

November 14, 15, and 17, 2011

The Texas Department of Transportation (TxDOT) and the Federal Highway Administration (FHWA) are preparing an Environmental Impact Statement (EIS) for the North Houston Highway Improvement Project (NHHIP), located in Harris County, Texas. The proposed project and study limits begin at the interchange of US 59 and SH 288 south of downtown Houston and follow northward along IH 45 to the interchange of IH 45 and Beltway 8 North, a distance of approximately 16 miles. The proposed project area also includes portions of IH 10 and US 59 near downtown Houston, IH 610 and Beltway 8 North between IH 45 and Hardy Toll Road, and Hardy Toll Road from north of downtown to Beltway 8 North. The purpose of the proposed project is to create additional roadway capacity to manage congestion, enhance safety, and to improve mobility and operational efficiency.

This report summarizes the activities used to solicit participation for agency and public scoping meetings, and the input received at the meetings and during the associated comment period.

Agency and Public Scoping Meetings

The **agency scoping meetings** were held on November 14, 2011 at the TxDOT Houston District office, 7600 Washington Avenue, Houston, Texas 77007, at the times listed below.

- Participating agencies 10:00 a.m. to 12:00 p.m.
- Cooperating agencies 2:00 p.m. to 4 p.m.

Federal, state, and local agencies were invited to be participating or cooperating agencies in the development of the Environmental Impact Statement (EIS) for the proposed project, and to attend scoping meetings. The meetings were an opportunity for agency discussion regarding the project prior to the public scoping meeting. The agencies invited to the meetings, and their expected roles in the project, are detailed in the Draft Agency Coordination and Public Involvement Plan.

The project information provided to the agencies utilized the materials developed for the pubic scoping meetings, including the meeting handout, presentation boards and maps, PowerPoint presentation, draft Agency Coordination and Public Involvement Plan, and draft Need and Purpose document. Agency coordination, and roles and responsibilities of participating and cooperating agencies were discussed with meeting attendees, who also had the opportunity to view the meeting materials, ask questions of TxDOT and the study team, and discuss the proposed project.

Representatives of three agencies attended the participating agency scoping meeting: Houston-Galveston Area Council, Harris County Flood Control District, and Metropolitan Transit

Authority of Harris County (METRO). Although no invited agencies attended the cooperating agency scoping meeting, a representative of METRO who attended the morning meeting also came for the afternoon meeting. Because there were no new attendees, TxDOT asked the METRO representative if he wanted to go over any of the information presented at the earlier meeting; he declined. Therefore, the cooperating agency scoping meeting ended without presentation and discussion.

The **pubic scoping meetings** were held in two locations in the project area, on two different days, to provide two opportunities for interested citizens to attend. Both meetings were held from 6 p.m. to 8 p.m., on the dates and at the locations listed below.

- Tuesday, November 15, 2011 Jefferson Davis High School (H.S.), 1101 Quitman Street, Houston, Texas 77009
- Thursday, November 17, 2011 Aldine Senior H.S.,11101 Airline Drive, Houston, Texas 77037

The purpose of the public scoping meetings was to:

- 1. Initiate early public involvement
- 2. Provide project history and background
- 3. Explain the environmental review process
- 4. Present the project timeline
- 5. Invite review and comment on two draft documents: Need and Purpose Statement; Agency Coordination and Public Involvement Plan
- 6. Gather information about the project area
- 7. Discuss project with the public and answer questions
- 8. Request comments on the project
- 9. Encourage the public's continued involvement

Approximately 311 people attended the public meetings:

- Jefferson David H.S. 259 individuals, including 7 elected officials or their representative
- Aldine Senior H.S. 52 individuals, including 5 elected officials or their representative

Representatives from TxDOT and the project consultant team were present at both meetings and included Spanish-speaking individuals for translation and communication.

Both public meetings were conducted in an "open-house" format and at each venue attendees were to view a repeating presentation (PowerPoint format) about the project, including project background and study process; and then view exhibit boards, maps, and previous studies in an exhibit area. Attendees were provided a 2-page informational handout, and a 2-page survey form/comment form with attached 1-page project area map. Copies of the draft Agency Coordination and Public Involvement Plan, and draft Need and Purpose document were available for all attendees. TxDOT and project team representatives were available at the meeting registration table, in the presentation room, in the exhibit area.

Scoping Meeting Documentation

The complete NHHIP Scoping Meeting Documentation report is available for review at the TxDOT Houston District Office, 7600 Washington Avenue, Houston, Texas 77007. The 2-volume document includes documentation of the agency and public scoping meetings, and comments received during the associated comment period.

Volume 1 - Meeting summary and photographs, notifications, registration sheets, handouts, the printed PowerPoint presentation frames with printed narration script, and reduced-size copies of the exhibit boards and maps.

Volume 2 – Comment index table; comment and survey matrix table; copies of all written comments received during the scoping meeting comment period; meeting surveys; and reduced-size copies of the "areas of concern" maps displayed at the scoping meetings, with tables listing information that project team members noted during discussions with attendees.

Summary of Comments

A total of 172 people submitted written comments during the comment period that ended on December 5, 2011. The written comments were submitted at the scoping meetings, and by mail and email. Some comments were written on forms provided at the scoping meetings, and include 51 scoping meeting survey forms. The survey form had six questions related to public involvement, knowledge of the NHHIP project, need for improved highway transportation in the North Houston area, and environmental considerations. Notes based on verbal comments regarding "areas of concern" in the project area were summarized by TxDOT and project team members, and are included in the scoping meeting documentation report.

This meeting summary and responses to comments will be posted on the project website: www.ih45northandmore.com. The Public Scoping Meeting Documentation report includes copies of all comments submitted during the associated comment period.

