



I-820 (East)

Project Description

Fort Worth District

Reconstruct Southern I-820/SH 121 Interchange

I-820 from approximately 2,000 feet north of Pipeline Road/Glenview Drive to approximately 3,200 feet south of Randol Mill Road

SH 121 from I-820 to approximately 5,000 feet west of Handley-Ederville Road

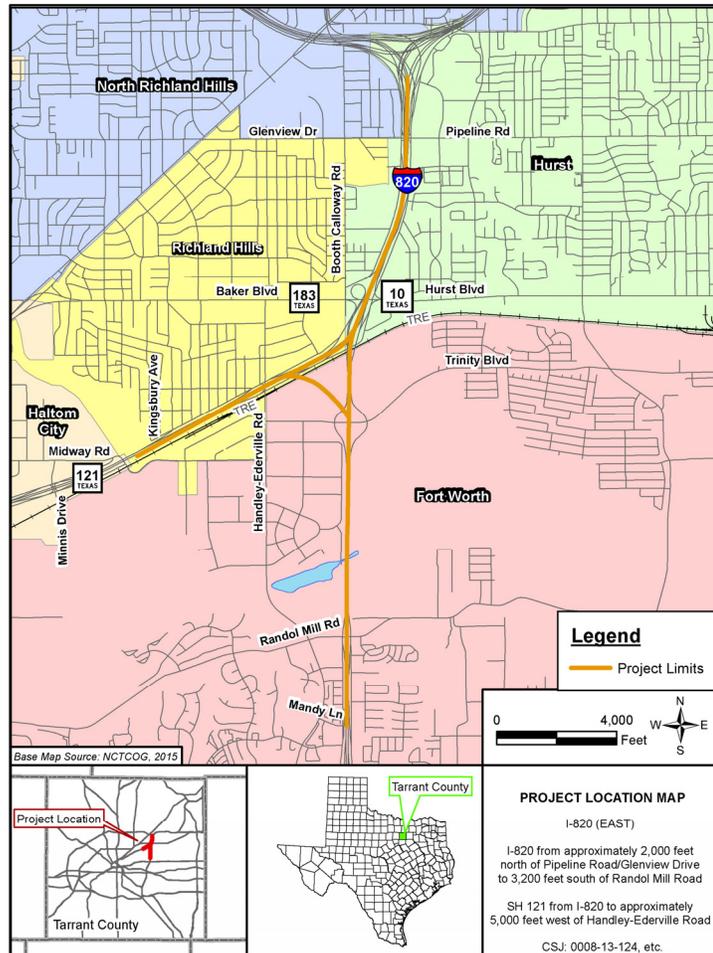
Main CSJ: 0008-13-124

Associated CSJs: 0008-13- 179, 202, 210, 221, 235, 236 & 237 and 0363-03-051 & 054

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 December 16, 2014, and executed by FHWA and TxDOT

Project Description

The Texas Department of Transportation (TxDOT) is proposing to reconstruct Interstate Highway 820 (I-820) and State Highway (SH) 121 interchange in northern Tarrant County. The proposed actions would take place within the cities of North Richland Hills, Richland Hills, Hurst, and Fort Worth. The proposed project would reconstruct I-820 from approximately 2,000 feet north of Pipeline Road (Rd)/Glenview Drive (Dr), at the northern I-820/SH 121/SH 183 interchange, to approximately 3,200 feet south of Randol Mill Rd. Additionally, SH 121 would be reconstructed from the southern I-820/SH 121 interchange to approximately 5,000 feet west of Handley-Ederville Rd. These improvements would also include the addition of connections providing direct access between SH 121 with I-820 and SH 121 with Trinity Boulevard (Blvd).



Need and Purpose

The Cities of Hurst, Richland Hills, North Richland Hills, and Fort Worth have experienced steady growth and expansion. This growth is accompanied by increased population density in Tarrant County, as well as substantial increases in motor vehicle numbers utilizing present transportation facilities.

The increased population density in Tarrant County has steadily occurred over the past several decades and regional and community growth trends in the project vicinity are expected to continue. Traffic volumes continue to increase as a result of area growth. Traffic is particularly congested because the capacity of the existing IH 820 facility is being exceeded by the current travel demand and because of the proximity of the existing interchanges. In addition, intersection congestion is occurring at critical signalized locations with high delays and extensive queuing.

The proposed project would provide infrastructure to reduce traffic congestion on existing roadways; to provide a safer, more convenient route for traveling through the area; and to increase mobility and provide access (including improved emergency service access) to area. It would also provide a multitude of functions, which are consistent with adopted area-wide goals, policies, and objectives relating to a comprehensive development plan.

As population and land use changes have occurred, the access needs of drivers to enter and exit IH 820/SH121 have also changed. In addition to adding frontage roads to some segments of the existing facility, ramps would be added or removed, and braided ramps would be used in some locations to provide improved access to IH 820 and SH 121.

Project History

The I-820 project, initiated in 1992, began with the analysis of three Build Alternatives. A Public Meeting was held in 1993 to present the three alternatives to the public. Comments were made regarding access, entrance and exit ramps, and widening alternative roadways. In 2000, TxDOT held meetings with Fort Worth, Hurst, Richland Hills, North Richland Hills, and the Fort Worth Transportation Authority (The T) to provide an update on the progress of the project and receive comments. All comments presented at the Public Meeting and subsequent meetings were analysed and included in the design, when feasible.

