Chapter 4: Recommendation of the Preferred Alternative

This section explains how the Preferred Alternative meets the transportation objectives and fulfills the purpose and need for the project as presented in **Chapter 1**. It explains how the Preferred Alternative protects, enhances, and uses relevant resources and presents the mitigation measures (including avoidance, minimization, compensation and monitoring) that are part of the Preferred Alternative.

A. IDENTIFICATION AND RATIONALE FOR THE PREFERRED ALTERNATIVE

A.1. Preferred Alternative

The Build Alternative is the Preferred Alternative. It includes the widening and reconstruction of IH 30 and IH 35E and construction of HOV/M lanes, C-D roads, and frontage roads. The Build Alternative:

Maximizes traffic capacity by
- Including a continuous and reversible HOV/M lane system;
- Adding one general purpose travel lane in each direction in some areas;
- Meeting design standards for freeway lanes and shoulder widths;
- Eliminating left-hand merges and diverges;
- Eliminating forced lane changes to stay on same freeway and providing lane continuity;
- Including direct connections in all directions within the IH 30/IH 35E interchange;
- Eliminating the severe freeway weaving area between Spur 366 and DNT;
- Providing continuous frontage roads along IH 30 and IH 35E;
- Eliminating the current C-D roads adjacent to the Canyon main lanes;
- Simplifying the South Central Expressway interchange with IH 30;
- Providing HOV/M lane access at Commerce Street and Medical/Market Center; and
- Providing for ITS.

Minimizes the need for additional right-of-way by
- Including a continuous and reversible HOV/M lane system;
- Adding one general purpose travel lane in each direction in some areas;
- Eliminating the current C-D roads adjacent to the Canyon main lanes;
- Elevating the C-D roadway over the frontage roads;
- Cantilevering the frontage roads;
- Simplifying the South Central Expressway interchange with IH 30; and
- Including strategies described under the No-Build Alternative.

Improves operations and safety by
- Including a continuous and reversible HOV/M lane system;
- Adding one general purpose travel lane in each direction in some areas;
- Meeting current design standards for freeway lanes and shoulder widths;
- Meeting current design standards for horizontal and vertical alignments;
- Eliminating left-hand merges and diverges;
- Eliminating forced lane changes to stay on same freeway and providing lane continuity;
- Eliminating inside merges on main lanes;
- Eliminating the severe freeway weaving area between Spur 366 and DNT;
- Providing continuous surface frontage roads along IH 30 and IH 35E;

- Eliminating the current C-D roads adjacent to the Canyon main lanes;
- Simplifying the South Central Expressway interchange with IH 30; and
- Providing for ITS.

Improves traffic detouring around incident sites by
- Adding one general purpose travel lane in each direction in some areas;
- Meeting design standards for freeway lanes and shoulder widths;
- Including direct connections in all directions within the IH 30/IH 35E interchange;
- Providing continuous frontage roads along IH 30 and IH 35E; and
- Providing for ITS.

Improves potential interregional connections by
- Including a continuous and reversible HOV/M lane system;
- Eliminating forced lane changes to stay on same freeway and provides lane continuity;
- Eliminating the severe freeway weaving area between Spur 366 and DNT;
- Providing two-lane connections to and from the DNT;
- Including direct connections in all directions within the IH 30/IH 35E interchange;
- Providing HOV/M lane access to downtown Dallas at South Central and Commerce Street and the Medical/Market Center area;
- Providing a pedestrian underpass south of Hi Line to access the DART LRT Victory station;
- Providing for future connection to and from the Spur 366 extension and the Trinity Parkway; and
- Providing for ITS.