TxDOT and project team members reviewed all of the comments, and grouped the concerns, questions, and suggestions into the 33 categories of issues listed below. Responses to comments related to the issues listed are included in the "Responses to Comments" section of this summary, with two tables: one that lists names of the commenters and related response numbers, and one that has the full text of the comments.

Comment Categories

- 1. Project alternatives
- 2. Modes of transportation
- 3. Congestion in the inner city and related impacts
- 4. Neighborhood quality of life
- 5. Impacts to neighborhoods, homes, and businesses
- 6. Noise and vibration
- 7. Air quality
- 8. Flooding and drainage
- 9. Tolling
- 10. Visual impacts
- 11. Parks and recreation
- 12. Increased speeds and related costs
- 13. Project goals
- 14. Property values and property acquisition
- 15. Design themes and landscaping
- 16. Access for pedestrian, bicycle, and transit riders
- 17. Encouraging single-passenger vehicle use
- 18. Project would benefit suburban areas, and adversely affect City of Houston residents
- 19. Project would encourage suburban growth
- 20. Connect Hardy Toll road to downtown Houston
- 21. Cost of project compared to project goals
- 22. Conservation of natural resources
- 23. Historic resources and cemeteries
- 24. Rejoin disconnected neighborhoods
- 25. Forecast travel times and speeds for No Build alternative
- 26. Double-decked roadways
- 27. Providing project information in Spanish.
- 28. Use of SAFETEA-LU design standards
- 29. Additional signatures on Agency Coordination and Public Involvement Plan
- 30. Consider downtown roads as a separate project
- 31. Comments on the Draft Need and Purpose and Draft Agency Coordination and Public Involvement Plan
- 32. Facilitating receipt and understanding of project information
- 33. General comments

All comments received will be considered as TxDOT and the project team develops and evaluates roadway alternatives for this project. Comments on the Draft Need and Purpose and Draft Agency Coordination and Public Involvement Plan will be considered as the documents are finalized.

Name		Commenter No. (see note below)	Response Nos.
Acree	Clint	W06	2
Albright	Victoria	SM01	2,5
Alcaraz	Hugo	SM02	*
Almond	Anna	E22	1,2,4,6,7,18,
Aviles	Norma	SM03	1,32
Aviles	Patricia	SM04	*
Bagley	W. Bryan	W01	1,15,26
Bailey	JR	SM05	*
Barnard	Janis	E38	1,2,4,5,8,10,13,26
Barnum	Daniel	E01	1,15,26
Baumgardner	Anne	E29	1,2,4,5,6,8,12,13,14,20, 31
Bonica	John	E23	1,2,4,6,8,10,20,26
Boyd	Jon	E39	1,2,16,17,31
Boyers	Amy	E40	2,4,6,7,8,10,13,20,26
Bravo	Lorena	SM06	*
Bravo	Pascual	SM07	*
Burke	Kristen	E30	4,5,14
Burns	Marita	M06	1,6,7,8,11
Canty	D.J.	E41	4,5,18
Carter	Carrie	E31	1,2,4,5,6,7,8
Castillo	James	E83	1,2,4,5,23
Castillo	Sarah	SM08	2
Castro	Dorian	SM09	*
Cho	Peter	SM10	1,2
Cicack	Christina	E42	1,4,5
Clark	Florence	E43	1,2,4,6,8,10,13,20,26,31
Clarke	Paige	W29	1,9,20
Cooper	Jon	E44	1,2,4,5,6,8,9,10,14,19,20
Correia	Jonathan	E45	1,2,4,6,8,10,13,20,26,31
Covington	Karen	W15	1,5
Cunningham	Cay	E46	1,2,4,6,8,10,13,20,26,31
Day	Jonathan	E47	1,4,5,21,23
DeHaven	Christina	E32	1,4,5,11
DeLeon	Brenda	SM11	4,5
DeLeon	Xavier	SM12	*
Doby	Carl	SM13	1,6,16,18,21
Dower	Margaret	E14	1,4,5
Dvoretzky	Rachel	E33	1,6,7,12,14,15,21
Eilar	Linda	M12	1,2,4,5,6,7,16
Eury	Robert	M07	1,2,9
Eyler	Alan	E48	1,2,4,5

Name		Commenter No. (see note below)	Response Nos.
Farrar	Jessica	W16	1,4,5,6,7,815,14,23,26
Farris	Angelina	E49	1,2,4,6,8,10,13,20,26,31
Farris	Linda	SM14	*
Fischer	Beth	W17	1,4,5,6,11,21
Fischer	Steve	W18	1,2,4,5,11,20,23
Flores	Christina	E24	1,2,4,6,8,10,20,26
Fogelson	Abby	E84	1,2,4,5,6,7,20
Gammill	Cecil	M03	33
Garcia	Bernardo	E50	1,2,4,6,8,10,13,20,26,31
Garcia	Benjamin	SM15	*
Garrett	Dave	E51	1,2,4,5,8,18
Guerrero	Hugo	E06	6,7
Haim	David	E02	3
Hale	Tommy	SM16	1,2,4,5
Hall	Tory	E34	1,2,4,5,9,13,14,23,26,31
Hall	Maureen	W12	1,4,5,18
Ham	Nina	E52	2,4,17,21
Hart	Barry	E05	32
Hayslip	Mary	M08	2,4,6,7
Helm	Tom	E53	1,2,5,18
Herbage	Ann	W19	1,2,4,6,8,10,13,20,26,31
Herrington	Kim	E54	1,2,4,5,6,10,14,18
Hohmann	Stacie	W03	20
Hoyle	Kim	E55	1,2,4,5,6,8,21,23
Hrabar	Stephanie	E08	1,6,7,8,31
Hrabar	Stephanie	SM17	1,8
Huffman	Arthur	E56	1,2,4,20,21,23
Hunt	Rebecca	E65	1,13
Husak	Alan	E12	1,2,9,18
laconis	Sandy	E25	1,2,4,6,8,10,20,26
Jackowski	Mark	E57	1,2,4,6,8,10,13,20,26,31
Jenkins	Chris	E03	2,3,4,5
Jenkins	Julia Beth	E04	2,3,4,5
Jernigan	Scott	E58	1,2,4,5,6,7,14,18
Kavanaugh	Elizabeth	E59	1,2
Khyne	James	SM18	6,26
Kinzel-Tapper	Stephanie	E60	2,4,5,18,21
Klein	Barry	E85	1,4,5,6,7,10,13,25,26
Kokenge	Ben	E07	1,4
Laguarta	Alice	W21	1,2,4,6,8,10,13,20,26,31
Lane	Suzette	M09	4,6,7

