The Irving to Frisco Corridor Project Advisory Committee meeting will begin shortly.

Please mute your microphones and enter your name and organization in the chat box.

Thank you.
IRVING TO FRISCO PASSENGER RAIL CORRIDOR STUDY

Project Advisory Committee
3rd Meeting

August 6, 2020
Agenda

• Welcome/Meeting Protocols
• Public Engagement
• Compatible Initiatives
• Northern Extension of Study Limits
• Current Station Screening Efforts
• Alternative Demographics near Station Locations
• Interlining Opportunities

• Analyzing Transit Demand for Corridor
• People Mover Locations
• Funding Options for Potential Legislative Request
• Collin County Transit Study Update
• Questions & Discussion
• Next Steps
Welcome/Meeting Protocols

• Welcome

• Meeting Protocols
  ▪ Please keep your microphone muted unless speaking
  ▪ Please enter your name and organization into the Chat Box
  ▪ Please utilize the Raise your hand feature to ask a question or make a comment; you may also use the Chat Box for questions and comments
  ▪ If joining by phone, please hold your questions and comments until specified times during presentation

• Committee Structure
  Discussed in Survey Results
Public Engagement

• Survey Results
  Continue to hold two separate committee meetings

• Public Engagement Tools
  Online Toolkit:
  ▪ One-page overview of passenger rail corridor study
  ▪ Talking points and messaging
  ▪ Study information
  ▪ Materials for public meetings

August 6, 2020
Compatible Initiatives

• Passenger rail study of Irving to Frisco corridor

• DCTA study of transit-oriented development along KCS corridor

• Rail coordination with BNSF
  Influences skip-stop operation analysis
Partnerships

• Established Relationships with Class I Railroads, Transit Agencies, and Short Line Railroads within the Region

• Provides Greater Opportunities for Public-Private Partnerships

• Creates Possibilities to Work Collaboratively - Balancing City, County, and Rail Interests
Clear Path™ Technology

• Implementation of Clear Path Technology

• In Use in the Greater Chicago Area

• Will Enable all Agencies and Railroads to Exchange Timely, Accurate, and Actionable Information on Train Movements in the Region

• Will Help Identify Infrastructure Projects to Increase Rail Capacity and Efficiency Throughout the Region
TxDOT Regional Rail Study

• Purpose: To conduct a comprehensive analysis of the freight and passenger rail transportation network to identify mutually beneficial mobility improvements

• Phase I and Phase II

• Identified specific improvements that are needed to ensure successful freight and passenger operations in the corridor
System Status

• Current and Future Considerations
• Freight and Passenger Interactions
• Planned Freight and Passenger Growth
• Dallas and Fort Worth Bottlenecks
• Long-Term Mobility Plan Projects – Road and Rail
Northern Extension of Study Limits

• Celina Presentation
• Prosper Presentation
Current Station Screening Efforts

• City Coordination Efforts
  ▪ Virtual meetings
  ▪ Emails
  ▪ Survey responses

• Overall Station Screening Efforts
  ▪ Finalized screening criteria
  ▪ Screening example
Potential Station Locations per City Input

- **11 High** potential stations (green star)
- **3 New** potential stations (blue circle)
- **2 Alternate** potential stations (green circle)
- **8 Low** potential stations (gray circle)
- Received feedback from all cities along the corridor

August 6, 2020
Potential Station Locations per City Input

SOUTH SECTION

- Irving Stations
  - Downtown Irving (High Potential)
  - South Las Colinas (High Potential)

- Farmers Branch Station
  - Valley View Lane (High Potential)
  - Royal Lane (Alternate)
Potential Station Locations per City Input

MIDDLE SECTION

• Carrollton Stations
  ▪ Downtown Carrollton (High Potential)
  ▪ Keller Springs Road (New)
  ▪ Hebron Parkway (High Potential)

• The Colony Station
  Sam Rayburn – South (Alternate)
Potential Station Locations per City Input

NORTH SECTION

• Frisco Stations
  ▪ Sam Rayburn – North (High Potential)
  ▪ Stonebrook Parkway/Grand Park (High Potential/New)
  ▪ Frisco CBD (High Potential)
  ▪ Panther Creek Parkway (High Potential)

• Prosper Station
  ▪ Downtown Prosper (High Potential)

• Celina Station(s)
  ▪ Frontier Parkway (New)
  ▪ Downtown Celina (High Potential)
Potential Station Locations per City Input

Initial cost-effective assessment vs.
Potential station locations per city input

August 6, 2020
Collin County
Irving to Frisco Rail Corridor
Station Screening Criteria and Example
Station Screening will consider travel patterns for all trip purposes within and beyond a ½ mile radius of the potential station location.
### Regional Rail Station Selection Criteria