Of the three original alternatives, Alternative 3, which was revised to include components of Alternatives 1 and 2, became the Preferred Alternative. This alternative included reconstruction of the south interchange with SH 121, widening and upgrading the highway to an eight to ten-lane facility with auxiliary lanes, continuous frontage roads, and a reversible high occupancy vehicle (HOV) lane from the north interchange at SH 121 to Trinity Boulevard. This Preferred Alternative was presented to the public through a Public Hearing and the project received a Finding of No Significant Impact (FONSI) on March 18, 2004. Design changes, changes in federal and state rules and regulations since the FONSI was issued, and continued growth, development, and redevelopment, has resulted in the need for reevaluation of the FONSI EA findings.

During the reevaluation process, it was determined that a new environmental decision was needed as a result of the extension of the project limits combined with the amount of time that had passed since the from the 2004 FONSI. On August 2, 2017, the proposed project was reclassified as a categorical exclusion (CE) and a CE determination is being pursued.

Prominent Design Changes

Since March 2004, regional requirements have changed and it was determined the project's design required revision before the facility could be funded and constructed. The proposed

project became Segment 4 of the Comprehensive Development Agreement (CDA) for North Tarrant Express, Segments 2 - 4. As part of the CDA, the developer prepared a Master Development Plan including a revised preliminary layout based upon the 2004 design, updated regional requirements, and region's Metropolitan Transportation Plan (MTP). The CDA for Segment 4 was terminated November 2012.

TxDOT executed a consultant services contract in October 2012 to revise the preliminary design and perform the environmental review. This study has prepared an updated project layout through revising the previous work prepared through the CDA and incorporating public comments from two additional public meetings. The notable project design changes from the 2004 design would include the following:

- Expanding the project limits
 - The project limits in the 2004 FONSI were described as I-820 from North Interchange at SH 121 to Randol Mill Road in Tarrant County. The revised project limits are described as I-820 from approximately 2,000 feet north of Pipeline Road (Rd)/Glenview Drive (Dr), at the northern I -820/SH 121/SH 183 interchange, to approximately 3,200 feet south of Randol Mill Rd. Additionally, SH 121 would be reconstructed from the southern I-820/SH 121 interchange to approximately 5,000 feet west of Handley-Ederville Rd.
- Converting the one-lane reversible HOV facility to two managed toll lanes (one lane in each direction) along I-820 from Trinity Boulevard to the north SH 121 interchange and SH 121 from I-820 to Handley-Ederville Road. These managed lanes would connect to the managed toll lanes in the North Tarrant Express system.
- Removing the proposed Trinity Freeway and direct connections to/from I-820 and SH 121 to the proposed Trinity Freeway.
 - The Trinity Freeway was removed from the region's MTP in June 2007.
- Adding direct connections to/from SH 121 and Trinity Boulevard.
- Including bicycle/pedestrian accommodations
 - There would be a 14-foot wide shared use lane for cyclists along the frontage roads and 6-foot sidewalks for pedestrians within the entire length of the project.
 - Sidewalks would be replaced where they are impacted and there would be a 6-foot wide graded area provided for sidewalks or future sidewalks.
- Decreasing the amount of proposed ROW required.
 - Re-designing and engineering determined that only 23 acres of ROW would be needed for the revised project. Therefore, 36 acres of the 59 acres of new ROW

identified in the 2004 FONSI would not be needed. The large reduction in ROW would be due to the previously proposed Trinity Freeway and connections being removed from the MTP and project design.

- The three displacements identified in the FONSI EA would no longer occur. However, three new displacements would occur:
 - Commercial property (for lease office building) at 227 NE Loop 820, Hurst, TX 76053
 - Amino Transport (office building) at 223 NE Loop 820, Hurst, TX 76053
 - Physicians Open Stand-Up MRI (office building) at 121 NE Loop 820, Hurst, TX 76053: building and parking lot displacement.

Proposed Design

The portion of I-820 to be reconstructed is described in two segments. The northern segment extends from the northern I-820/SH 121/SH 183 interchange south to Trinity Blvd. The existing freeway along this segment includes up to four northbound and five southbound general purpose lanes with discontinuous frontage roads varying from two to three lanes in each direction. The proposed project would reconstruct this segment to include up to five northbound and six southbound general purpose lanes, in addition to auxiliary lanes. The proposed project would also include one managed toll lane in each direction and continuous frontage roads that would vary from one to three lanes in each direction along this segment.

The southern segment extends between Trinity Blvd to Randol Mill Rd. The existing freeway along this segment includes two general purpose lanes in each direction. The proposed project would reconstruct this segment to include five general purpose lanes each direction.

The existing freeway of SH 121, from I-820 to Handley-Ederville Rd, varies from two to three general purpose lanes each direction and includes continuous frontage roads consisting of two lanes in each direction. The proposed project would reconstruct this segment of SH 121 to include three general purpose lanes in each direction, one managed toll lane in each direction and continuous frontage roads varying from one to three lanes in each direction.