public purpose by itself. In addition, it would not predetermine locations and types of future transportation improvements or force future sections of projects or alignments. Therefore, the project has both logical termini and independent utility, and because the project stands alone, it cannot and does not irretrievably commit federal funds.

1.2 Project History

US 290 and SH 71 through Oak Hill act as a gateway to the Hill Country and serve as a key route to Austin for the residents of Oak Hill, Lakeway, Bee Cave, Dripping Springs, and other growing communities. US 290 extends from Interstate Highway (IH) 10 near Junction to IH 610 in Houston, and SH 71 extends from US 87 near Brady to SH 35 near Blessing. The proposed improvements were originally considered in a final environmental impact statement (FEIS) covering improvements to US 290/SH 71 from RM 1826 to Farm-to-Market Road (FM) 973. A Record of Decision (ROD) was issued by the FHWA on August 22, 1988. The mid-section of the original project limits, between Joe Tanner Lane and Riverside Drive, has been constructed. Since the issuance of the ROD, changes in adjacent land use, state and federal listing of the Barton Springs salamander as endangered, changes in funding mechanisms, and public input have resulted in substantial changes and a new proposed design concept.

The original FEIS has been reevaluated four times. Environmental and traffic-related studies and reports, as well as public involvement activities have continued since the issuance of the ROD. A brief project history for US 290/SH 71 West follows.

August 22, 1988—ROD signed.

May 12, 1992—Reevaluation of the 1988 FEIS was conducted focusing on Brodie Lane to South Congress Avenue.

June 24, 1995—Reevaluation of the 1988 FEIS was conducted focusing on Williamson Creek to Brodie Lane and from South Congress Avenue to Woodward Street.

May 18, 1999—Reevaluation of the 1988 FEIS was conducted focusing on the IH 35/US 290/SH 71 interchange.

March 6, 2002—Reevaluation of the 1988 FEIS was conducted focusing on Burluson Road to Riverside Drive.

July 12, 2004—The CAMPO approved amendments to their 2030 regional transportation plan. Under the CAMPO amendments, the portion of the US 290/SH 71 project from west of RM 1826 to east of Williamson Creek would be tolled.

June and July 2005—TxDOT conducted neighborhood open houses where a final “TxDOT Design” for US 290/SH 71 from RM 1826 to east of Williamson Creek was presented. Public input on the project during these meetings resulted in several design changes to better serve the citizens of the COA and the traveling public.

November 16, 2005—Save Our Springs Alliance, Save Barton Creek Association, South Windmill Run Neighborhood Association, Austin Group of Sierra Club, and the Texas Public Interest Research Group jointly requested in a letter to TxDOT and FHWA that a full EIS be completed for the US 290/SH 71 West project that included the TxDOT design as well as a design that was created by individuals involved in these groups.

April 18, 2006—Fix290 (a community alliance), Oak Hill Association of Neighborhoods (OHAN), and Oak Hill Business and Professional Association (OHBPA), with assistance from the COA, created a context sensitive design (CSD)—Proposed Highway Plan for the Oak Hill "Y" following principles of context sensitive solutions (CSS) as described by FHWA. This CSS proposal presented a parkway design concept for US 290 through the "Y" in Oak Hill.

March and April 2006—TxDOT conducted meetings with project stakeholders including Fix290 and affiliates.

May 2006—TxDOT conducted CSD open house meetings.

April–July 2007—Four groups (OHAN, OHBPA, Fix290 and Consensus 290) drafted a letter to TxDOT dated April 4, 2007, indicating their commitment to “convening a summit involving stakeholder groups to comment on and develop a community response” to different design options being prepared by TxDOT. The Center for Public Policy Dispute Resolution at the University of Texas School of Law provided facilitation services for the Highway 290W design process. A total of seven facilitated meetings were conducted. No consensus was reached during the mediation.

November 30, 2007—In a letter to TxDOT, FHWA determined that a supplemental EIS (SEIS) would be the most appropriate document to prepare for the US 290/SH 71 West project, as opposed to a reevaluation of the 1988 FEIS.

August 13, 2008—A Notice of Intent (NOI) was published in the *Texas Register* announcing TxDOT’s intent to prepare a limited-scope SEIS for US 290/SH 71 West through Oak Hill.

