



TEXAS DEPARTMENT OF TRANSPORTATION



## **NORTH HOUSTON HIGHWAY IMPROVEMENT PROJECT**

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Environmental Impact Statement  
and Preliminary Engineering  
4<sup>th</sup> Public Meeting  
April 23, 28, and 30, 2015

Welcome to the Fourth Public Meeting for the North Houston Highway Improvement Project, located in Harris County, Texas.

This evening's meeting is an integral part of the Environmental Impact Statement process and Preliminary Engineering for this project.

We greatly appreciate your participation.

Detailed information about opportunities for public involvement will be provided at this evening's meeting.

## NORTH HOUSTON HIGHWAY IMPROVEMENT PROJECT

The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried-out by TxDOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated December 16, 2014, and executed by Federal Highway Administration and TxDOT.

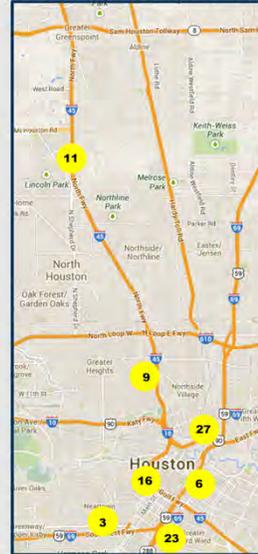
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Prior to December 16th, 2014, the Federal Highway Administration, also known as FHWA, reviewed and approved documents prepared under the National Environmental Policy Act, known as NEPA; however, on December 16th, 2014 the Texas Department of Transportation assumed responsibility from FHWA for reviewing and approving certain assigned NEPA environmental documents. The Texas Department of Transportation will approve the North Houston Highway Improvement Project Draft and Final Environmental Impact Statements.

## NEED FOR AND PURPOSE OF PROPOSED PROJECT

- Need for Proposed Project
  - Population and employment increases
  - Existing and future I-45 traffic
  - Current design standards and improved safety
  - Efficient traffic movement, including during evacuation events
- Purpose of Proposed Project
  - Manage congestion
  - Enhance safety
  - Improve mobility and operational efficiency

Top 100 Congested Roadway Segments



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The proposed North Houston Highway Improvement Project is needed to address existing and future roadway traffic congestion that would result from expected increases in population and employment in the Houston metropolitan area.

The 2014 ranking of the 100 most congested road segments in Texas listed Segments of I-45 in the project area as the 9<sup>th</sup>, 11<sup>th</sup>, and 16<sup>th</sup> most congested. US 59 and I-10 in downtown Houston were ranked as 3<sup>rd</sup>, 6<sup>th</sup>, and 27<sup>th</sup> most congested.

The project is also needed to bring the roadway up to current design standards, which would improve safety and provide for more efficient movement of people and goods. An improved roadway will aid in emergency evacuation.

The purpose of the proposed project is to create additional roadway capacity to manage congestion, enhance safety, and to improve mobility and operational efficiency.

## RECOMMENDED ALTERNATIVES

Project divided into 3 Segments

- Segment 1 – Beltway 8 to I-610
  - Segment 2 – I-610 to I-10
  - Segment 3 – Downtown Loop System
- One Proposed Recommended Alternative for each segment
  - See exhibits in the open house area for maps, diagrams, and details



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The project area for the North Houston Highway Improvement Project extends along I-45 from Beltway 8 North to south of downtown Houston.

To assist in the design and analysis of alternatives, the project area was divided into three segments:

SEGMENT 1, shown in green, is from Beltway 8 North to I-610

SEGMENT 2, shown in purple, is from I-610 to I-10

SEGMENT 3, shown in orange, is the Downtown Loop System, including connections to US 59 and State Highway 288

After holding agency and public meetings in November 2013, the study team continued evaluating alternatives for the proposed project, and identified one Proposed Recommended Alternative for highway improvements for each study segment.

## PURPOSE OF 4th PUBLIC MEETING

- Present and gather your input on:
  - Preliminary evaluation of Reasonable Alternatives
  - Proposed Recommended Alternative
    - Segment 1
    - Segment 2
    - Segment 3



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- At this evening's meeting we are asking for your comments on
  - the preliminary results of the evaluation of the Reasonable Alternatives presented in November 2013, and
  - the Proposed Recommended Alternative for each study segment.

## PURPOSE OF 4th PUBLIC MEETING (continued)

- Present the project timeline, history, and background
- Explain the next steps
- Receive your written comments
- Encourage your continued involvement



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At this meeting, we are also presenting

- the project timeline, history, and background, and
- the next steps in the project development process.

We will

- receive your written comments, and
- explain how you can continue to be involved in the study process.

