

Federal Highway Administration  
FINDING OF NO SIGNIFICANT IMPACT  
Interstate Highway 45 and Loop 197 Direct Connector  
Galveston County, Texas

**Introduction**

The Federal Highway Administration (FHWA) has determined, in accordance with 23 CFR §771.119 and § 771.121, that the IH 45/Loop 197 direct connector project will not have a significant impact on the human or natural environment. This Finding of No Significant Impact (FONSI) for the preferred alternative is based on the March 2008 IH 45/Loop 197 Environmental Assessment (EA). The EA was approved by FHWA for public involvement on November 28, 2008. The Public Hearing Summary and Analysis and Comment and Response Report (which includes responses to public comments) have been prepared by the Texas Department of Transportation (TxDOT) and have been incorporated into the project.

The March EA and the Public Hearing Summary and Analysis and Comment and Response report have been independently evaluated by the FHWA and determined to adequately and accurately discuss the need, purpose, alternatives, environmental issues, and impacts of the proposed IH 45/Loop 197 project and appropriate mitigation measures. These documents provide sufficient evidence and analysis to determine that an Environmental Impact Statement (EIS) is not required. Finally, these documents are incorporated by reference into this decisional document.

**Project Background**

The existing IH45/LP 197 interchange does not provide a direct connection between IH 45 and LP 197. Currently, commuters traveling along IH 45 must take the State Highway (SH) 146 exit and travel a short distance along SH 146 before reaching a three-way stop. From this stoplight, commuters may turn right onto LP 197 or continue northward onto SH 146 or SH 3. The proposed project would construct a direct connector from IH 45 to LP 197, a distance of approximately 0.91 mile.

The needs for the project, or reasons for the project, are identified in the EA:

1. Inefficient transitioning of traffic at the existing IH 45/LP 197 interchange; interchange is currently below design standards.
2. Traffic congestion and delays due to the at-grade railroad crossing near the intersection of LP 197 and SH 146.
3. Future truck traffic resulting from the development of the Shoal Point Terminal Facility.
4. Current intersection of IH 45/ LP 197 is located within the 100-year floodplain.

The purposes of the project, or solutions to the needs, are identified in the EA:

1. To improve existing and future congestion of predicted traffic by constructing continuous non-stop connector ramps from IH 45 to LP 197, and to improve inefficient geometry of the existing IH 45/LP 197 interchange by meeting current design standards.
2. To avoid congestion and delays at the at-grade railroad crossing near the intersection of LP 197 and SH 146.
3. To provide alternate routes for the increased truck traffic created by the Shoal Point Terminal Facility.
4. To provide an alternate connecting route between IH 45 and LP 197, which is not subject to flooding.

The IH 45/LP 197 project was developed in accordance with the National Environmental Policy Act (NEPA) of 1969, Council on Environmental Quality (CEQ) Regulation for Implementing the Procedural Provisions of the NEPA (40 CFR 1500-1508), FHWA Environmental Impact and Related Procedures (23 CFR Part 771), and Public Involvement Rules (43 TAC Chapter 2), and other related federal and state requirements.

### **Review of the EA**

TxDOT completed the EA in March 2008. The EA considered and analyzed the potential social, economic, and environmental impacts related to proposed improvements for the IH 45/LP 197 interchange. Specifically, the EA studied potential impacts associated with four project alternatives – the No-Build Alternative, Build Alternative 1, Build Alternative 2, and Build Alternative 3.

The potential impacts studied include direct, indirect, and cumulative impacts of the project. Direct effects are defined by the CEQ regulations (40 CFR § 1508) as being “caused by the action and occur at the same time and place.” Indirect effects are defined as effects that are “caused by an action and occur later in time or farther removed in distance, but are still reasonably foreseeable,” and 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 ecosystem.” Cumulative impacts are the incremental impacts that the project’s direct or indirect effects have on a resource in the context of the myriad of other past, present, and future effects on that resource from unrelated activities.

In order to further understand the complexity of selecting a preferred alternative for this project, it is important to understand that the MOTCO, Inc. superfund site is located in the northwest quadrant of the IH 45/LP 197 interchange within the project limits. The MOTCO, Inc. site was developed in 1958 to recycle styrene tars. Recycling was discontinued in 1961 and the pits at the site were used to dispose of industrial petro-chemical wastes. The site was listed on the National Priorities List (NPL) on September 8, 1983. According to Environmental Protection Agency (EPA) records (EPA ID: TXD980629851 / Site ID: 0602673), contamination had migrated 300 feet off the property and was present to a depth of 100 feet. Remediation efforts began in 1985, and construction of a slurry wall occurred between 1995 and 1997. The slurry wall was built to isolate constituents of concern and prevent underground migration of these pollutants to soil and groundwater outside of the contaminated area. The site is currently monitored by the EPA. Subsurface construction within the slurry wall might compromise the integrity of the confining

layers for the MOTCO constituents of concern, necessitating further remediation efforts; therefore, alternatives were carefully developed to avoid impacts to this site.

