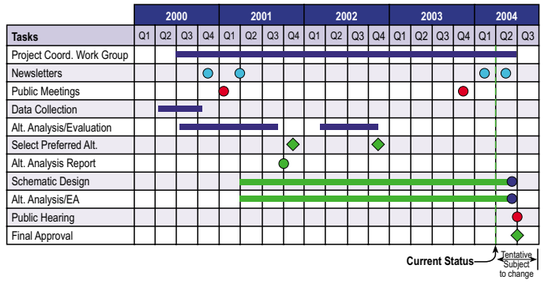

What's Next?

In the coming months, the EA and design schematics will be completed and approved for further processing by the TxDOT Environmental Affairs Division (ENV), and the Federal Highway Administration (FHWA). This will be followed by advertisement for and hosting of a public hearing, where the public will have the opportunity to provide comments about the project. Next, a summary and analysis of the public hearing will be prepared and will be forwarded to FHWA through ENV. FHWA will review the summary and analysis and, if in agreement, will issue a Finding of No Significant Impact (FONSI). Only then can the right-of-way acquisition process and preparation of a detailed engineering plan for any part of the project begin — all based on funding availability. If you would like more information, or have any questions about the project, please contact Matthew Asaolu, P.E., at the TxDOT FortWorth District Office by calling (817) 370-6852, or e-mail him at masaolu@dot.state.tx.us.

To add your name to the mailing list please complete this form and mail back to us.

☐ Yes, please include me on the IH 820 Corridor Alternatives Analysis mailing list.

Name _____

Address _____

City _____State____ Zip _____

Phone # _____

Complete this form and mail to:

Matthew Asaolu, P.E.

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Spring 2004
Volume 1 Issue 3

The IH 820 Alternative Analysis Study Achieving Success

IH 820 CORRIDOR ALTERNATIVES ANALYSIS STUDY

Texas Department of Transportation

East Loop IH 820 Corridor Alternatives Analysis

820

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Inside this Issue:

In April of 2001 the Texas Department of Transportation (TxDOT) and its consultant team led by Parsons Brinckerhoff began the IH 820 Alternatives Analysis Study. The IH 820 study corridor is located in Tarrant County, Texas. The purpose and need for this project was determined early in the process and stemmed from three major factors: 1) anticipated local and regional population and employment growth within the IH 820 corridor and the Dallas/Fort Worth Metroplex; 2) the demand for additional transportation capacity within the IH 820 corridor as a result of increased population and employment; and 3) design deficiencies throughout the existing corridor that contribute to congestion and frequent traffic accidents.

This is the third edition of the project newsletter published about IH 820 Alternatives Analysis Study. The first two editions were published in Fall 2000 and Spring 2001 respectively. The Fall 2000 edition introduced the project and fully explained the alternative analysis process while the Spring 2001 edition explained the process of evaluating and screening alternatives that were being considered for the project. The two earlier editions can be viewed online at the project website: http://www.dot.state.tx.us/ftw/mis/ih820/newsletter.htm

The screening and evaluation process led to the selection of a Preferred Alternative. The Preferred Alternative consists of recommended improvements to the freeway lanes and the interchanges within the study corridor. This would include the addition of Managed Lanes (HOV, Tolls, etc), providing added capacity to the general purpose main-lanes, continuity for the frontage roads, frontage roads/cross street intersection improvements, re-arrangements of ramps, and realignments of direct connections at the major interchanges. The Alternatives Analysis Study and Environmental Assessment planning process has now advanced to the detailed analysis and refinement of the Preferred Alternative.