Name		Commenter No. (see note below)	Response Nos.
Lange	Barbara	E61	1,2,4,5,8,23,26
Lankau	Sarah	W22	1,2,4,5,6,8,11,20,23
Lankau	Tim	W23	1,2,4,5,6,7,10,11,15,21,23
Lawler	Mary	E13	1,2,4,5,6,7,8,9,20,26
Leftwich	David	E62	1,2,4,5,6,7,8,10,13,20,31
Lenz	Paula	W07	33
Liffman	Paul	E63	2,4,5,22,23
Lindsay	Lauren	E64	2,4,8
Marin	Myriam	SM19	6,26
Martinez	Janice	E15	1,2,4,5,6,7,8,9,20,26
Martinez	Jaime	E66	33
Martinez	R.L.	M04	33
Martinez	Janice	SM20	1,4,5,18,23
Martinez	Jaime	W08	33
Massie	Dinah	SM21	1,3,23
Mastal	Megan	E67	1,11,23
Masters	Blake	E68	1,2,4,6,7,8,10,15,20
Mattenson	Jan	E69	4,15,23
McIntyre	Heather	E10	1,2,4,5,6,7,8,9
McMillan	Danny	M05	1,2,5
Michaelides	Evan	W13	1,2,8,21,73
Mireles	Herminia	SM22	1,14
Morales	Frank	M11	1,3,4,5,6,7,8,18,19,26
Mozur	Jim	E70	1,2,4,6,8,10,13,20,26,31
Mozur	Jim	W24	1,2,4,6,8,10,13,20,26,31
Muhammad	Robert	W14	2
Norton	Joe	W09	1,4,6
Oneal	Lindsey	E35	1,2,4,6,8,10,13,20,26,31
Parker	Wendy	E16	1,2,4,5,6,811,13,18,23,31
Pena	Rosa	SM23	*
Perry	Marci	W25	1,2,8,9,11,21,22,28,29,30,31
Pile	Tom	E71	1,2
Prilop	Valerie	W26	1,2,4,5,6,7,10
Proctor	Robert	E17	1,6,7,10,13
Puente	Sandra	SM44	2,3,4,5,8
Quarles	Maryellen	W27	2
Raimond	Randy	E18	1,2,4,6,8,10,13,20,26,31
Raimond	Randy	SM24	*
Raimond	Susan	SM25	*
Reyna-Rosario	Joanna	SM26	1,4,5,14
Robbins	Brad	E72	1,6,7,23,24

Robbins Mary E73 1,2,8,23	
Rodriguez Thomas W02 1,26	
Roque Jonathan W04 1,26	
Rosario Miguel SM27 *	
Saldivar Kimberly SM28 *	
Santos Dolores E86 1,2,4,6,8,10,20,26	
Schaafs Jan SM29 1,2,4,5,15	
Schindler MaryAnn E26 1,2,4,6,8,10,13,20,	,26,31
Schwaller Sue M10 9,20,26	
Self Ronnie E09 1,26	
Shanley Kevin E19 8,15,22	
Sheeren Bonnie Campbell E74 2,18,19	
Shepard Tom E75 1,21	
Shirley Bill W30 1	
Smith Marianne E27 1,2,4,6,10,12,20,20	6
Smith Marianne SM30 1,2,6,7	
Snider Susan E76 4,6,7,10,13,31	
Stephens Pamela E20 1,2,4,6,8,10,20	
Sternfels Melissa E36 4,5,11,18	
Stovall Anne E77 1,2,4,6,8,10,13,20,	,26,31
Strawn Sabrina W11 1,2,20,26,31	
Tesar Deborah SM31 1,5	
Thalmann Robert W05 4,5	
Thomason Faron E78 1,2,4,5,11,13,21,2	3
Tijerina Joseph M01 1,8,15	
Tran Long SM32 *	
Trevino Daniela SM33 1	
Trevino Maria SM34 5,14,33	
Trevino Rodolfo SM35 *	
Villaescusa Julie E21 1,2,4,6,8,10,20,26	
Villaescusa Doug E37 1,4,5	
Wagley Jenifer E11 1,2,4,5,6,7,8,9,20,3	26
Watkins Nathan W10 33	
Weng Judy W28 1,2	
Weston Jim E79 1,2,4,6,8,10,13,20,	,26,31
Wilcox David SM36 2,7	
Woodward Amy SM37 *	
Yang Ivy SM38 1	
Yun Janet E80 1,2,4,5,14,18,23	
Zersen Scott E81 1,2,4,6,8,10,13,20,	,26,31
Unknown E28 1,2,7,9,18,19	

Name	Commenter No. (see note below)	Response Nos.
Unknown	E82	1,4,5,6,7,15,18,22,23
Unknown	M02	1,18,20
Unknown1	SM39	26,27,32
Unknown2	SM40	33
Unknown3	SM41	2,10,16,23
Unknown4	SM42	1
Unknown5	SM43	1,6
Unknown1	SM45	1
Jim	W20	1,2,6,8,10,13,20,26,31

Notes

For Commenter Numbers: SM=Scoping Meeting, E=Email, M=Mail, W=Website

^{*} Survey form submitted, no other comments.