Enhances access by
- Including a continuous and reversible HOV/M lane system;
- Including direct connections in all directions within the IH 30/IH 35E interchange;
- Providing continuous frontage roads along IH 30 and IH 35E;
- Eliminating the current C-D roads adjacent to the Canyon main lanes;
- Providing HOV/M lane access to downtown Dallas at South Central and Commerce Street and the Medical Market Center area;
- Providing a pedestrian underpass south of Hi Line to access the DART LRT Victory station;
- Allowing adequate horizontal and vertical clearance for bicycle and pedestrian crossings;
- Providing 10 foot sidewalks on freeway cross-streets; and
- Providing 14 foot outside lane widths at city cross-streets over/under the freeway to accommodate bicycles.

Decreases traffic congestion by
- Including a continuous and reversible HOV/M lane system;
- Adding one general purpose travel lane in each direction in some areas;
- Meeting design standards for freeway lanes and shoulder widths;
- Eliminating left-hand merges and diverges;
- Eliminating forced lane changes to stay on same freeway and provides lane continuity;
- Eliminating inside merges on main lanes;
- Including direct connections in all directions in the IH 30/IH 35E interchange;
- Eliminating the severe freeway weaving area between Spur 366 and DNT;
- Providing continuous frontage roads along IH 30 and IH 35E;
- Providing HOV/M lane access to downtown Dallas at South Central and Commerce Street and Medical/Market Center area; and
- Providing for ITS.

Enhances ETR programs by
- Including a continuous and reversible HOV/M lane system;
- Providing HOV/M lane access to downtown Dallas at South Central and Commerce Street and the Medical/Market Center area;
- Providing a pedestrian underpass south of Hi Line to access the DART LRT Victory station;
- Allowing adequate horizontal and vertical clearance for bicycle and pedestrian crossings;
- Providing 10 foot sidewalks on freeway cross-streets;
- Providing 14 foot outside lane widths at city cross-streets over/under the freeway to accommodate bicycles;
- Providing for ITS; and
- Including strategies described under the No-Build Alternative.

Enhances bicycle and pedestrian crossings by
- Provides continuous frontage roads along IH 30 and IH 35E;
- Allowing adequate horizontal and vertical clearance for bicycle and pedestrian crossings;
- Providing a pedestrian underpass south of Hi Line to access the DART LRT Victory station;
- Providing 10 foot sidewalks on freeway cross-streets;
- Providing 14 foot outside lane widths at city cross-streets over/under the freeway to accommodate bicycles; and
- Including strategies described under the No-Build Alternative.

Integrates urban design elements by
- Incorporating aesthetic elements, landscaping and urban design treatments;
- Providing a pedestrian underpass south of Hi Line to access the DART LRT Victory station;
- Allowing adequate horizontal and vertical clearance for bicycle and pedestrian crossings; and
- Providing 10 foot sidewalks on freeway cross-streets.

Is technically and financially feasible by
- Including all of the elements previously mentioned; and
- Being included in NCTCOG's financially-constrained MTP.

The Preferred Alternative addresses the primary purposes of the project, which are to improve safety and traffic operations and reduce traffic congestion along IH 30, IH 35E, and the interchange of IH 30 and IH 35E near downtown Dallas.

A.2. Support Rationale
The Preferred Alternative succeeds in minimizing the need for additional right-of-way. By accomplishing this and other project objectives, the Preferred Alternative is able to avoid or minimize adverse effects on all relevant project issues and resources, including land use, parkland, historic preservation, air quality, noise, access, and jurisdictional waters. There are no unresolved environmental issues.

A.3. Mitigation and Monitoring Commitments
Table 4.1 provides a list and brief explanation of the mitigation measures that are part of the Preferred Alternative.

