Dallas to Houston High-Speed Rail
Environmental Impact Statement

Public Scoping Meetings
Presented October 21-29, 2014
Agenda

• Introductions
• Purpose of Scoping
• Proposed Project
• National Environmental Policy Act (NEPA) Process
• Initial Screening Analysis
• Agency/Public Involvement
• Next Steps
• Public Comment Session
Purpose of Scoping

• To obtain public and agency input to be used in determining major issues and impacts
• This input is used in the proposed project decision-making process
• This is then documented in the Environmental Impact Statement
What is an EIS?

• An Environmental Impact Statement (EIS) is a document that describes the impacts on the environment as a result of a proposed action
• Mandated by NEPA for major federal projects
• The document provides project information, such as:
  – Reasons for the proposed project
  – Alternatives considered
  – Comparison of alternatives
  – Environmental study areas
  – Possible environmental impacts
  – Proposed mitigation of environmental impacts
  – Preferred Alternative
Dallas to Houston High-Speed Rail Environmental Impact Statement

PROPOSED ACTION
What is High-Speed Rail (HSR)?

- Streetcar
- Light Rail Transit
- Commuter Passenger Rail
- High-Speed Passenger Rail
Is There a Need for HSR between Dallas and Houston?

DALLAS/ FORT WORTH

6.4 MILLION PEOPLE

BY 2035

12.6 MILLION PEOPLE

GREATER HOUSTON

5.9 MILLION PEOPLE

BY 2035

12 MILLION PEOPLE
Is There a Need for HSR between Dallas and Houston?

- **Congestion**: By 2035
- **Average Travel Speed**: By 2035
  - Speed: 60
- **Average Travel Time**: By 2035
  - 6.5 Hours
Is There a Need for HSR between Dallas and Houston?

- Air travel between Dallas and Houston
  - 65 minute travel time
  - Minimum 60 minute gate time
  - Subject to bad weather
Why Here?

• Need for alternative transportation option to serve significant and growing population centers

• Ideal distance
  – Dallas to Houston: 240 miles
  – Travel by HSR is less than 90 minutes

• Ideal location and topography
  – Straight
  – Flat
  – Undeveloped
  – No tunnels
What is the Proposed Project?

- 240-mile high-speed passenger rail between Dallas and Houston
- Bullet train technology – N700-I Tokaido Shinkansen
- 90-minute travel time
- Speeds up to 205 mph
- “Closed” railroad system (dedicated to HSR)
- Terminal stations in Dallas and Houston with potential for an intermediate station
- Privately funded
Who is Involved?

Applicant

Texas Central Railway

Contractors

Approving Agencies

Federal Railroad Administration

Texas Department of Transportation

URS
Dallas to Houston High-Speed Rail Environmental Impact Statement

NEPA PROCESS
What is NEPA?

• Federal law that outlines policies to consider the environment and
  – Provides environmental information to public officials and citizens before decisions are made and before actions are taken
  – Informs decision-makers and the public of reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment

• Public involvement is a key part of the NEPA process
  – Scoping
  – Draft EIS
What is the Federal Action?

- FRA must approve system safety
- Rule of Particular Applicability (RPA)
  - No HSR regulations currently exist in US
  - Will describe how system will be regulated
- Project will require approvals from numerous federal agencies
  - FRA
  - FHWA
  - USFWS
  - USACE
  - EPA
  - FTA
- Thus, NEPA applies
What is the NEPA Process?

National Environmental Policy Act Process

- FRA Publishes Notice of Intent (NOI)
- Identification and Screening of Alternatives
- Agency Scoping/Public Scoping Meetings
- Final Screening of Alternatives
- Engineering Analysis
- Environmental Analysis
- Agency Coordination
- Identify Preferred Alternative
- Document Preparation
- FRA/TxDOT Review Draft EIS
- FRA Approves Draft EIS and Circulates for Public and Agency Review
- Draft EIS is Made Available for Public Review
- Public Hearing
- Public and Agency Comment Period
- Comments Incorporated into Final EIS
- FRA/TxDOT Review of Final EIS
- FRA Approves Final EIS and Circulates
- FRA Issues Record of Decision (ROD)
Purpose and Need

• Purpose

To construct and operate reliable, safe and economically viable passenger high-speed rail service between Dallas and Houston

• Need

To address mobility- and congestion-related issues in the I-45 corridor

To approve the Applicant’s proposed high-speed rail investment and meet FRA’s mission to “enable the safe, reliable movement of people and goods for a strong America, now and in the future”

To provide connectivity to regional transportation systems

To support all federal approvals and permits
ALTERNATIVES CONSIDERED
Screening and Evaluation Process

**Step 1**
- TCR Alternatives
- Public Scoping Alternatives

**FRA Screening Evaluation**

**Step 2**
- Final Scoping Report
- Final Alternatives
- Draft Environmental Impact Statement
- Preferred Alternative

**Preliminary alternatives** are identified as those that meet the operational, technical, and economic goals of the applicant. Additional alternatives identified through public scoping may be also evaluated. Evaluation measures may be qualitative at this stage. FRA will conduct an initial screening analysis to identify which alternatives will be carried forward into the draft EIS.