Responses to Comments

 Response to comments about design alternatives to be considered for the proposed North Houston Highway Improvement Project (NHHIP), including design options such as roadway alignment and elevation, and tunneling; and the process of evaluating alternatives.

We are in the early stages of project development. The NHHIP involves evaluation of IH 45 North from the US 59/SH 288 interchange to Beltway 8 North, the Hardy Toll Road from IH 610 North Loop to Beltway 8 North, and portions of IH 10 and US 59 near downtown Houston. The solution to the highway transportation needs in the study corridor has not been determined. Previous studies (North-Hardy Corridor Studies) identified a need for additional highway capacity in the north Houston corridor, and recommended adding 4 managed lanes to the IH 45/Hardy Toll Road corridor from downtown Houston to Beltway 8 North (North-Hardy Planning Studies, Highway Component, 2005). We will consider updated traffic projections and regional roadway planning, information on environmental constraints, and input from the public and agencies to develop a "universe" of alternatives that meet the highway transportation needs in the study corridor. These alternatives will be presented to agencies and the public for comments.

The project team will identify a wide range of alternatives (the universe of alternatives), then narrow the focus to a reasonable range of alternatives for more detailed study, including a "No Action", or No Build alternative. The universe of alternatives will be developed from previously identified alternatives that were presented in the *North-Hardy Planning Studies Alternatives Analysis Report (Highway Component)*, and alternatives developed by the project engineering team. The NHHIP alternatives will be roadway transportation alternatives, and will include at-grade, elevated, and tunnel design options. Interchanges, access ramps, frontage roads, access to adjacent properties, and other design considerations will be evaluated, including other planned and reasonably foreseeable projects. Input from agencies and the public will be considered in the development of alternatives. TxDOT and FHWA will determine the reasonable alternatives and preferred alternative, considering input from other agencies and the public throughout the study process.

As discussed in the presentation at the Scoping Meeting, during the approval process for the Final North-Hardy report for the Highway Component, TxDOT agreed to the following goals for this phase of project planning.

- Stay within the existing IH 45 right of way between Quitman Street and Cavalcade Street, except at intersections where turn lanes may be needed.
- Minimize adverse effects on quality of life issues of the residents and neighborhoods in the project area.

Responses to Comments

- Study Hardy Toll Road as an alternative route for additional lanes.
- Evaluate use of tunnels as an alternative in areas of constrained right-of-way.

Taking the existing IH 45 out of service is not likely to be a reasonable alternative for meeting the project need and purpose, but will be considered during the evaluation of the universe of alternatives.

Information on the development and analysis of the universe of alternatives and subsequent identification of reasonable alternatives will be provided by TxDOT to FHWA for review prior to public meetings where alternatives and alternatives evaluation criteria will be presented. As discussed in the Agency Coordination and Public Involvement Plan (ACPIP) for the NHHIP, three additional public meetings are planned during development and evaluation of alternatives, prior to distribution of the Draft Environmental Impact Statement (DEIS). A public hearing will be held after distribution of the DEIS. TxDOT and FHWA will also conduct meetings with cooperating and participating agencies. The project team will also schedule meetings with elected officials and resource agencies as needed or as requested to discuss the alternatives and evaluation criteria. A final decision on the proposed project will not be made by TxDOT and FHWA until after agencies and the public have the opportunity to comment on the Final Environmental Impact Statement (FEIS). The ACPIP includes a proposed schedule for planned meetings and project milestones and describes the study process and agency and public review in detail. It is not expected that the DEIS would be complete before 2014. Final design would not be completed until after the EIS process is complete.

2. Response to comments about considering other modes of transportation (rail, transit) as alternatives for the proposed NHHIP.

A variety of modal choices were considered during the North-Hardy Corridor studies, which the Metropolitan Transit Authority of Harris County (METRO) participated in with TxDOT and the Houston-Galveston Area Council (H-GAC). Modes of transportation addressed in the North-Hardy Corridor Studies included transit (bus and rail) and highway. The studies identified a need for alternative transportation modes in the north Houston corridor. METRO is implementing the transit plan in the corridor, including light rail projects. The Gulf Coast Rail District is studying other regional commuter rail alternatives. The NHHIP is proposed to implement highway improvements in the area of the North-Hardy Corridor from downtown Houston to Beltway 8 North.

Summary of North-Hardy Corridor Studies

The North-Hardy Corridor studies evaluated transit and highway improvement alternatives for a corridor from downtown Houston to 30 miles north, principally in the area between IH 45 and the Hardy Toll Road, and including Bush Intercontinental Airport

Responses to Comments

(IAH) and segments of IH 45 and US 59 south of downtown. Study results were documented in the three reports listed below.

2003 North-Hardy Corridor Alternatives Analysis Report: Examined transit and highway alternatives; recommended that transit alternatives be examined prior to detailed evaluation of highway alternatives.

2004 North-Hardy Corridor Planning Studies, Alternatives Analysis Report (Transit Component): Findings used to develop a regional Transit System Plan that combines an aggressive bus service program with Advanced High Capacity Transit (light rail). METRO is implementing the transit plan, including light rail.

2005 North-Hardy Planning Studies, Alternatives Analysis Report (Highway Component): The Recommended Highway Alternative from downtown Houston to Beltway 8 North was to add four managed lanes to the IH 45/Hardy Toll Road corridor.

