The Collin County Transit Study Project Advisory Committee meeting will begin shortly.

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

Thank you.
Agenda

• Meeting Protocols
• Meeting Context
• Study Milestones Schedule
• Transit Service Needs and Market Analysis Technical Report
• Transit Scenario Development Recap

• Transit Scenario Costs
• People Mover Feasibility Analysis Results
• Irving to Frisco Rail Corridor Update
• Questions & Open Discussion
• Next Steps
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
Meeting Context

Collin County: Moving Transit Further to the North

Dallas Area Rapid Transit (DART)

Cities Requesting Planning Assistance

Transportation Management Association (TMA)
Study Milestones Schedule

February
- Transit Service Needs & Market Analysis Technical Report
- Scenario Development
- Introduce Funding & Implementation Strategies

April
- Transit Scenario Costs
- People Mover Locations – Feasibility Results

May
- Transit Funding Sources (Revenue)
- Transit Supportive Economic Development Best Practices Report
Transit Service Needs and Market Analysis Update

Objective: Identify Existing and Trending

• Transit Markets
• Service Gaps
• Underserved Corridors/Areas;
• First/Last Mile Service Deficiencies

Progress:

• Building Off Transit Propensity Analysis
• Completing Draft Market Analysis and Maps of Market Conditions
• Developing Best Practices for Transit-Supportive Economic Development

Five Keys to Preparing for Transit

- Governance
- Transit-Supportive Land Use
- Transit Service Planning/Development
- Funding
- Community Support
Scenario Development- Approach

Jurisdictional Focus
- Basic Mobility
- Emerging & High Growth
- Developed & Maturing
- DART Member Cities

Phasing Component
- Near-Term (1-5 Years)
- Mid-Term (5-10 Years)
- Long-Term (10+ Years)

Transit Service Mix
- Fixed-Route
- Demand-Responsive
- Autonomous Shuttle
- People-Mover
- Vanpool
- High-Intensity Bus
- Regional Rail
NOTE: Classifications are for general guidance, individual jurisdictions may recommend changes.
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Low Transit Intensity Scenario

- Emphasis on basic mobility services
- Largely a continuation of current transit services
- Few new agreements or partnerships
- Beyond DART service area unlikely to attract new riders
Low Transit Intensity Scenario

- DART service area maintains current approach
- Collin County Transit service continues
- Balance of county gradually adds on-demand (subsidized taxi or equivalent) via contract
- Longer term transition to AV shuttles
- No new rail or high-intensity bus

April 1, 2021
Medium Transit Intensity Scenario

- Emphasis on areas with high transit propensity, population concentration, and activity centers
- Requires new governance and financial arrangements to implement
- Balance of meeting basic mobility needs and more robust transit in select areas
- No regional rail or high-intensity bus
Medium Transit Intensity Scenario

- Four zones with potential for fixed-route transit
- Three regional corridors with potential for connector routes
- Mobility hub development to provide multimodal connectivity
High Transit Intensity Scenario

- Substantial commitment to multimodal system built on transit ‘backbone’
- Mix of transit services and facilities with transit-supportive economic development
- Coordination of governance and funding essential ingredient (LGC, etc.)
- Supports high level of connectivity to greater DFW region
High Transit Intensity Scenario

- Development of a regional transit “backbone”
  - Regional Rail
  - High-Capacity Transit
- Multimodal hubs provide connectivity
- Additional services:
  - Local Bus
  - Micromobility
  - Express Bus
  - Vanpool
  - People Movers
- **Only alternative capable of transformative mobility shifts**
Transit Service by City Propensity Type

• Basic Mobility
  o Demand Response
• Emerging & High Growth
  o Demand Response
  o Fixed Route
• Developed & Mature
  o Demand Response
  o Fixed Route
  o Premium Bus
• Tier 2 for each category
## Cities by Transit Propensity

<table>
<thead>
<tr>
<th>City Type</th>
<th>Basic Mobility</th>
<th>Emerging &amp; High Growth</th>
<th>Developed &amp; Mature</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>City Names</strong></td>
<td>Blue Ridge Lowry Crossing</td>
<td>Anna Celina Farmersville* Josephine* Lavon* McKinney Melissa Nevada* Princeton Prosper Royse City</td>
<td>Allen Fairview* Frisco Lucas* Murphy Parker* Sachse Wyle</td>
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<tr>
<td></td>
<td>New Hope St. Paul Weston*</td>
<td></td>
<td>*Tier 2 Cities</td>
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</table>

*April 1, 2021*
<table>
<thead>
<tr>
<th>City Type</th>
<th>Demand Response</th>
<th>Fixed Route</th>
<th>Premium Bus</th>
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</thead>
<tbody>
<tr>
<td>Basic Mobility</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Emerging &amp; High Growth</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Developed &amp; Mature</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
# Approximate Annual Operating Costs