#### Initial Screening Example

<table>
<thead>
<tr>
<th>Objective</th>
<th>Suggested Metric(s)</th>
<th>Station Alternatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community/Stakeholder Preference</td>
<td>Local government support; planning/zoning; future land use plans</td>
<td><img src="Image" alt="Green" /></td>
</tr>
<tr>
<td>Access and Connectivity</td>
<td>Adjacent roadway volumes; first/last mile connections; transit connections; land use patterns; roadway network density; ridership catchment area</td>
<td><img src="Image" alt="Red" /></td>
</tr>
<tr>
<td>Physical Impacts</td>
<td>(Re)Development potential; right-of-way; property; environmental; utility impacts (initial screening)</td>
<td><img src="Image" alt="Yellow" /></td>
</tr>
<tr>
<td>Operations</td>
<td>Station spacing; tangent (straight) track section</td>
<td><img src="Image" alt="Yellow" /></td>
</tr>
<tr>
<td>Overall Score</td>
<td></td>
<td><img src="Image" alt="Yellow" /></td>
</tr>
</tbody>
</table>
## Regional Rail Station Selection Criteria

**Initial Screening Example**

<table>
<thead>
<tr>
<th>Objective</th>
<th>Suggested Metric(s)</th>
<th>Evaluation Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community/Stakeholder Preference</td>
<td>Local government support; planning/zoning; future land use plans</td>
<td>• Local staff and elected officials concur with the station location?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Station area zoned for transit-supportive development types?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Willingness to re-zone or up-zone to support TOD?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Community indicated support for a regional rail station?</td>
</tr>
<tr>
<td>Access and Connectivity</td>
<td>Adjacent roadway volumes; first/last mile connections; transit connections; land use patterns; roadway network density; ridership catchment area</td>
<td>• Average daily traffic volumes?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Bicycle and pedestrian connections?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Transit routes nearby and level of service?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Street network and grid structure?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Intersection density?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Households within 15-minute drive time?</td>
</tr>
<tr>
<td>Physical Impacts</td>
<td>(Re)Development potential; right-of-way; property; environmental; utility impacts (initial screening)</td>
<td>• Adjacent and nearby parcels suitable for development or redevelopment?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Single-family homes in immediate proximity of the station?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Railroad right-of-way sufficient for station and/or additional tracks?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Environmentally sensitive features nearby?</td>
</tr>
<tr>
<td>Operations</td>
<td>Station spacing; tangent (straight) track section</td>
<td>• Nearest proposed station location (at least 1 mile)?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Sufficient section of straight track to site a station and platform?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Near-level grade?</td>
</tr>
<tr>
<td>Evaluation Criteria</td>
<td>Green</td>
<td>Yellow</td>
</tr>
<tr>
<td>----------------------------------------------------------</td>
<td>-----------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Station area zoned for transit-supportive development types?</td>
<td>Station area zoned for mixed-use development at &gt;40 DU/Acre; no parking minimums; minimal to no setback requirements</td>
<td>Station area zoned for mixed-use development at &gt;20 DU/Acre; parking requirements lower than surrounding area; limited setbacks</td>
</tr>
<tr>
<td>Transit routes nearby and level-of-service?</td>
<td>&gt;3 fixed routes providing connecting service to station with average frequencies of every 30 minutes or better; on-demand service available or planned; or plans for comparable service within timeframe of rail opening</td>
<td>1-3 fixed routes providing connecting service to station with average frequencies of every 30 minutes or better; or plans for comparable service within timeframe of rail opening; on-demand service available or planned</td>
</tr>
<tr>
<td>Environmentally sensitive features nearby?</td>
<td>No sensitive habitat or water features, historical or cultural resources, wetlands or floodplains, or contaminated sites within immediate area</td>
<td>Few/minor environmental factors within immediate area</td>
</tr>
</tbody>
</table>
Alternative Demographics near Station Locations

• NCTCOG Regional Travel Demand Model
  Includes elements such as roadway and transit networks, and population and employment data to calculate the expected demand for transportation facilities.

• Uses Horizon Year of 2045 with “approved” projections for demographics, including population, employment, land uses, development plans, etc.