August 15, 2008—An NOI was published in the *Federal Register* announcing TxDOT’s intent to prepare a limited-scope SEIS for US 290/SH 71 West through Oak Hill.

July 9, 2012—Due to the changes in adjacent land use, state and federal listing of the Barton Springs salamander as endangered, changes in funding mechanisms, and public input that resulted in changes to the proposed design concept, it was determined that a limited scope SEIS was no longer the correct document to produce. Therefore, a new EIS would be completed to evaluate potential impacts from the proposed improvements to US 290/SH 71 West. A rescission of the 2008 NOI to prepare a limited-scope SEIS for US 290/SH 71 West through Oak Hill, was published in the *Federal Register*.

July 20, 2012—A rescission of the 2008 NOI to prepare a limited-scope SEIS for US 290/SH 71 West through Oak Hill was published in the *Texas Register*.

October 9, 2012—An NOI was published in the *Federal Register* announcing TxDOT’s intent to prepare a new EIS for US 290/SH 71 West through Oak Hill.

October 19, 2012—An NOI was published in the *Texas Register* announcing TxDOT’s intent to prepare a new EIS for US 290/SH 71 West through Oak Hill.

November 15, 2012—The first public scoping meeting was held at Clint Small Jr. Middle School to introduce the project and solicit public comments.

March 2018 – TxDOT and the Mobility Authority decided to proceed with non-tolled mainlanes. TxDOT is currently coordinating with CAMPO to modify their 2040 plan and revise the OHP DEIS to reflect this current decision.

1.3 Description of the Oak Hill Parkway Corridor

The proposed project corridor includes approximately 6.15 miles along US 290 (from MoPac to west of RM 1826) and an approximately 1.31-mile interchange along SH 71 (from US 290 to Silvermine Drive) as shown on **Figure 1-1**. The project would primarily serve commuters and residents of southwest Austin, Oak Hill, southwestern Travis County, northern Hays County, and Dripping Springs traveling to and from the COA. The proposed project would also benefit regional and statewide users of the facility.

On US 290 between MoPac and Circle Drive there are a variety of land uses. Major components include a Target shopping center, At Home, Clint Small Jr. Middle School, West Creek subdivision, Legend Oaks subdivision, multi-family residential housing, Seton Southwest Hospital and Medical Center, ACC—Pinnacle Campus, H-E-B and Oak Hill Plaza shopping centers, and NXP Semiconductors Corporate Headquarters. Many other smaller strip retail centers, businesses, and smaller residential neighborhoods are also adjacent to the project corridor. SH 71 serves as a primary access point for residents of southwest Austin to the cities of Bee Cave, Lakeway, Marble Falls, and beyond. Recreational destinations accessed from SH 71 include the Hill Country Galleria, the Backyard at Bee Cave, and access to Lake Travis. Development has increased in the Dripping Springs community and areas along US 290 west of the project corridor. Several master-planned communities have been developed along US 290 west of the project corridor including Belterra, Highpointe, Ledge Stone, and Sawyer Ranch.