Response to comments about possible increases in congestion in the inner city, and potential impacts to community and public resources caused by congestion.

The proposed project will be planned to reduce traffic congestion, increase safety, and facilitate hurricane evacuation. TxDOT will make every effort to avoid or minimize potential adverse impacts to community, public, and other sensitive resources by minimizing ROW acquisition, and will identify mitigation measures for unavoidable adverse impacts. Every effort will be made to minimize adverse affects on quality of life issues of the residents and neighborhoods. Neighborhood traffic should not increase, and may decrease if highways are improved.

4. Response to comments about possible adverse impacts to neighborhood quality of life.

FHWA and TxDOT will make every effort to minimize adverse impacts to neighborhoods and associated quality of life issues of the residents of neighborhoods. Potential environmental impacts of the alternatives developed will be evaluated and will be an integral part of the transportation decision-making process for the project. An important purpose of the EIS process is to identify potential impacts resulting from a proposed project, including beneficial and adverse impacts, and to identify measures that may avoid, minimize, or mitigate unavoidable adverse impacts. In accordance with the National Environmental Policy Act (NEPA) of 1969 and FHWA's implementing regulations and related guidance, the EIS will consider various environmental, socioeconomic, and other impacts for each reasonable alternative considered. The analysis of quality of life considerations will include evaluation of existing neighborhood

Responses to Comments

resources (for example, residences, businesses, parks, churches and other places of worship, historic properties, public land, visual/aesthetic characteristics) and the potential impacts of construction, traffic noise, air emissions, changes in access, right-of-way acquisition, etc. Direct, indirect, and cumulative impacts of the proposed project will be evaluated.

Potential impacts to low-income and minority populations will be identified in accordance with Executive Order 12898 - Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, 1994. The proposed project will be developed in consideration and support of the fundamental goals of environmental justice:

- To avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations.
- To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process.
- To prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

5. Response to comments about the impact to neighborhoods, homes, and businesses, due to expanding roadway right-of-way.

No studies have been done and no alternatives have been developed to identify any right-of-way needs for the project. In accordance with NEPA and FHWA's implementing regulations and related guidance, the EIS will consider various environmental, socioeconomic, and other impacts for each reasonable alternative considered. The analysis of potential impacts of expanding the roadway right-of-way will include evaluating potential impacts to neighborhoods, homes, businesses, and other land uses. Direct, indirect, and cumulative impacts of the proposed project will be evaluated.

One of TxDOT's goals for this phase of project planning is to stay within the existing IH 45 right of way between Quitman Street and Cavalcade Street, except at intersections where turn lanes may be needed.

6. Response to comments about noise and vibration.

Traffic noise impacts will be evaluated during the EIS process in accordance with federal regulations. The National Environmental Policy Act (NEPA) of 1969 provides broad authority and responsibility for evaluating and mitigating adverse environmental effects, including roadway traffic noise. The federal legislation that specifically involves abatement of roadway traffic noise is the Federal Aid Highway Act of 1970. This law

Responses to Comments

mandates FHWA to develop noise standards for mitigating roadway traffic noise and requires promulgation of traffic noise-level criteria for various land use activities. FHWA's Noise Standard is at 23 Code of Federal Regulations (CFR) Part 772. TxDOT developed guidelines for analysis and abatement of roadway traffic noise for Federal projects authorized under 23 United States Code (USC). The guidance was reviewed and approved by FHWA. Analysis of traffic noise impacts and noise abatement will be performed as part of the EIS for the NHHIP.

TxDOT is not required to assess the impact of operational traffic-induced vibrations. The Federal Highway Administration (FHWA) determined in 2005 that most studies have shown that both measured and predicted vibration levels are less than any known criteria for structural damage to buildings.

7. Response to comments about air quality, air pollution and emissions, and health protection.

Air quality impacts will be evaluated and documented in the EIS in accordance with applicable air quality regulations and guidance. Because the project is in an area that does not attain the ozone standard, it must conform to the State Implementation Plan (SIP) to achieve national ambient air quality standards. The proposed project must be consistent with the area's financially constrained Regional Transportation Plan (RTP). The RTP and the first four years of roadway projects, called the Transportation Improvement Program (TIP), for the Houston-Galveston region must be determined to be conforming to the region's motor vehicle emissions budget set by the state.

The air quality analysis conducted for the EIS will address ozone, carbon monoxide (CO) and Mobile Source Air Toxics (MSAT). Carbon dioxide is recognized as a naturally occurring greenhouse gas. It has been classified as a pollutant by the EPA, but is not currently regulated under the National Ambient Air Quality Standards.

8. Response to comments about flooding and drainage.

Drainage and flooding are important considerations that will be addressed during the project development process. The proposed project would be designed to not adversely impact the base flooding elevations to a level that would violate applicable floodplain regulations and ordinances. Proposed roadway drainage facilities would permit conveyance of the 100-year flood without causing major impacts to the main lanes of the proposed roadways, streams, or adjacent properties. Fill placement in the floodplain would be mitigated with equivalent floodplain storage in the vicinity of the proposed project. During final design, final drainage and mitigation analyses will be performed, and will be reviewed by regulatory agencies to confirm that adequate measures have

Responses to Comments

been taken to ensure that floodplain encroachment does not increase the risk of flooding to adjacent property. Addressing current flooding is not a focal point of this project, nor is it an issue under the jurisdiction of TxDOT. The NHHIP project will not contribute to additional flooding. Storm water detention ponds may be required as mitigation for storm water flow; TxDOT will consider wet-bottom detention ponds if another local agency will maintain them.