At the initial stage of the study, the project's study corridor was divided into three segments as follows: Segment I – IH 820 between US 287/IH 820 interchange and Meadowbrook Drive; Segment II – IH 820/US 287 between IH 820/US 287 interchange and IH 820/IH 20 interchange; Segment III – IH 820/IH 20 between Anglin Drive and IH 820/IH 20 interchange, and IH 20/US 287 between IH 820/IH 20 interchange and IH 20/US 287 interchange. Proposed improvements for Segment I would increase main freeway capacity from 4 lanes to 8 lanes with 3-lane frontage roads in each direction at most locations. Improvements for Segment II would increase main freeway capacity from 10 lanes to at least 12 lanes with 3-lane frontage roads in each direction at most locations and 2-lane reversible Managed Lanes. Improvements for Segment III would increase main freeway capacity from 10 lanes to at least 14 lanes with 3-lane frontage roads in each direction at most locations and 2-lane reversible Managed Lanes along IH20/287 section. All proposed ramps and intersections would be improved. In addition, the Preferred Alternative consists of numerous components such as Travel Demand Management, Transportation Systems Management (TDM/TSM), and bicycle and pedestrian measures that are designed to decrease and manage demand on the transportation system. These elements include employer trip generation programs, telecommuting options, traveler information, special event options, and signal and intersection improvements. The Preferred Alternative also includes a recommendation for further study of a proposed light rail/commuter line along the existing Union Pacific (UP) South route crossing near Old Mansfield Highway and IH 20.

IH 820 Study Limits Expanded

Level of Service (LOS) is a qualitative measure of traffic flow and congestion which is calculated in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety. After TxDOT conducted LOS analysis to examine future traffic congestion, the project study limits were extended to allow a smooth and safe transition from the proposed future roadway to existing roadways. In addition, the proposed Managed Lanes would need to transition back to general purpose lanes at the project termini. The extensions add an additional 6.5 miles to the study corridor, which now totals approximately 15 miles.

Elements of the Preferred Alternative:

Based on an extensive alternatives analysis and public involvement process, the preferred transportation improvement strategy being proposed features the following key elements:

- **IH 820 From Lancaster to Meadowbrook Drive:** The proposed design calls for depressed mainlanes, a raised Craig Street Bridge elevated over slightly depressed frontage roads, and braided ramps (on/off ramps are bridged one over the other) north of Craig Street.
- **IH 820 Between Lancaster and Spur 303:** The design calls for the mainlanes and continuous frontage roads to be depressed underneath the UP Railroad. Currently, frontage roads are discontinuous at the railroad.
- **IH 820/US 287 Interchange:** This has been redesigned to provide a right-hand divergence for IH 820 northbound mainlanes off the northbound IH 820/US 287 mainlanes. It would also provide a right-hand convergence for IH 820

Project Limit Extensions

Previous Study Limit	New Study Limit/Proposed Design
US 287 North Terminated at Village Creek	Extended from Village Creek to Wichita/Bishop
IH 20 East Terminated at Green Oaks	Extended from Green Oaks to Park Springs
IH 820/20 West Terminated at Anglin	Extended from Anglin to Forest Hill
US 287 South Terminated at Sublett	No Change

southbound mainlanes to southbound IH 820/US 287 mainlanes. This would improve weaving movements on the mainlanes between the IH 20/IH 820 and IH 820/US 287 interchanges.

- **At Sun Valley:** The proposed design would relocate the existing exit and entrance ramps to new locations. The new design would improve safety by providing for better weaving conditions on the mainlanes.
- **IH 820/IH 20 Interchange:** This interchange has been redesigned to provide a right-hand divergence for IH 820 northbound mainlanes off eastbound IH 20/IH 820 mainlanes. It would also provide a right-hand convergence for IH 820 westbound mainlanes to westbound IH 20/IH 820 mainlanes. This would also improve weaving movements on the mainlanes between IH 20/IH 820 and IH 820/US 287 interchanges.
- **Westbound IH 820/IH 20 at Anglin Drive:** The proposed improvement would realign Anglin Drive at the westbound frontage road intersection. The realignment would eliminate the two-way movement that currently exists at that location, thereby providing safer direct access to the westbound frontage road. The entrance ramp to westbound IH 820/IH 20 from Mansfield Highway would be braided over the exit ramp from westbound IH 820/IH 20 to Anglin Drive. To accommodate additional lanes on the westbound mainlanes and improve safety, the existing entrance ramp from Anglin Drive to westbound IH 820/IH 20 would be eliminated.
- **IH 820/IH 20 at UP Railroad:** The proposed design calls for the mainlanes and continuous frontage roads to be elevated above the UP Railroad. The frontage road bridges would be stand- alone structures separated from the mainlane bridges. Currently, frontage roads are discontinuous at the railroad.
- **Managed Lanes:** The proposed design calls for a two-lane facility that would be separated from the general purpose mainlanes by concrete barriers and would be managed as needed. This would be a reversible two-lane facility that would begin at US 287 north of Village Creek and would continue to the IH 20/US 287 interchange. It would diverge to terminate with a reversible single-lane facility to both IH 20, east of the IH 20/US 287 interchange, and to US 287 south of Little School Road. Access to the Managed Lanes would be available only at the termini.