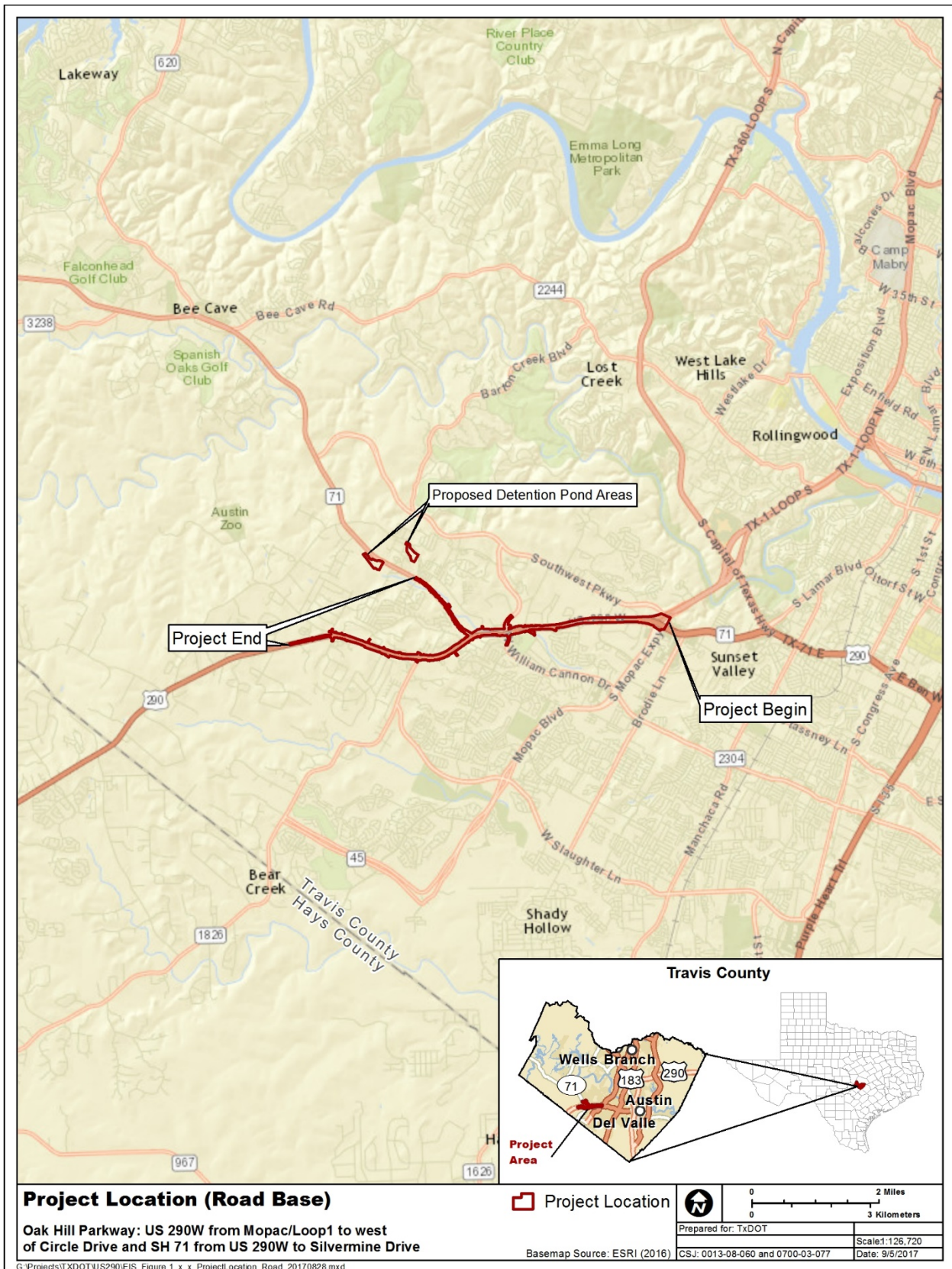


Figure 1-1. Project location (road base).

1.4 Existing Facility

1.4.1 US 290 from MoPac to Circle Drive

The existing facility is comprised of several functional classifications of roadways. SH 71 from the northwest and US 290 from the west converge at a junction, locally known as the “Y,” and continue concurrently to MoPac and further east. US 290/SH 71 from just west of Old Fredericksburg Road to MoPac is a six-lane urban freeway section (three lanes in each direction) with four- to eight-lane frontage roads (two to four lanes in each direction). There are direct connector ramps connecting US 290/SH 71 mainlanes to the MoPac mainlanes. The mainlanes are 12 feet wide with 10-foot-wide shoulders. The frontage road lane widths vary from 12 to 14 feet wide.

The US 290/SH 71 mainlanes between Old Fredericksburg Road and MoPac are grade separated at intersections with the frontage roads at Monterey Oaks Boulevard and Old Fredericksburg Road. The right-of-way width varies from approximately 300 to 400 feet. The mainlanes are posted at 65 miles per hour (mph) and the frontage roads are 45 mph. The 2015 annual average daily traffic (AADT) in this section varied from 68,000 vehicles per day (vpd) near Old Fredericksburg Road to almost 87,000 vpd just west of the connections to MoPac. There are traffic signals at the frontage road intersections with Monterey Oaks Boulevard and Old Fredericksburg Road along with pedestrian and bicycle facilities consisting of curb ramps and crosswalks at those intersections. Sidewalks are intermittent along the frontage roads. Drainage is provided by a curb-and-gutter storm sewer system.