## PURPOSE OF 4th PUBLIC MEETING (continued)

- View exhibits and talk with project team
- Review information from prior meetings at the Reference Table

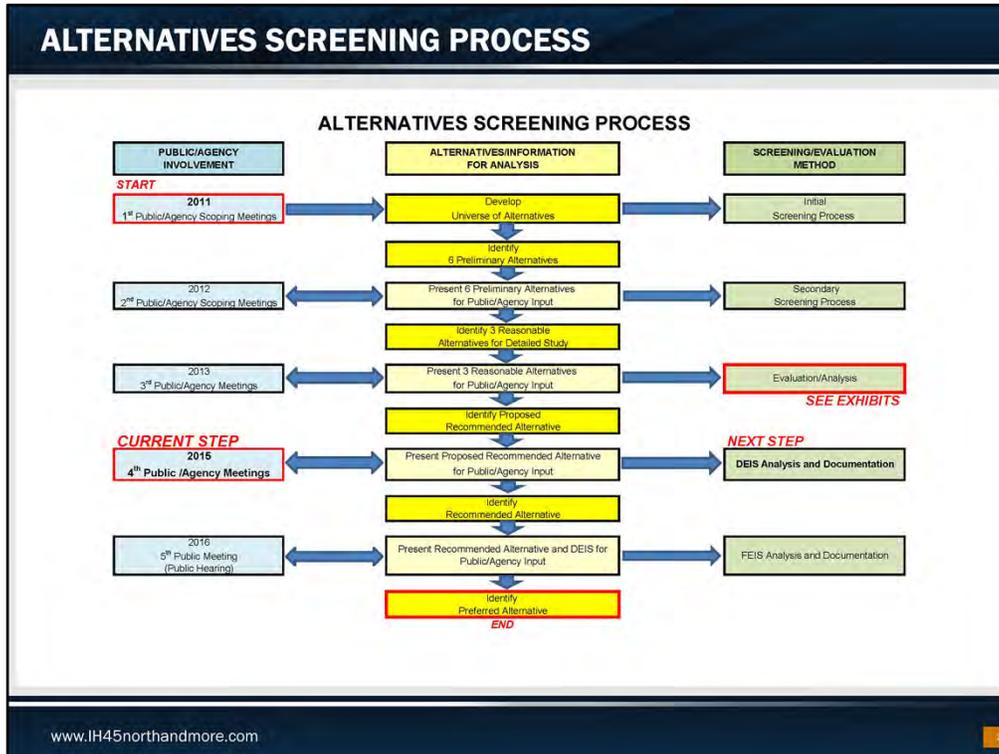


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Information on the Alternatives Evaluation Process and the Proposed Recommended Alternative is available on the exhibits presented at this evening's meeting and on the project website.

For those who were not able to attend the previous public meetings, information provided at those meetings about project alternatives and the evaluation process is available at this meeting and on the project website.



The diagram on this slide shows the alternatives evaluation process that is being followed throughout the development of this project.

This diagram is available for you to view as an exhibit in the open house area at this evening's meeting, and on the project website.



## SINCE THE 3<sup>rd</sup> PUBLIC MEETING

- Evaluated the Reasonable Alternatives
  - Project Need and Purpose, and Goals
  - Public, Agency, and other Stakeholder feedback
  - Engineering, Traffic, and Environmental Studies
- Revised Reasonable Alternatives
- Identified the Proposed Recommended Alternative for each segment

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The team evaluated the Reasonable Alternatives that were presented in November 2013 in consideration of

- the Project Need and Purpose,
- the Project Goals,
- public and agency feedback from prior meetings,
- input from additional meetings with stakeholders, and
- engineering, traffic, and environmental studies.

During this evaluation, the team revised the Reasonable Alternatives to address comments received, and to develop a single project for the study area.

The team then identified the Proposed Recommended Alternative presented at this evening's meeting.