<table>
<thead>
<tr>
<th>City Type</th>
<th>Demand Response Tier 1</th>
<th>Demand Response Tier 2</th>
<th>Fixed Route Tier 1</th>
<th>Fixed Route Tier 2</th>
<th>Premium Bus Tier 1</th>
<th>Premium Bus Tier 2</th>
<th>TOTAL COST (EST) TIER 1</th>
<th>Total Cost (Est) Tier 2</th>
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</thead>
<tbody>
<tr>
<td>Basic Mobility</td>
<td>$1,882,200</td>
<td>$941,100</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>$1,882,200</td>
<td>$941,100</td>
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<tr>
<td>Emerging &amp; High Growth</td>
<td>$1,882,200</td>
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<td>-</td>
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<td>$2,879,200</td>
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<tr>
<td>Developed &amp; Mature</td>
<td>$1,882,200</td>
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<td>$1,994,000</td>
<td>$997,000</td>
<td>$1,329,800</td>
<td>$664,900</td>
<td>$5,206,000</td>
<td>$3,544,100</td>
</tr>
</tbody>
</table>
McKinney Line Regional Rail

• Regional rail line connecting McKinney to DART Red Line in downtown Plano
• 18 Miles
• $700M - $900M

High-level ridership analysis to follow in next PAC meeting.
Collin County Roadway Investments

Per NCTCOG’s Transportation Improvement Program (TIP), the following are programmed roadway improvement funds for Collin County:

2002 – 2020
Total: $2,300M
Avg. Annual: $121M

Local transportation investments in Collin County not included in the TIP:
Avg. Annual: $35M - $40M
People Mover Components

Automated Transportation System (ATS)

• Smart Vehicle (Group-Rapid Transit)
  o Autonomous
  o Rubber-Tire’d

• “Dumb” Guideway
  o Paved
  o Grade-Separated
People Mover Considerations

Retrofit
Greenfield

ATS System
Existing Development

Grade-Separated System
At-Grade System w/ Signal Priority

Development Circulator
Regional Connections

Minimal/Consolidated Parking
Individual Site - ITE Parking Code

Privately Funded
Publicly Funded
or Partnership?

Each site may have combination of many of these considerations

April 1, 2021
Concurrent Efforts

Previous Efforts (2016-Mid 2020)
- Regional demand mapping
- General site feasibility/site capture
- Potential system use
- Other high-level planning elements

Current Efforts (Mid 2020–2022)
- Infrastructure engineering process
- Vehicle technology identification process

Future Efforts (2023–)
- Availability of funding (public/private)
- Implementation considerations
- Institutional Structure/Governance

Current RFP

April 1, 2021
Collin County Transit Planning Study
People Mover – Planning Process

Step 1
Identification of Potential Locations
GIS Regional Mapping Tool
• Population & Employment Density
• Employment Mix
• Land Uses
• Short Trip Density
• Proximity to Regional Transit Stations

Step 2
Initial Feasibility of Potential Locations
Feasibility Analysis Tool
• Size of Development/Area Served
• Population & Employment Density (by type)
• Parking Strategy
• Proximity to Transit Stations

Step 3
Operations Analysis & Ridership Estimation
Ridership Estimation Tool
• Site Layout w/ Preferred People Mover Alignment
• Detailed Land Use Breakdown by ITE Code for Zonal Analysis
Mobility 2045 – Areas of Potential Demand for People Movers

Counties
People Mover Demand MOB45

ROADS
- Freeway/Tollway

Miles

0 1.5 3 6

DFW AIRPORT SKYLINK
LAS COLINAS APT SYSTEM
Modified Areas of Potential Demand for People Movers
## People Mover Feasibility Analysis Summary

<table>
<thead>
<tr>
<th>HIGHER FEASIBILITY LOCATIONS</th>
<th>LOWER FEASIBILITY LOCATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collin Creek Mall</td>
<td>Downtown Frisco</td>
</tr>
<tr>
<td>Legacy West</td>
<td>Legacy East</td>
</tr>
<tr>
<td>SH 121/US 75</td>
<td>Grandscape</td>
</tr>
<tr>
<td>The Star/Stonebriar Center</td>
<td>McKinney Airport Connection</td>
</tr>
<tr>
<td></td>
<td>US 380/US 75</td>
</tr>
</tbody>
</table>

- Development-based analysis
- Capital/operating costs not considered
- Grade-separated ATS focused analysis
- System phasing/ridership generation
- Variability in analysis results based on input assumptions
Irving to Frisco Rail Corridor Update

• Rail Coordination Efforts with BNSF
  Continued coordination assessing supply side with demand side

• Capital Cost Estimates
  Development of Capital Cost Estimates

• Ridership Modeling Efforts:
  Trip Origins and Trip Destinations

• Revenue & Funding Opportunities
  Identifying & Assessing Accountable Funding Options

• People Mover Connections Evaluations
  Opportunities for Station Connections

• Public Involvement
  Presentations to City Councils
Questions & Open Discussion

- Study Milestones Schedule
- Scenario Development
- Scenario Costs
- Other
Next Steps

• Please review Draft Transit Service Needs & Market Analysis Technical Report and provide comments by April 30.
• Prepare accountable Funding Sources (revenues) to pair with Transit Costs.
• Develop Scenario Action Plans connected with Funding & Implementation Strategies

Next scheduled meeting is **May 6 at 10:30 am**
NCTCOG Team Contacts

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April 1, 2021