9. Response to comments about tolling.

A reasonable range of alternatives will be considered to satisfy the identified need for and purpose of the project. The alternatives will include managed lanes/tolling alternatives. The Texas transportation system faces challenges like never before. Demand on the system is outpacing available revenue, and factors like inflation, a growing population, an aging infrastructure and more fuel-efficient vehicles are pushing current funding sources to their limits. Tolls are used as an additional source of revenue to fund construction and maintenance of roadways. Existing lanes on IH 45 would not be tolled. New lanes on IH 45 may be tolled. Hardy Toll Road will continue to be tolled. TxDOT is coordinating with Harris County Toll Road Authority (HCTRA) during the NHHIP studies.

10. Response to comments about visual impacts.

FHWA and TxDOT will make every effort to minimize adverse visual impacts. Potential environmental impacts of the alternatives developed will be evaluated and will be an integral part of the transportation decision-making process for the project. An important purpose of the EIS process is to identify potential impacts resulting from a proposed project, including beneficial and adverse impacts, and to identify measures that may avoid, minimize, or mitigate unavoidable adverse impacts.

11. Response to comments about impacts to parks and recreation.

FHWA and TxDOT will make every effort to minimize adverse impacts to parks and other recreation resources. Potential environmental impacts of the alternatives developed will be evaluated and will be an integral part of the transportation decision-making process for the project. An important purpose of the EIS process is to identify potential impacts resulting from a proposed project, including beneficial and adverse impacts, and to identify measures that may avoid, minimize, or mitigate unavoidable adverse impacts.

Per federal regulations, the Federal Highway Administration (FHWA) and other DOT agencies cannot approve the use of land from publicly owned parks, recreational areas,

Responses to Comments

wildlife and waterfowl refuges, or public and private historical sites unless certain conditions apply. FHWA will ensure that the study process complies with the regulations.

12. Response to comments about estimated increased speeds during peak travel times and related costs.

Estimated speed improvements will be addressed during the NHHIP studies. Reduced travel times can reduce travel costs, and for roadways with thousands of trips per day, the cumulative cost savings can be substantial.

13. Response to comments about having better, more definitive goals for the project.

FWHA and TxDOT will review the project goals throughout the study process, as alternatives are developed and evaluated, and consid input from agencies and the public. Goals will be quantified, where appropriate, to address transportation needs related to congestion, safety, emergency evacuation, and roadway design.

14. Response to comments about impacts to property values and property acquisition.

There are many variables that influence property values. Property values can increase, decrease, or remain the same as a result of roadway improvements. A cursory review of studies on this topic reveals that transportation improvements can affect property values both beneficially and negatively. The NHHIP will be developed to minimize adverse impacts to residential, commercial, industrial, and other land uses in the project area.

Property acquisition would not occur until the EIS study and engineering design is complete. When property acquisition is required, TxDOT's acquisition and relocation assistance program would provide assistance and counseling to residential property owners that would be required to relocate. The relocation assistance program is conducted in accordance with the *Uniform Relocation and Real Property Acquisition Policies Act of 1970*, as amended; *49 CFR Part 24*, *Subparts C through F*; *Title VIII of the Civil Rights Act of 1968* (Federal Fair Housing law); *Housing and Urban Development (HUD) Amendment Act of 1974* and TxDOT policies and procedures. Relocation resources would be available, without discrimination, to all affected property owners required to relocate as a result of the implementation of a proposed project. No person would be displaced by this project unless and until adequate replacement housing has already been provided or is in place. Replacement housing would be offered to all displaced persons regardless of their race, color, religion, sex, disability, or national origin. All replacement housing would be decent, safe, and sanitary, without

Responses to Comments

causing undue financial hardship. Non-residential property owners, such as businesses, churches, and others would be provided information on adequate replacement locations for their current property and may be reimbursed for costs based on TxDOT policies and procedures.

15. Response to comments about incorporating design themes and landscape architecture into the project.

There are a variety of federal, state, and departmental acts and directives that mandate TxDOT design and maintenance activities related to landscape and aesthetics design. While there are numerous citations, the combined impact of these requirements can be summarized as follows:

- The landscape and visual aesthetic qualities of a transportation corridor are an environmental characteristic that, by law, must be considered in the design process and, where possible, enhanced.
- The landscape disturbed by the construction of a highway must be reestablished for environmental and aesthetic reasons. The revegetation process is to be accomplished with appropriate native and adapted species.
- To the extent possible, plants used for revegetation of rights-of-way should be low water use (xeric) plant materials.
- Where a transportation project must disturb an environmentally sensitive landscape, wetland, historic site, established residential neighborhood, or scenic landscape, appropriate actions must be taken to mitigate visual and adverse environmental impacts.
- TxDOT recognizes the need for developing highways with acceptable visual
 quality and has developed several proactive programs that encourage and assist
 the development of such transportation corridors. These include the
 Transportation Enhancements Program, Construction Landscape Program, Cost
 Share Program, the Governors Community Achievement Awards, Green Ribbon
 Landscape Improvement Program, and Landscape Partnership Program.

16. Response to comments about improving access for pedestrians, cyclists, and/or transit riders.

In accordance with the federal Policy Statement on Bicycle and Pedestrian Accommodations Regulations and Recommendations by U.S. Department of Transportation (March 2010), TxDOT will consider including bicycle and pedestrian accommodations in the proposed project, taking into consideration existing and anticipated bicycle and pedestrian facility systems and needs, and linkages to transit stops and corridors. Bicyclists and pedestrians would not be allowed on the main lanes of IH 45, Hardy Toll Road, IH 10 and US 59.