# EVALUATION AND ANALYSIS PROCESS

SEGMENT 1: BELTWAY 8 TO I-610

PRELIMINARY SUBJECT TO CHANGE

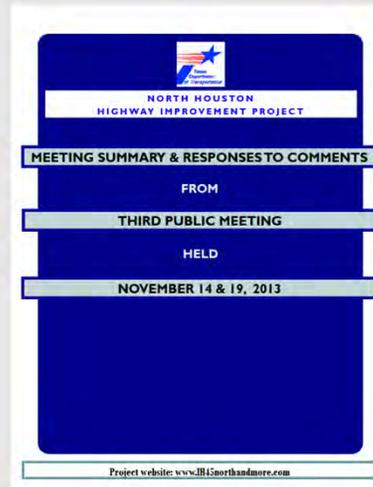
EVALUATION CRITERIA		Evaluation of Reasonable Alternatives														
Alternative	Description	Engineering Tradeoffs														
		Cultural Resources			Natural Resources			Soils			Social and Economic Impacts			Historic Resources		
		Prehistoric Cultural Resources	Historic Cultural Resources	Archaeological Resources	Biological Resources	Wildlife	Recreation	Scenic Resources	Soils	Seismicity	Transportation	Land Use	Community	Employment	Public Utilities	Historic Resources
	<p><b>Requirements Common to Segment 1 Alternatives:</b></p> <ul style="list-style-type: none"> <li>Complete implementation of all design proposals.</li> <li>Addition of three (3) footings and four (4) in each direction.</li> <li>Addition of 10-ft wide shoulders.</li> <li>Addition of 10-ft wide shoulders along frontage roads.</li> </ul> <p><b>Additional segment-specific requirements for Alternatives:</b></p>															
Alternative 4	<ul style="list-style-type: none"> <li>Addition of four (4) ft wide managed lanes.</li> <li>Three Right-of-Way (ROW) required mostly along the west side of I-45.</li> </ul>															
Alternative 5	<ul style="list-style-type: none"> <li>Addition of four (4) ft wide managed lanes.</li> <li>Three Right-of-Way (ROW) required mostly along the east side of I-45.</li> </ul>	<b>SEE EXHIBITS FOR COMPLETED MATRICES</b>														
Alternative 7	<ul style="list-style-type: none"> <li>Addition of four (4) ft wide managed lanes (in a single structure).</li> <li>Three Right-of-Way (ROW) required on both sides of I-45.</li> </ul>															

This is an example of the preliminary evaluation matrix that was completed for the Reasonable Alternatives for each study segment.

The three evaluation matrices are available for you to view at this evening's meeting, and are on the project website.

## INPUT FROM 3<sup>rd</sup> PUBLIC MEETING

- Consider impacts to businesses, employment, neighborhoods and homes
- Extend comment period
- Alternatives analysis process
- Design alternatives



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More than 200 comment forms, letters, and emails were received during the comment period for the third public meeting.

Responses to comments are in the Public Meeting Summary and Responses to Comments document prepared for the third public meeting, which can be viewed at this meeting and on the project website.



## PROPOSED RECOMMENDED ALTERNATIVE: SEGMENT 1

View of Proposed Improvements between Beltway 8 and Airline Drive



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This rendering shows the section between Beltway 8 and Airline Drive. Approximately 170 to 225 feet of additional right of way would be required in this section. The Proposed Recommended Alternative also accommodates the Shepherd Drive direct connector project that is currently under construction.

## PROPOSED RECOMMENDED ALTERNATIVE: SEGMENT 2

### ■ Segment 2 Features

- New Roadway Capacity
  - Add four (4) managed lanes
  - Add full-width shoulders
  - Add bike/pedestrian features along frontage roads
- Between I-610 and Cavalcade St.
  - Mainlanes are elevated
  - Frontage roads are at grade
  - Approximately 10 to 80 feet of additional right of way
- Between Cavalcade St. and Quitman St.
  - Mainlanes are depressed
  - Frontage roads are at grade
  - No new right of way required, except at intersections



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The Proposed Recommended Alternative for Segment 2 provides new capacity by adding four managed lanes, and provides added safety features such as full-width shoulders and accommodations for bikes and pedestrians along the frontage roads.

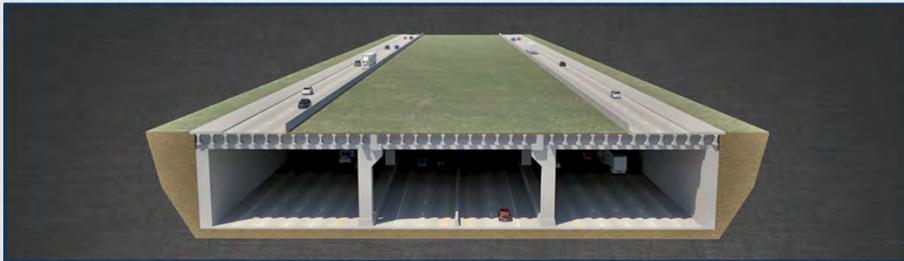
Approximately 10 to 80 feet of additional right of way would be required between I-610 and just south of Cavalcade Street. No new right of way would be required south of that area, except at intersections.

## PROPOSED RECOMMENDED ALTERNATIVE: SEGMENT 2

View of Proposed Improvements near North Main St.



View of Proposed Improvements near North Main St. with Potential Green Space



NOTE: Green space option is conceptual only and would require separate development and funding.

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To minimize right of way impacts, a below grade option was developed as shown in the top rendering. This section places the mainlanes and managed lanes below grade, while the frontage road maintains its access at grade.

This configuration provides an opportunity to utilize the area between the frontage roads as green space. This green space option is conceptual and would require separate development and funding.







This alternative realigns I-45 to be parallel with I-10 and US 59 within the downtown area.

This alternative would also enhance safety and mobility by improving horizontal curves on I-10 and US 59.