Table 4.1 Mitigation and Monitoring Commitments

Project Issues and Resources	Type of Impact	Mitigation and Monitoring Commitments
Relevant Issues and Resources		
Land Use	Displacement and Relocation of Households and Businesses	Any household or business that would be relocated or displaced would be eligible for assistance under the requirements of the Federal Uniform Relocation Act.
Parkland	0.7 Acres of Land Required from Stemmons Park	Potential commitments include construction and landscaping of a portion of the city's proposed hike-and-bike trail and trailhead facilities (underneath the freeway within the state's right-of-way and through Stemmons Park), and/or acquisition of a vacant parcel of land immediately south of Stemmons Park to provide additional parkland. Mitigation would also include payment of fair market value based on an independent fee appraisal. Other options include the possibility of offering surplus right-of-way adjacent to Old City Park or the Farmers Market to the City of Dallas as part of the consideration for taking land from Stemmons Park.
Historic Resources	No new right-of-way would be required from the boundaries of any NRHP or NRHP-eligible properties.	TxDOT will rehabilitate the Houston Street viaduct pursuant to the 1996 Section 106 mitigation agreement with THC.
Air Quality	None. Local concentrations of CO are not expected to exceed national standards at any time.	The project is subject to a regional air quality analysis. The NCTCOG is responsible for the conformity analysis in the Dallas-Fort Worth area.
Noise	Traffic noise levels would exceed the FHWA Noise Abatement Criteria.	None of the noise abatement measures are both feasible and reasonable; therefore, no abatement measures are proposed for this project.
Access	Entrance and Exit Ramp Modifications, Some Driveway Closures	All properties located along the freeways and currently having access to and from the freeways would continue to have access after the proposed improvements are constructed.
Wetlands and Waters of the U.S.	Approximately 16 acres could potentially be impacted	All impacts to waters of the U.S. would be permitted through the USACE, which may require mitigation for some or all of the impacts. Mitigation, typically at a 1:1 ratio, would be accomplished either on-site and in-kind, off-site, or through an alternative method (e.g., in-lieu-fee or payment to a mitigation bank) or a combination of these strategies. The specific acreage and location and type of mitigation would be developed during the permitting process with the USACE. All Section 404 permitting would be coordinated with the Regulatory Branch, Fort Worth District of the USACE. The TCEQ issues Section 401 water quality certifications for projects prior to approval of the Section 404 permit from the USACE. Section 401 of the CWA requires states to certify that a proposed CWA Section 404 permit would not violate water quality standards. The design and construction of the proposed improvements must include construction and post-construction Best Management Practices (BMPs) to manage stormwater runoff and control sediments.

Table 4.1 Mitigation and Monitoring Commitments
- Continued -

Project Issues and Resources	Type of Impact	Mitigation and Monitoring Commitments
Other Issues and Resources		
Environmental Justice	None	Continue to seek the meaningful involvement of low-income and minority communities in project development activities.
Pedestrians and Bicycles	Beneficial	Design plans for the Preferred Alternative would allow for adequate clearances needed to accommodate City of Dallas hike-and-bike trail crossings.
Joint Development	Beneficial	Design plans for the Preferred Alternative would take into account the potential for project enhancements by City of Dallas/others such as constructing decks over the IH 30 Canyon area and "signature" bridges for IH 30 and IH 35E crossings of the Trinity River.
Water Quality	Stormwater Runoff from Construction	The water quality of wetlands and waters in the State shall be maintained in accordance with all applicable provisions of the Texas Surface Water Quality Standards including the General, Narrative and Numerical Criteria. BMPs will be implemented in accordance with the Storm Water Pollution Prevention Plan (SW3P).
Storm Water	Stormwater Runoff from Construction	The construction contractor would take appropriate measures to prevent, minimize and control the spill of fuels, lubricants, and hazardous materials in the construction staging area. BMPs will be implemented in accordance with the SW3P.
Texas Pollutant Discharge Elimination System	No Long-Term Water Quality Impacts	TxDOT would be required to comply with TCEQ - Texas Pollutant Discharge Elimination System General Permit for Construction Activity. The project would disturb more than one acre; therefore, a Notice of Intent would be filed to comply with TCEQ stating that TxDOT would have a SW3P in place during construction of the proposed project. The project would also disturb more than five acres, thus requiring a Large Construction Permit.
Floodplains	None	Reconstruction of the IH 30 and IH 35E bridges over the Trinity River would be designed to ensure compliance with USACE flood protection requirements. A USCG determination regarding bridge lighting is still pending.
Archeological Resources	Accidental Disturbance of Buried Cultural Deposits during Construction	TxDOT would avoid the Houston Street Viaduct and conduct monitoring near Site 41DL377 during construction activities. Monitoring for historic archeological deposits would also be conducted at specific areas along the bluff edges and in the IH 30 Canyon area where the use of extensive fill materials has hidden and sealed early in place historic deposits. The type and amount of work required would be coordinated by TxDOT with the SHPO in compliance with Section 106 of the National Historic Preservation Act, and under TxDOT's MOU with the THC. Should evidence of archeological deposits be encountered during construction, work in the immediate area would cease and TxDOT archeological staff would be contacted to initiate accidental discovery procedures under the provisions of the MOU.