**Final alternatives** are those that best meet the purpose and need of the project. In addition to the evaluation measures used in the preliminary step, additional analysis will be required to quantitatively measure potential impacts.

Through the DEIS, a **preferred alternative** will emerge that meets the business case requirements and the project’s purpose and need.
Our approach to developing alignments

- Optimize alignment for maximum operating speed
- Minimize right-of-way requirements
- Minimize risks to safe train operations
- Maximize connectivity to regional transportation systems
- Minimize required grade separations with roadways and freight rail
- Minimize construction impacts and costs
- Minimize environmental impacts
Identifying Alternatives

• Four primary corridors
  – I-45
  – UPRR
  – BNSF RR
  – Utility

• Nine alternatives
Alternatives Screening Process

• Qualitative and quantitative criteria tied to Purpose and Need
• Criteria grouped into three categories
  – Financial and Project Delivery Considerations
  – Engineering Considerations
  – Environmental Considerations
• “Stop Light” chart used to visually assess strengths and weaknesses of each alternative
• FRA reviewed and verified criteria used to identify the alternative alignments for detailed evaluation in the DEIS
### Scoring – Equally Weighted Results

The Scoring – Equally Weighted Results table compares various alternatives based on financial, engineering, and environmental considerations. The table uses a stoplight chart to visually represent the results:

- **Green** indicates that the alternative is recommended for further evaluation.
- **Yellow** indicates that the alternative is not recommended for further evaluation, but it may be re-evaluated upon introduction of new data.
- **Red** indicates that the alternative is not recommended for further evaluation.

#### Alternative Evaluation Stoplight Chart

<table>
<thead>
<tr>
<th>Weighting</th>
<th>Group</th>
<th>BNSF w/ Option 1</th>
<th>BNSF w/ Option 2</th>
<th>BNSF w/ Option 3</th>
<th>BNSF w/ Option 4</th>
<th>I-45 w/ Hardy Option</th>
<th>I-45</th>
<th>UPRR</th>
<th>Utility Corridor w/ I-45</th>
<th>Utility Corridor</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Financial Considerations</td>
<td>2.9</td>
<td>2.1</td>
<td>2.3</td>
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<td>1.7</td>
<td>1.7</td>
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<td>2.6</td>
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<tr>
<td>1</td>
<td>Environmental Considerations</td>
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<td>1.8</td>
<td>1.8</td>
<td>1.8</td>
<td>1.8</td>
<td>1.8</td>
<td>2.0</td>
<td>1.8</td>
<td>2.1</td>
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</tbody>
</table>

#### FINAL Alternative Score

- **Financial Considerations**: 6.6
- **Engineering Considerations**: 5.6
- **Environmental Considerations**: 5.8

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<th>Result</th>
<th>Score</th>
<th>Recommendation</th>
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<tr>
<td>&gt;6.5</td>
<td>6.6</td>
<td>Recommended for further evaluation</td>
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<tr>
<td>5.0 - 6.4</td>
<td>5.7</td>
<td>Not recommended for further evaluation, but these alternatives may be re-evaluated upon introduction of new data.</td>
</tr>
<tr>
<td>&lt;5.0</td>
<td>5.6</td>
<td>Not recommended for further evaluation</td>
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### Notes

- **Applicant’s focus is on financial and project delivery considerations**
- **FRA evaluated from a number of perspectives**
### Scoring – Sensitivity Analysis

#### Alternative Evaluation Stoplight Chart

<table>
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<td>2</td>
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<td><strong>6.6</strong></td>
<td><strong>7.7</strong></td>
<td><strong>7.8</strong></td>
<td><strong>9.7</strong></td>
</tr>
</tbody>
</table>

**LEGEND**
- **>8.0** Recommended for further evaluation
- **7.0 - 7.9** Not recommended for further evaluation, but these alternatives may be re-evaluated upon introduction of new data.
- **<7.0** Not recommended for further evaluation

- **Sensitivity analysis to determine strength of these two alternatives**
- **Weighting did not impact their ranking with the other seven alternatives**
Screening Results

- Alternatives for detailed evaluation
  - BNSF Option 1
  - Utility Alternative
Screening Results

• Alternatives considered, but eliminated from further evaluation
  - BNSF Option 2
  - BNSF Option 3
  - BNSF Option 4
  - I-45 Hardy Option
  - I-45
  - UPRR
  - Utility Corridor with I-45
Initial Station Screening Criteria