17. Response to comments about encouraging single-passenger commuter traffic.

Highway transportation improvements are needed within the NHHIP area because the existing IH 45 facility currently operates near capacity, resulting in congestion during peak and off-peak periods. Additionally, future transportation demand from projected population and economic growth is expected to place a greater strain on the existing facility. The population of the Houston-Galveston region is expected to increase by an estimated 3 million people, or 65 percent, between the years 2000 to 2035, while the growth rate in the study corridor is projected to be approximately 35 percent. The additional travel demand resulting from population growth in the region will put a strain on the existing facility. The purpose of the proposed action is to help manage the projected transportation problems in the project corridor to improve mobility and safety.

Managed lanes are proposed and will be evaluated as part of this study. The managed lanes would provide travel options through a combination of limited capacity expansion coupled with operational strategies that seek to manage travel demand and improve transit and carpool opportunities.

18. Response to comments about the proposed project providing benefit to suburban areas while adversely affecting those who live in the city of Houston.

The NHHIP will be planned to provide benefit to all users of the roadway(s) that TxDOT would propose to improve under this project. Projected increases in population and employment in the Houston region will contribute to additional traffic congestion on IH 45, which is currently classified as serious to severe. The existing IH 45 facility in the north Houston area currently operates near capacity, resulting in severe congestion during peak and off-peak periods. The proposed project is needed to address the severe congestion and to accommodate existing and anticipated future traffic. Additionally, the project is needed to bring the roadway up to current design standards, which would improve safety and provide for more efficient movement of people and goods. Improved efficiency is also needed to aid in evacuation events. The additional demand will put a strain on the existing facility, which also has design deficiencies in some areas, which affects safety. The purpose of the proposed North Houston Highway Improvement Project is to create additional roadway capacity to manage congestion, enhance safety, and to improve mobility and operational efficiency.

The Houston-Galveston Area Council (H-GAC) is the region-wide voluntary association of local governments in the 13-county Gulf Coast planning region of Texas. H-GAC has developed forecasts of the future development trends and growth patterns in the region, and the effects on the traffic volumes for the design year 2035 – as reflected in the long-

Responses to Comments

range plan, the 2035 Regional Transportation Plan (RTP) Update, adopted January 25, 2011. The regional traffic model incorporates all of the approved and planned roadway, transit, and other transportation projects that are projected to be needed in the region for the next 20+ years.

19. Response to comments about the project encouraging suburban growth.

The proposed project is needed to address the severe congestion on existing IH 45 and to accommodate anticipated future highway traffic for the design year 2035. The existing IH 45 roadway facility in the north Houston area currently operates near capacity, resulting in congestion during peak and off-peak periods. Additionally, future transportation demand from projected population and economic growth throughout the entire Houston-Galveston region is expected to place a greater strain on the existing facility. The population of the entire Houston-Galveston region is expected to increase by an estimated 3 million people, or 65 percent, between the years 2000 to 2035. Suburban development is likely to continue to grow with or without the proposed project.

20. Response to comments about connecting Hardy Toll Road to downtown Houston.

The Harris County Toll Road Authority system map shows the Hardy Toll Road extension to downtown Houston as a future project. An assumption for the NHHIP study is that the extension is a reasonably foreseeable project, and that it will be operational by the time the NHHIP would be completed. The proposed alignment of the extension has been revised on the project study mapping, with input from Harris County Toll Road Authority.

21. Response to comments about the project cost compared to the project goal of increasing travel speed/reducing congestion.

The North-Hardy Planning Studies - Alternatives Analysis Report (Highway Component) documents the analysis of highway alternatives evaluated for the North-Hardy study corridor. Conceptual Capital Cost was one factor examined in the analysis of the "short list" of six build alternatives. Other factors were: Mobility Improvements/Demand Potential, Regional Connectivity, Ease of Implementation, Environmental Impacts, and Community Impacts. Project cost and mobility impacts of alternatives will also be evaluated in the EIS for the NHHIP.

22. Response to comments about conservation of natural resources.

FHWA and TxDOT will make every effort to minimize adverse impacts to natural resources. Potential environmental impacts of the alternatives developed will be

Responses to Comments

evaluated and will be an integral part of the transportation decision-making process for the project. An important purpose of the EIS process is to identify potential impacts resulting from a proposed project, including beneficial and adverse impacts, and to identify measures that may avoid, minimize, or mitigate unavoidable adverse impacts. In accordance with NEPA and FHWA's implementing regulations and related guidance, the EIS process will consider the potential impacts to natural resources of reasonable alternatives considered. Natural resources to be addressed include wetlands, streams, vegetation, and wildlife.

Coordination regarding potential impacts to regulated resources, such as wetlands and water quality, would be in accordance with regulatory requirements. Permitting would be conducted in coordination with the applicable regulatory agency, and would involve review by agencies and the public, if required.

23. Response to comments about potential impacts to historic resources and cemeteries.

Potential environmental impacts to historic resources and cemeteries will be considered during the development and analysis of alternatives. In the initial screening of the universe of alternatives, an alternative will be dismissed from consideration if it would directly impact a known cemetery or historic property that is on the National Register of Historic Places. Potential effects to historic resources will be evaluated in accordance with the National Historic Preservation Act of 1966 (NHPA) and the Antiquities Code of Texas.

The North-Hardy Planning Studies, Alternatives Analysis Report (Highway Component) documented cultural resources concerns in the project corridor at the time of the study, including areas of potential historic districts, individual building/resources, and archeological resources. Additional studies will be conducted during the EIS process to identify historic and archeological resources and the potential adverse effects of the proposed project. Every effort will be made to minimize disruption of and preserve existing historic resources.

24. Response to comments about possibly "rejoining", or connecting, neighborhoods that were divided when IH 45 was constructed.