• In those situations where “alternative scenarios” is of interest at potential station locations, post-processing evaluation can be conducted testing alternative demographics with higher/different growth rates and their effect on ridership
Interlining Opportunities
Interlining Opportunities

Regional Rail System
Frisco Corridor Study
*Potential Future Rail*

- DDTC
- Frisco
- A-Train
- Trinity Mills
- Downtown Carrollton
- Silver Line
- DFW North
- TEXRail
- DFW IA
- T&P
- Downtown Irving
- TRE
- Union
- North McKinney
- Parker Road
- Shiloh
- Wylie

Legend:
- **Existing/Committed Routes**
- **Included in Mobility 2045**
Interlining Opportunities

Regional Rail System
Frisco Corridor Study
Frisco-Based Lines

DDTC
A-Train
Downtown Carrollton
Silver Line
DFW North
TEXRail
DFW IA
T&P
Downtown Irving
TRE
Union

Frisco
Potential Interlining Routes
- Denton to Frisco
- Frisco to Fort Worth via TEXRail
- Frisco to DFW Int'l Airport
- Frisco to Fort Worth via TRE
- Frisco to Downtown Dallas
- Plano to Frisco
- Existing and Planned Routes

North McKinney
Parker Road
Wylie
Shiloh

August 6, 2020
Regional Rail System
Frisco Corridor Study
Plano-Based Lines

Interlining Opportunities

Potential Interlining Routes
- Yellow: Plano to Downtown Irving
- Red: Plano to Frisco
- Magenta: Denton to Plano
- Black: Existing and Planned Routes

DDTC, Frisco, Downtown Carrollton, Silver Line, DFW North, DFW IA, TEXRail, TRE, T&P, Downtown Irving, Shiloh, Wylie, North McKinney, Parker Road, Union
Interlining Opportunities

Regional Rail System
Frisco Corridor Study
Irving-Based Lines

Potential Interlining Routes:
- Yellow: Frisco to Fort Worth via TRE
- Pink: Denton to Downtown Irving
- Blue: Frisco to Downtown Dallas
- Orange: Plano to Downtown Irving
- Black: Existing and Planned Routes
Analyzing Transit Demand for Corridor

NCTCOG Regional Travel Demand Model

• Demand for northern extension to Prosper & Celina
  ▪ Shorter trips?
  ▪ Longer trips?

• Measuring demand for interlining opportunities by process of elimination
Use of Location-Based Services Data

• What is LBS Data?
• Entire Dallas-Fort Worth Region – Economy of Scale
• Supplement NCTCOG’s Travel Model
  ▪ Analyze trips to and from potential stations
  ▪ Fast-developing rural areas on northern end of line
• Data Specifics
  ▪ Provided by Cambridge Systematics
  ▪ Data from first half of 2019
• Addressing COVID Effects
People Mover Locations

Initial locations for further analysis

• Las Colinas
• Legacy East/Legacy West/Stonebriar Center/The Star/Grandscape
• Downtown Frisco
• Others?
People Mover Locations

- Methodology
  - Feasibility Analysis
  - Ridership Modeling
  - Template Study: Dallas Midtown