Table 4.1 Mitigation and Monitoring Commitments
- Continued -

Project Issues and Resources	Type of Impact	Mitigation and Monitoring Commitments
Aesthetic Quality	Beneficial	The Preferred Alternative would include landscaping treatments and aesthetic elements that integrate the freeway with adjacent communities. The implementation of some urban design elements would require participation and cost-sharing to fund the aesthetic improvements from the City of Dallas, property owners or community-based organizations.
Invasive Species and Beneficial Landscaping	Beneficial	An Executive Memorandum dated August 9, 1994 directed that on all federally assisted projects, agencies "shall wherever cost-effective and to the extent practicable": (1) use regionally native plants for landscaping; (2) design, use or promote construction practices that minimize adverse effects on the natural habitat; (3) seek to prevent pollution by, among other things, reducing fertilizer and pesticide use; and (4) implement water-efficient and runoff reduction practices. The landscaping included with this project would be in compliance with the Executive Memorandum and the guidelines for environmentally and economically beneficial landscape practices. In accordance with Executive Order 13112, which addresses invasive species, and the Executive Memorandum on beneficial landscaping, landscaping would be limited to seeding and replanting of the right-of-way with native species of plants where possible. Where project construction has removed existing vegetation, a mix of native grasses would be used to revegetate the right-of-way. These native grasses may include green spangletop (*Leptochloa dubia*), sideoats grama (*Bouteloua curtipendula*), blue grama (*B.gracilis*), and buffalograss (*Buchloe dactyloides*). Soil disturbance would be minimized to avoid the introduction or spread of invasive species as a result of the proposed project.
Hazardous Materials	Accidental Disturbance of Hazardous Materials	An environmental soil and groundwater management plan would be developed during the design stage. The management plan would concentrate on contingency planning so that only the actual subsurface impacts must be addressed. Should the proposed transportation improvements be approved for final design and construction, environmental professionals with the construction planning staff would determine what kind of contingency planning and full-time or on-call environmental inspectors are needed. The TxDOT Dallas District has procedures intended to minimize cost and construction delays when petroleum contaminated soils are encountered during roadway construction. The Dallas District has a contractor to remove underground tanks and a contractor to excavate and haul petroleum contaminated soils. If this or any other type of encounter with hazardous substances does occur, it would be handled according to all applicable state, federal, and local regulations.

Table 4.1 Mitigation and Monitoring Commitments
- Continued -

Project Issues and Resources	Type of Impact	Mitigation and Monitoring Commitments
Construction	Traffic Detouring, Temporary Noise and Dust, etc.	Plans to ensure safe and efficient traffic flow during construction would be developed as part of the detailed construction plans for the proposed improvements. Other construction-related impacts (such as temporary air and noise effects) would be addressed in compliance with standard TxDOT policies and procedures.

A.4. Recommendation for Alternative Selection and for a FONSI

TxDOT recommends implementation of the Build Alternative: reconstruction of IH 30 and IH 35E based on the information in this EA and in this project's Administrative Record. TxDOT requests that FHWA find that implementing the Build Alternative – which is the alternative that best meets the project's purpose and need – would not be a major federal action significantly affecting the quality of the human environment and thus issue a Finding of No Significant Impact (FONSI) for this project.