Our interpretation of this comment is that the commenter is asking if neighborhoods that were divided when IH 45 was originally constructed could be rejoined, or reconnected. As alternatives are developed and evaluated, the feasibility of improving connections between neighborhoods will be investigated.

Responses to Comments

25. Response to comments about providing a forecast of travel times and speeds for the No Build option.

The No Build alternative will be evaluated in the EIS, including an assessment of how it would perform in relation to reducing congestion, increasing speeds, improving safety, etc. The analysis will be shared with the public, when available.

26. Response to comments about double-decked roadways (some commenters were in favor of double-decked roads, some were opposed).

Double-decked roadways will be evaluated by the project team as an alternative.

27. Response to comments about providing project information in Spanish.

Some project information will be produced in Spanish for future public meetings. TxDOT will conduct a bi-lingual public hearing. Spanish-speaking persons can discuss the proposed project with Spanish-speaking project team members who will be present at public meetings, and also by contacting the TxDOT Public Information Office at 713-802-5076.

28. Response to comments about using SAFETEA-LU design standards in the project.

TxDOT will comply with all applicable guidance, laws, and other requirements, including SAFETEA-LU, during the development of the NHHIP project.

29. Response to comments about involving additional agencies as signatures of the Agency Coordination and Public Involvement Plan (ACPIP).

In accordance with Public Law 109-59, "Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users," (SAFETEA-LU), Federal Highway Administration (FHWA), as lead federal agency, and TxDOT, as joint lead agency, have developed and signed the ACPIP for the NHHIP project. Only the lead agencies sign the plan. As specified in Council on Environmental Quality (CEQ) regulations for implementing NEPA (40 CFR §1501.5), lead agencies are responsible for supervising the preparation of the environmental impact statement. SAFETEA-LU Guidance also specifies that lead agencies must:

- 1. provide increased oversight in managing the EIS process and resolving issues;
- 2. identify and involve participating agencies;
- 3. develop coordination plans;

Responses to Comments

- 4. provide opportunities for public and participating agency involvement in defining the need and purpose and determining the range of alternatives; and
- 5. collaborate with participating agencies in determining methodologies and the level of detail for the analysis of alternatives.

No agency has offered to be involved in the project as a lead agency with FHWA and TxDOT; therefore, no additional signatures are needed on the ACPIP. Other federal, state and local agencies were invited by FHWA or TxDOT to be cooperating or participating agencies for the EIS. The responsibilities of the cooperating and participating agencies are detailed in the ACPIP.

The Houston Downtown Management District, the Downtown Redevelopment Authority (DRA) who administers the Tax Increment Reinvest Zone No. 3, requested to be added as a participating agency, and TxDOT agreed.

30. Response to comments about considering the downtown Houston area roadways as a separate project.

Alternatives specific to the downtown area will be evaluated and may become separate projects for development if they can be shown to be independent projects. At this time, the highways around downtown - IH 45, IH 10, and US 59 – are included for evaluation in the NHHIP studies.

The limits or logical termini for project development are defined as (1) rational end points for a transportation improvement, and (2) rational end points for review of the environmental impacts. The Federal Highway Administration (FHWA) considers three factors when determining the limits of study for an EIS. The action evaluated in the EIS shall: (1) connect logical termini and be of sufficient length to address environmental matters on a broad scope, (2) have independent utility or independent significance, i.e., be usable and be a reasonable expenditure even if no additional transportation improvements in the area are made, and (3) not restrict consideration of alternatives for other reasonably foreseeable transportation improvements.

31. Response to comments on the Draft Need and Purpose and Draft Agency Coordination and Public Involvement Plan (ACPIP).

Information received from agencies and the public are being considered in the refinement of the Need and Purpose statement and the ACPIP. The Need and Purpose statement and ACPIP are being revised and will be made available on the NHHIP website, at the TxDOT Houston District office, and at public meetings.

Responses to Comments

Several commenters asked why the tunnel alternative was not included in the Need and Purpose and Draft ACPIP. These two documents do not include details about project alternatives. The documents were provided to give agencies and the public information for their review about the need for and purpose of the proposed project, and how FHWA and TxDOT plan to coordinate with agencies and the public. The presentation at the scoping meeting provided information about TxDOT's goals, including the commitment to evaluate the use of tunnels as an alternative in areas of constrained right-of-way.

One commenter asked that additional scoping meetings be held during the study process for the project, prior to the DEIS. The scoping meeting was held at the initiation of the NEPA process, prior to initiating work on the development of alternatives. The ACPIP includes a proposed schedule for planned meetings and project milestones and describes the study process and agency and public review in detail. Three additional public meetings are planned during the development and evaluation of alternatives, prior to distribution of the Draft Environmental Impact Statement (DEIS). A public hearing will be held after distribution of the DEIS. It is not expected that the DEIS would be complete before 2014. A final decision on the proposed project will not be made by TxDOT and FHWA until after agencies and the public have the opportunity to comment on the Final Environmental Impact Statement (FEIS). FHWA and TxDOT will offer many opportunities for agency and public input throughout the study process.

32. Response to requests for facilitating receipt and understanding of project information.

Commenter(s) who requested to be included on the project mailing list have been added to the list.

Commenter(s) who asked to be kept informed or updated on the project will be included on project communications, such as newsletters and emails. In addition, TxDOT will provide information on the website and via the Public Information Office when there is news regarding the NHHIP.

One commenter asked for definitions of the terminology used in the study, such as right-of-way for freeways. A list of common terms used in the NHHIP will be prepared for the NHHIP website and will be available for public meetings. At public meetings, the project team is available to explain terminology. Also, the TxDOT Houston District Public Information Office can answer questions.

33. Response to general comments.

Comment noted.