During the alternatives analysis process described in detail in the EA, four preliminary alternatives were studied in detail to determine whether any of them met the stated need for and purpose of the project. The four preliminary alternatives studied in detail include the No-Build Alternative and three Build Alternatives. As discussed below, TxDOT has recommended approval of Build Alternative 3 as the Preferred Alternative.

The No-Build Alternative would not improve the IH 45/LP 197 intersection. Only routine maintenance would occur within this area. The geometry of the intersection would not be improved and it would remain within the 100-year floodplain.

Build Alternative 1 utilizes existing TxDOT right-of-way (ROW) for the majority of its alignment and would therefore result in minimal impacts to wetlands. Alternative 1 would construct the direct connector at-grade requiring subsurface construction inside the MOTCO superfund site slurry wall, which, as discussed above, might compromise the integrity of containment. Additionally, Alternative 1 has an unfavorable alignment for heavy truck traffic traveling to and from the City of Texas City port facilities.

Build Alternative 2 avoids direct impacts to the MOTCO superfund site slurry wall and is elevated to minimize wetland impacts (approximately 0.87 acre permanently impacted), but does not have the most suitable geometry for accommodating heavy truck traffic at highway speeds. Alternative 2 is shifted to the south of Alternative 3 (described below), where the distance between the IH 45 mainlanes and the LP 197 mainlanes requires a smaller transition curve radius in the direct connector. Heavy trucks would have to downshift, decelerate, accelerate, and merge with (posted) 65 mph interstate and highway traffic on the mainlanes. This alternative is physically closer to the neighborhoods of Omega Bay, Bayou Vista, La Marque, and Hitchcock, and the geometry of this alternative creates transitioning of truck traffic which would increase noise levels in these neighborhoods.

Build Alternative 3 utilizes a portion of the existing LP 197 ROW, minimizes environmental impacts by avoiding the entire MOTCO superfund site, uses an elevated section to minimize impacts to wetlands (approximately 0.87 acre permanently impacted), meets current safety and operational standards, and improves driving conditions on a designated hurricane evacuation route. Alternative 3 provides suitable geometry for heavy truck traffic to maintain speed within the flat curve radius, thus facilitating a smooth merge and transition to the IH 45 mainlanes. The geometry would reduce elevated noise levels that result from downshifting, braking, and acceleration of heavy trucks, minimizing impacts to the communities of Omega Bay, Bayou Vista, La Marque, and Hitchcock.

As noted above, the EA examined the direct, indirect, and cumulative impacts of the project, which identified potential impacts of special concern to include: (a) MOTCO, Inc. Superfund Site, (b) Virginia Point Wildlife Preservation, and (c) protection of endangered species. The EA concluded:

1. Build Alternative 3 is the recommended Preferred Alternative for the IH 45/LP 197 project.
2. Build Alternative 3 meets the need for and purpose of the project with the least amount of impacts to the resource areas.
3. The proposed project would have no significant impacts to the quality of the human or natural environment.
4. TxDOT recommended a FONSI for the IH 45/LP 197 project.

TxDOT's recommendation for the selection of Build Alternative 3 resulted from a process that involved the public and close coordination with various federal, state, and local government agencies.

### **Public Involvement**

Public involvement is an integral and critical component of the NEPA project development process. A comprehensive public involvement plan was developed to incorporate all the different types of stakeholders and their needs, from safety to mobility to environmental concerns. The public involvement team for this IH 45/LP 197 project included representatives from the TxDOT Houston District, TxDOT Environmental Affairs Division and the consulting firms of PBS&J and S&B Infrastructure, LTD. The process also included consultation with and the participation and involvement of FHWA.

#### *Public Meeting and Public Hearing*

A public meeting was held on March 31, 2004 to gather public input on the design alternatives for the proposed direct connector. Invitations were sent via letter to residents, property owners, interested citizens, businesses, special interest groups, and federal, state, county, and city elected officials. In addition, public meeting notices were published in the Houston Chronicle and the Texas City Sun. A total of 12 elected officials and 131 citizens attended the public meeting.

A public hearing was held on May 27, 2009. Invitations were sent via letter to residents, property owners, interested citizens, businesses, special interest groups, and federal, state, county, and city elected officials. The public hearing notices were published in both english and spanish in the Houston Chronicle, the Galveston Daily News (the Texas City Sun and the Galveston Daily News merged in November 2004), and La Voz. The hearing included an open house format with exhibits available for public viewing from 6:00 pm to 7:00 pm. The formal presentation began at 7:00 pm, followed by a public comment period. A transcript of the public hearing, as well as responses to comments that were received as a result of the hearing, are documented under separate cover.

#### *Media Coordination*

Website postings regarding the project on the TxDOT Houston District website included meeting notices and meeting summary reports. Copies of the Environmental Assessment were made available to the public at the TxDOT Galveston Area Office and the TxDOT Houston District Office.

### *Changes Made to the IH 45/LP 197 design as a Result of Public Input*

As a result of close coordination with resource agencies and the community, TxDOT was able to identify and address community needs and concerns throughout the project development process. The following is a summary of public issues and the corresponding actions taken by TxDOT.