The IH 820 Alternatives Analysis Study has progressed to a Preferred Alternative schematic design that is 90% complete. Many issues of concern were brought to the attention of the Study Team during the public involvement process and some solutions have been developed.

Concerned citizens discuss details of the project at a recent public meeting.

Public Involvement News

There have been two public meetings held for this project up to the date of this newsletter. Both were held at Dunbar High School located on Ramey Avenue within the project study area. The meetings were attended by adjacent property owners, business owners and public officials. Both meetings began with an open house format that allowed the participants to walk through and ask questions about the displayed exhibits.

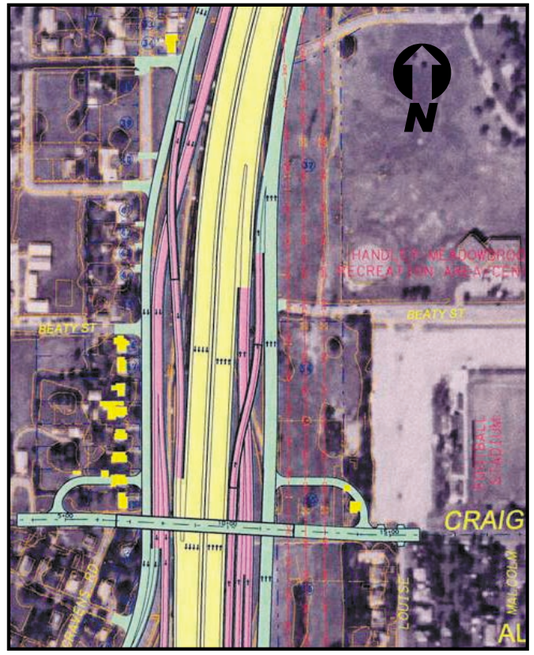
The first Public Meeting was held on April 19th 2001. At that first meeting, the project was introduced, the alternative analysis process was fully explained and the attendees had the opportunity to review and comment on the 30% complete design schematic that was presented. The second public meeting was held on December 11, 2003. At the second meeting, the 90% complete design schematic was presented and the attendees were given opportunity to comment and ask questions about specific areas in the corridor. Several insightful issues were raised by the attendees about specific ramp locations, Managed Lanes, the proposed project timeline, and how they could become more involved in the process. After the meeting, the design team worked with some affected property owners to address their concerns.

Input provided by the Project Work Group participants, the agencies and the general public helped to refine the Preferred Alternative. Eleven (11) on-call presentations to neighborhood groups and other one-on-one meetings with some of the affected property owners were held to discuss the project. Questions and comments at these meetings have contributed to an effective public involvement process that helped the design team in their decision-making process. The meeting summary reports for both public meetings are available online at the project website: http://www.dot.state.tx.us/ftw/mis/ih820/meetings.htm. A public hearing is expected to be scheduled for the project before the end of 2004.

Environmental Assessment News

Federal action (funding) is involved in this project. All proposed highway improvements that involve federal actions (and are not categorically excluded by law) require an environmental investigation concurrently with engineering alternatives studies, and the preparation of an Environment Assessment (EA). The first draft of the project EA has been completed and is currently under local review. The EA summarizes and compares the effects on the natural and social environment of a no-build scenario with that of the Preferred Alternative. The areas studied in the EA include access issues; displacement of residences or businesses because of right-of-way needs; environmental justice (the analysis of whether the project has the potential to create disproportionately high and adverse effects on minority and low-income populations); potential noise and air quality impacts; potential effects on historic properties, and impacts to wetlands or waters of the U.S. (waters subject to federal water quality protection).