• Tied to specific alternative alignments
• Screening criteria
  – Availability of property
  – Access to rail alignment corridors being studied
  – Access to public transportation network
  – Access to highway/roadway network
  – Annual ridership and revenue potential
  – Relative “Last Mile” Costs
  – Station area development potential
Station Alternatives

- Dallas Station Alternatives
  - Three alternatives
  - Each served by all alternative alignments
Station Alternatives

- Intermediate Station Alternative
Station Alternatives

- Houston Station Alternatives
  - Several alternatives
  - Stations dependent on alternative alignment
Additional Analyses Required

- Property availability
- Access to transportation network
- Refined annual ridership and revenue potential
- Refined relative “Last Mile” costs
- Potential impacts to the surrounding communities
- Station area development potential
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ENVIRONMENTAL ANALYSIS
Environmental Resource Areas

- Transportation
- Land Use
- Socioeconomic & Demographic Conditions
- Neighborhoods, Community Services & Facilities
- Cultural, Historic & Archaeological Resources
- Water Quality
- Floodplains
- Waters of the US (wetlands)
- Natural Resources & Ecosystems
- Soils & Geology
- Hazardous Materials
- Noise & Vibration
- Electromagnetic Fields (EMF)
- Air Quality
- Greenhouse Gas (GHG)/Climate Change
- Safety & Security
- Utilities
- Construction
- Environmental Justice
- Energy
Agency/Public Involvement

• Agency Stakeholder Involvement Plan (ASIP)
• Public Scoping Meetings
• Agency Coordination
• Opportunities for specific geographic and issue input
• Project Website
• Toll-free telephone hotline
Scoping Meetings

- **October 21, 2014**
  Dallas Infomart
  1950 N. Stemmons Frwy #7000, Dallas, TX

- **October 22, 2014**
  IOOF Event Center
  601 N. 45th St., Corsicana, TX

- **October 23, 2014**
  Teague Community Center
  511 Main St., Teague, TX

- **October 27, 2014**
  Brazos Center
  3232 Briarcrest Dr., Bryan, TX

- **October 28, 2014**
  Veterans Conference Center
  455 SH 75 N. Huntsville, TX

- **October 29, 2014**
  NRG Center, Second Floor
  1 Reliant Parkway, Houston, TX
Join Us for Public Scoping Meetings on the Dallas to Houston High-Speed Rail

The Federal Railroad Administration (FRA) and Texas Department of Transportation (TxDOT) are preparing an Environmental Impact Statement (EIS) for a 240-mile high-speed rail project from Dallas to Houston proposed by the Texas Central High-Speed Railway, LLC (TCR)

PUBLIC SCOPING MEETINGS

Please join us for a Public Scoping Meeting on the Dallas to Houston High-Speed Rail Environmental Impact Statement (EIS)

Upcoming Meetings:

[Dates and locations]
### Agency Coordination

**Federal**
- DOI/NPS
- EPA*
- FHWA*
- FTA*
- HUD
- USACE*
- USCG
- USDA
- USFWS*
- Tribal entities

**State**
- THC – initiated October 7th
- TPWD
- TCEQ
- GLO

**Local stakeholders**
- DART/Houston Metro
- Municipalities/counties
- MPOs

* Indicates preliminary desire to act as Cooperating Agency
Cultural Resources and Public Involvement

- National Historic Preservation Act of 1966
- Must consider the effects of proposed action on historic properties
- Public participation is required throughout the process

Flowchart:
- Initiate Section 106 Process
- Identify Historic Properties
- Assess Adverse Effects
- Consult with Texas State Historic Preservation Officer

Public Involvement and Consultation
Dallas to Houston High-Speed Rail Environmental Impact Statement

NEXT STEPS
What Can You Do?

• Scoping Period Ends – November 14
  – Submit a comment today
  – Email a comment (DallasHoustonHSR@urs.com)
  – Submit a comment on the website

• For comments to be included in the Scoping Report they must be submitted by November 14

• Comments after November 14 will still be considered

• Follow us on dallashoustonhsr.com

• Questions? Call our project hotline at 1-844-541-1875
Schedule

- Detailed Evaluation of Alternatives (Dec 2014)
- Preliminary Draft EIS (Spring 2015)
- Draft EIS (Summer/Fall 2015)
- Public Hearing (Fall 2015)
- Final EIS (Spring 2016)
- ROD (Summer 2016)
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PUBLIC COMMENT SESSION
Public Comment Session

- Each speaker granted three minutes
- Comments should relate to
  - NEPA process
  - Alternatives
  - Anticipated issues and impacts
- Comments will be documented
THANK YOU