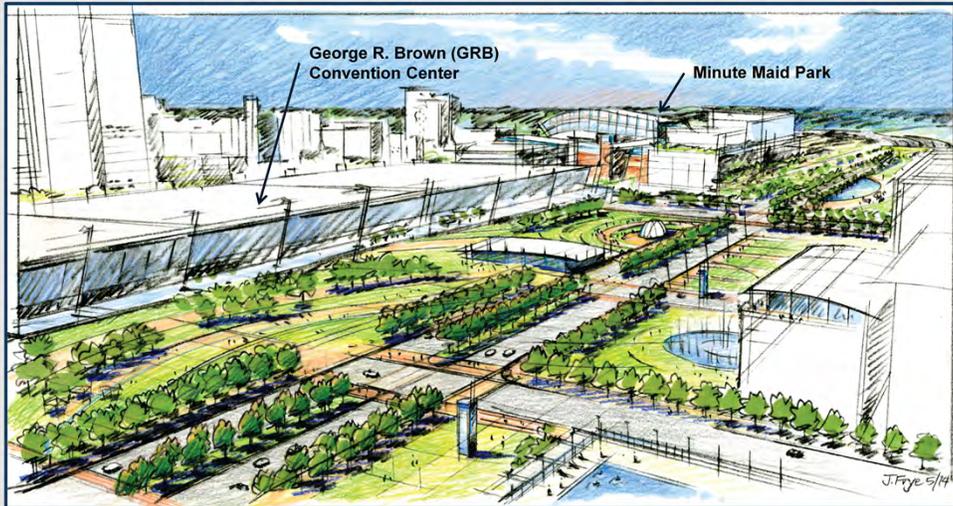
I-10 express lanes are proposed from west of I-45 to east of US 59, to allow through traffic on I-10 to bypass Downtown.

US 59 would be below grade (or depressed) from Spur 527 to Downtown and the existing I-45 Pierce Elevated would be removed, enhancing the visual sight line of the Midtown and Downtown areas.

The proposed managed lanes in Segments 1 and 2 would terminate into the same Downtown streets as the existing managed lane.

### PROPOSED RECOMMENDED ALTERNATIVE: SEGMENT 3

View of Potential Green Space Option near the GRB Convention Center



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Similar to Segment 2, the below grade configuration would provide an opportunity to utilize the area between the frontage roads as green space. This green space option is conceptual and would require separate development and funding.

## NEXT STEPS

- Document and compile Public and Agency Comments
- Determine if any adjustments are needed to the Proposed Recommended Alternative
- Document the alternatives evaluation in the Draft Environmental Impact Statement
- Identify the Recommended Alternative
- Present to the public and agencies at Public Hearing in early 2016

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Following this meeting, the project team will:

- Document and compile Public and Agency Comments
- Determine if any adjustments are needed to the Proposed Recommended Alternative, based on comments and the continuing engineering and environmental studies
- Document the detailed analysis of the Reasonable Alternatives in the Draft Environmental Impact Statement
- Identify the Recommended Alternative for each study segment, and
- Present this information to the public and agencies at a Public Hearing in early 2016

## HOW TO GET INVOLVED

- Attend public meetings
- Inform family, friends, coworkers, neighbors
- Discuss with elected officials
- Visit the project website:

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To get involved in the project development and environmental review process, you may

- Attend the public meetings
- Inform family, friends, coworkers, and neighbors
- And discuss the project with elected officials

The project website will be updated during the evaluation process with project status and upcoming public participation opportunities.

## HOW TO SUBMIT COMMENTS

- Submit comments by Thursday, May 14, 2015

- Written

- Comment box at this meeting
- Mail

Director of Project Development  
Texas Department of Transportation  
P.O. Box 1386  
Houston, Texas 77251-1386

- Email

- Website: [www.IH45northandmore.com](http://www.IH45northandmore.com)
- Click “Comments/Contact Us”
- [HOU-piowebmail@txdot.gov](mailto:HOU-piowebmail@txdot.gov)

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To provide written comments on this project, there is a comment box provided at this evening's meeting, or you can mail comments to the Texas Department of Transportation.

You may also submit comments through email by going to the project website and selecting the “Comments/Contact Us” tab, or you may send them to the email address on this slide.

The addresses presented on this slide are also provided in the meeting handout.

For your comments to be included as part of the official record of this meeting, please submit emails by Thursday, May 14, 2015, or if mailing, comments must be postmarked by this date.



**THANK YOU FOR ATTENDING!  
PLEASE VISIT THE OPEN HOUSE AREA**

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Thank you for attending this evening's meeting and providing your feedback.

Please proceed to the open house area to view the exhibits and discuss the project with the project team.



**THIS PRESENTATION WILL RESTART IN 2 MINUTES**



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This presentation will restart in two minutes.