- Next Steps
  - Updated Demographics

- Future Simulations
Funding Options

- Initial Assessment
  - Federal
  - State
  - Local
  - Other

- Schedule of funding options request for Legislature
<table>
<thead>
<tr>
<th>Program</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5307 Urbanized Area Funds</td>
<td>Formula funding for urban areas with populations over 50K.</td>
</tr>
<tr>
<td>5309 Capital Investment Grants</td>
<td>Discretionary competitive funding for major capital investments, including expanded rail, bus rapid transit, streetcar.</td>
</tr>
<tr>
<td>5339 Buses and Bus Facilities</td>
<td>Formula and competitive based funding related to bus related projects. This can be used to rehabilitate and purchase buses and related equipment as well as to construct bus-related facilities.</td>
</tr>
<tr>
<td>Better Utilizing Investments to Leverage Development (BUILD)</td>
<td>Competitive grant opportunity to invest planning and capital projects that will have a significant impact either regionally or locally.</td>
</tr>
<tr>
<td>CARES Act</td>
<td>Formula funding for COVID-19 response.</td>
</tr>
<tr>
<td>Accelerating Innovative Mobility</td>
<td>Supports projects to advance innovation in transit.</td>
</tr>
<tr>
<td>Access and Mobility Partnership Grant</td>
<td>Improve access to transit with health, transportation and other providers to support innovative projects for transportation disadvantaged.</td>
</tr>
<tr>
<td>Congestion Mitigation and Air Quality Program (CMAQ)</td>
<td>Flexible funding for projects and programs to meet requirements of the Clean Air Act.</td>
</tr>
<tr>
<td>Integrated Mobility Innovation (IMI) Grant</td>
<td>Funding for projects that demonstrate innovative and effective practices, partnerships, and technologies to enhance public transit.</td>
</tr>
<tr>
<td>State Funding</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>State Infrastructure Bank Loans</strong></td>
<td>Revolving loan fund that allows borrowers to access capital funds.</td>
</tr>
<tr>
<td><strong>Transportation Reinvestment Zone</strong></td>
<td>Captured ad valorem tax increments are set aside to finance transportation projects.</td>
</tr>
<tr>
<td><strong>Regional Mobility Authority</strong></td>
<td>Political subdivision formed by one or more counties to finance, acquire, design, construct, operate, maintain, expand, or extend transportation projects.</td>
</tr>
<tr>
<td><strong>Transportation Development Credits</strong></td>
<td>Federal funding tool that states can use to meet federal funding match requirements.</td>
</tr>
<tr>
<td>Local Funding</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Transit Fare Revenue</td>
<td>Revenue earned from carrying passengers.</td>
</tr>
<tr>
<td>Sales Tax</td>
<td>Legal authority of local governments to impose a dedicated tax.</td>
</tr>
<tr>
<td>Local Contribution</td>
<td>Funds allocated to transit out of general revenue rather than a dedicated transit fund.</td>
</tr>
<tr>
<td>In-Kind Contribution</td>
<td>Non-cash assets or services that have value that benefits those outside the contributor’s organization.</td>
</tr>
<tr>
<td>Non-Transit Related Revenue</td>
<td>Earnings received from investments, rental of buildings or property, parking fees, development fees.</td>
</tr>
<tr>
<td>Local Motor Vehicle Registration Fees</td>
<td>Flat rate fee or fee based on the vehicle value.</td>
</tr>
<tr>
<td>Other Funding</td>
<td></td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Auxiliary Transit Revenues</strong></td>
<td></td>
</tr>
<tr>
<td>- Advertisements on vehicles, fines for fare evasion.</td>
<td></td>
</tr>
<tr>
<td><strong>Air Quality Surcharge</strong></td>
<td></td>
</tr>
<tr>
<td>- One-time charge of new vehicle based on the vehicles estimated lifespan.</td>
<td></td>
</tr>
<tr>
<td><strong>Luxury Transportation Tax</strong></td>
<td></td>
</tr>
<tr>
<td>- Tax on yachts, private jets, and luxury vehicles that would help fund transportation.</td>
<td></td>
</tr>
<tr>
<td><strong>Transit for Livable Communities</strong></td>
<td></td>
</tr>
<tr>
<td>- Funding for local areas to create station plans.</td>
<td></td>
</tr>
<tr>
<td><strong>Value Capture</strong></td>
<td></td>
</tr>
<tr>
<td>- Capture future real estate values based on the enhancements from the project the fund construction.</td>
<td></td>
</tr>
<tr>
<td><strong>Special Fuel Tax</strong></td>
<td></td>
</tr>
<tr>
<td>- Tax per volume of fuel sold rather than the cost of fuel.</td>
<td></td>
</tr>
<tr>
<td><strong>Public Private Partnership</strong></td>
<td></td>
</tr>
<tr>
<td>- Collaboration between government and private sector that can be used to finance, build, and operate projects.</td>
<td></td>
</tr>
<tr>
<td><strong>Tax Rate Election</strong></td>
<td></td>
</tr>
<tr>
<td>- Taxes that increase property tax to fund other projects.</td>
<td></td>
</tr>
<tr>
<td><strong>University/Colleges</strong></td>
<td></td>
</tr>
<tr>
<td>- Partner with local university or college to fund transit.</td>
<td></td>
</tr>
</tbody>
</table>
Schedule for Legislature Request

• Request Advisory Committee member feedback

• Original deadline of October 1st for Funding Options
Collin County Transit Study Update

• Existing Conditions Report
• Transit Propensity Map of Collin County
• Similar Efforts
  ▪ Public Engagement Tools
  ▪ LBS Data
  ▪ People Mover Locations
  ▪ Funding Options
Questions & Open Discussion

• Public Engagement Tools
• Rail Coordination with BNSF
• Northern Extension of Study Limits
• Station Screening Efforts
  ▪ Other screening criteria
  ▪ Screening process
• Alternative Demographics Process
• Additional Interlining Opportunities
• Transit Demand Analysis
  ▪ NCTCOG travel demand model
  ▪ LBS data services
• Additional People Mover Locations
• Funding Options
  ▪ Additional options
  ▪ Maintain or adjust schedule
• Other
Next Steps

• Determine preferred stations for modeling
• Model preferred interlining options
• Compile alternative demographic data
• Prepare funding options for October 1 deadline

Next scheduled meeting is **September 3**
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