The design requirements for achieving overall operational and safety improvements for this project dictate that some ramps be added, relocated or eliminated. These ramp modifications would improve safety and mobility along the study corridor but could have some adverse impacts. The draft EA discusses the nature and extent of these impacts and specifies measures that would be taken to mitigate them. Every effort has been made to accommodate most of the proposed improvements within the existing right-of-way. When that cannot be accomplished, additional land parcels adjacent to the existing corridor right-of-way would have to be partially or entirely purchased. Acquiring entire properties at some locations would result in residential or business displacements. According to current estimates, a total of 17.5 acres would be acquired, resulting in 48 displacements for the whole project. The total number of displacements includes 20 residences and 28 commercial properties. The displacements would not disrupt any socially cohesive neighborhoods or business districts. The avoidance or minimization of commercial and residential relocations was a major consideration during project development and continued to figure prominently into the final design.



Proposed Craig Street Bridge Design

From the draft EA, it appears that the project would have no impact on historical resources. The final assessment of project impacts on historic resources would be completed once consultation with the Texas Historical Commission (THC) is complete and the THC concurs with the project's Historical Resources Survey Report.

Some sensitive noise receivers (such as churches and residences) are located adjacent to the proposed right-of-way along the major highways IH 820, US 287 and IH 20. Analysis of the future traffic volumes (for design year 2025) indicates that these sensitive receivers would likely be affected by highway traffic noise. Noise abatement measures are being considered for the affected receivers. Locations where noise mitigation measures are found to be both reasonable and feasible would be subject to the final design process and to additional public involvement with affected property owners.

The results of air quality analysis within the corridor reveal that local concentrations of carbon monoxide resulting from future traffic volumes are not expected to exceed Environmental Protection Agency (EPA) National Ambient Air Quality Standards (NAAQS) at any time within the project design year (2025).

Wildcat Branch and Village Creek are waters of the U.S. crossed by the project's roadways. Because these waterways cross beneath the freeways from one side to the other, expansion of the road to either side could result in impacts to these jurisdictional waters. Impacts to waters of the U.S. determined to be jurisdictional under Section 404 of the Clean Water Act would require a permit from the U.S. Army Corps of Engineers prior to the start of construction.

IH 820 Context Sensitive Design – Craig Street Bridge

The Craig Street Bridge is located in Segment I of the study corridor between Meadowbrook Drive and Lancaster Avenue, and currently provides an east-west connection over IH 820 between both sides of the well-established Handley neighborhood. The first design concept called for the relocation of Craig Street Bridge to Greenlee Drive, which is about one-quarter mile north of Craig Street, where no bridge exists . That option would have saved money and had less environmental impact on the neighborhood than what we are currently proposing. Handley neighborhood residents expressed their opposition to that first design concept because it included removal of the Craig Street Bridge. Members of the design team met with members of the Handley Neighborhood Association, City of Fort Worth officials, and other stakeholders from the area to look at other options. Additional design time was spent to fully analyze ten different options that would allow the bridge to remain at its current location. The option that was finally selected includes a higher elevated Craig Street Bridge spanning slightly depressed IH 820 frontage roads. Under the proposed option, access between Craig Street and IH 820 frontage roads would be made possible through a "jug-handle" connection (see illustration). This option requires acquisition of additional right-of-way and would result in a more expensive scheme, but was chosen because it allows the bridge to be retained at its current location, thereby satisfying the Handley neighborhood concerns.

Why Managed Lanes?

Data provided from the North Central Texas Council of Governments (NCTCOG) traffic model that examines future traffic to 2025 supported the inclusion of Managed Lanes into the Preferred Alternative. Managed Lanes are being proposed for the following reasons:

- The facility would operate with less congestion than with only general purpose lanes
- Managed Lanes have the flexibility to charge or change the toll to accommodate varying levels of congestion.
- When congestion levels are low, the Managed Lanes could also function as an Express-lane facility for single occupant vehicles.
- No tollbooths would be necessary because the facility would be technologically-controlled so that electronic toll devices could be used.