- *Concerns regarding noise levels:* Build Alternative 3 is located further north than the other alternatives considered; therefore, this alternative would move traffic noise further away from the neighborhoods of Omega Bay, Bayou Vista, La Marque, and Hitchcock. Additionally, the geometry of Alternative 3 creates smoother transitioning of truck traffic, thus reducing the noise associated with downshifting and braking. These factors would reduce noise levels to those neighborhoods. Based on findings of the traffic noise analysis, implementation of Alternative 3 would not result in substantial noise impacts.
- *Concerns regarding wetlands impacts:* Build Alternative 3 was developed as an elevated section; therefore permanent wetland impacts would be minimized.
- *Concerns regarding drainage in the Bayou Vista subdivision:* Since Build Alternative 3 was designed as an elevated section, impacts to the 100-year floodplain are minimized. Additionally, any unavoidable impacts to the floodplain would be mitigated for as directed by the Galveston County Floodplain Administrator.
- *Concerns regarding highway lighting interfering with wildlife:* TxDOT will evaluate the need for illumination, and if warrants are met, will then evaluate the need for shielding to control roadway illumination.
- *Concerns regarding impacts to the Virginia Point Peninsula Preserve (VPPP):* TxDOT personnel have met with the representatives of Scenic Galveston (owners of the VPPP) throughout the project development process. Build Alternative 3 would not require any ROW from the VPPP, and access to the property would remain unchanged. Due to the existing roadways and railroads in the area, the proposed work is not expected to fragment or otherwise alter any existing wildlife habitats within the project limits. The elevated roadway would also offer wildlife access beneath the structure without having to cross lanes of traffic.

### **Mitigation/Commitments**

A majority of the potential impacts associated with the construction of the recommended selected alternative (Build Alternative 3) were avoided or minimized as documented in the EA. The design and construction of the LP 197 direct connector will incorporate measures to minimize harm to the environment, as described below.

Proper stabilization techniques will be employed during construction to control erosion and sedimentation. These techniques will be accomplished according to Best Management Practices (BMPs) that will be outlined in the Storm Water Pollution Prevention Plan (SW3P), which is developed during the design phase.

A Texas Pollutant Discharge Elimination System (TPDES) permit will be required and its conditions and requirements will be followed to address erosion/sedimentation/pollution

concerns during the construction and operation phases. In accordance with Texas Commission on Environmental Quality (TCEQ) regulations, a Notice of Intent (NOI) will be filed and a SW3P will be implemented for the construction site.

Noise associated with the construction of the project is difficult to predict, however construction normally occurs during daylight hours when occasional loud noises are more tolerable. Provisions would 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. Impacts upon air quality during construction will be temporary. Measures to control dust would be considered and incorporated into the final design and construction specification.

The loss of wetlands and jurisdictional waters has been minimized to the greatest extent possible. Appropriate Section 404 permits will be obtained prior to construction.

No recorded archeological resources with National Register of Historic Places or State Archeological Landmark status were identified as being impacted by the recommended alternative for selection. Cultural resource surveys conducted by qualified archeologists located no cultural resource sites, and no artifacts were collected or curated. The lack of cultural resources within the project area is likely due to the high degree of modern disturbance. The Texas Historical Commission concurred that no further work was required on March 10, 2005.

Approximately 11 acres of additional ROW will be necessary for the project; however, displacement of homes and businesses would not be required. The purchase of all ROW will be done in accordance with the Procedures of Purchase of ROW and the provisions of the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended.

### **Monitoring or Enforcement**

All commitments and conditions of approval stated in the EA will be monitored by TxDOT and other appropriate state, federal, and local agencies to ensure compliance.

### **FHWA Decision**

FHWA has reviewed all of the relevant documents and materials and all of the previous environmental studies and findings. Based upon our own independent review and analysis we find that the March 2008 IH 45/LP 197 EA analyzed and considered all the relevant potential environmental impacts and issues. FHWA concurs with the findings made in the EA in that: (1) Build Alternative 3 is the recommended alternative for the IH 45/LP 197 project, (2) Build Alternative 3 best meets the need for and purpose of the project with the least amount of impacts to the resource areas, (3) the proposed project would have no significant impacts on the quality of the human or natural environment under NEPA.

Based upon our own agency review and consideration of the analysis and evaluation contained in the EA for this project, and after further careful consideration of all social, economic, and environmental factors, including input from the public involvement process, FHWA hereby

approves the issuance of a Finding of No Significant Impact for the IH 45/LP 197 direct connector project. FHWA further approves Build Alternative 3 as the recommended alternative for selection as the proposed action for this project. The selected alternative would best fulfill the need for and purpose of the project, and meets the goals identified for the IH 45/LP 197 intersection. This proposed project is included in the Metropolitan Transportation Plan's 2035 Regional Transportation Plan.

As to project mitigation, TxDOT is hereby required to ensure completion of all mitigation outlined above and set out specifically in the March 2008 IH 45/LP 197 project EA. TxDOT is also required to ensure that any and all local, state, or federal permit requirements and conditions are met and that the project is within compliance.

Brett M. Jackson, P.E.  
For  
Federal Highway Administration

5/10/2010  
Date