Between Old Fredericksburg Road and Joe Tanner Lane, US 290/SH 71 transitions from the freeway/frontage road facility to a four- and five-lane urban highway with a mix of curb-and-gutter and roadside ditch drainage features. The lanes are 11 to 12 feet wide with an intermittent 12-foot-wide center left-turn lane. The overall pavement width is 52 to 70 feet and the median width varies from 12 to 40 feet. The right-of-way width varies from approximately 300 to 450 feet. This urban section continues to just east of the SH 71 junction and includes signalized intersections at Joe Tanner Lane and William Cannon Drive. Existing pedestrian and bicycle facilities consist of curb ramps, crosswalks, and pedestrian signals at William Cannon Drive. The posted speed limit is 55 mph and the 2015 AADT was just over 63,000 vpd. Drainage is provided by a curb-and-gutter storm sewer system and roadside ditches and culverts.

Between SH 71 and RM 1826, the existing US 290 roadway consists of four 12-foot-wide lanes with turn lanes and 2-foot-wide shoulders. The overall pavement width varies from 52 to 70 feet and the median width varies from 0 to 22 feet. The right-of-way width varies from approximately 370 to 420 feet and the posted speed limit is 55 mph. The 2015 AADT was approximately 43,500 vpd. Existing pedestrian and bicycle facilities consist of curb ramps, crosswalks, and pedestrian signals at RM 1826 and Convict Hill Road. There are traffic signals at the intersections with SH 71, Convict Hill Road, and RM 1826. Drainage is provided by a combination of roadside ditches and culverts.

West of RM 1826, the existing US 290 transitions to a four-lane roadway consisting of 11-foot-wide lanes, variable median widths, and shoulders ranging from 1 to 3 feet wide. At present, TxDOT has initiated roadway improvements between Circle Drive and El Rey Boulevard. The proposed design for this section of roadway would add a continuous 12-foot-wide center turn lane and 5-foot-wide paved shoulders for approximately 0.97 miles along US 290.

1.4.2 SH 71 from US 290 to Silvermine Drive

The existing SH 71 facility is a four-lane rural highway section with one signalized intersection and left-turn lanes at the access to shopping centers on both sides of SH 71. Lane widths are 12 feet with 2- to 4-foot-wide shoulders. There is a center 12-foot-wide turn lane from the shopping center drive to just north of Scenic Brook Drive. The right-of-way width varies from approximately 150 to 300 feet. Currently, there are no pedestrian or bicycle facilities. The 2015 AADT was approximately 29,000 vpd and the posted speed limit is 55 mph. Drainage is provided by roadside ditches and culverts.

1.4.3 Interim Intersection Improvements

The COA, Travis County, and TxDOT have constructed improvements to US 290/SH 71 in Oak Hill that are intended to provide traffic relief within the area for 7 to 10 years until a long-term solution can be found. Construction of these improvements was completed in 2015; the following paragraphs describe the interim intersection improvements that have been constructed along the corridor.

From west of RM 1826 to west of SH 71, traditional intersection improvements (dual left-turn and right-turn lanes) were constructed on US 290 at Convict Hill, the ACC Driveway, the Speedy Stop, Oak Hill United Methodist Church, and RM 1826. These improvements consisted of widening the outer lanes; adding curb and gutter; and adding signal, signing, striping, and drainage improvements. In this area between west of RM 1826 and west of SH 71, there are between five and seven lanes from 12 to 14 feet wide plus 8-foot-wide shoulders. The overall pavement width varies from 78 feet to 100 feet. Bicycle and pedestrian facilities include curb ramps, pedestrian signals, crosswalks, wide shoulders to serve as bicycle lanes through intersections, and sidewalks on RM 1826 and Convict Hill Road.

From west of SH 71 to Joe Tanner Lane, innovative improvements called continuous flow intersections (CFI) were constructed in 2015 on US 290 at William Cannon and SH 71; a median U-turn at Joe Tanner Lane was also constructed. The CFI was constructed in one direction at SH 71 and in two directions at William Cannon Drive. The travel lanes in this area vary between 11 feet and 14 feet wide depending on use with shoulders that vary from 1 foot to 10 feet. While the number of traffic signals increased in association with the CFIs, the amount of green light time for mainlane vehicle traffic also increased. The increased green light time for mainlane traffic allows the through traffic in both directions to move through the signals for longer periods of time, making the intersection more efficient. Sidewalks along US



290 at William Cannon Drive and SH 71 provide pedestrian accommodations, and designated bicycle lanes have been provided through the CFIs for bicyclists.