Agenda

• Clarify Master ILA and Federal Funding
• Project Status
  – Traffic Analysis Overview
  – Noise/Vibration Overview
  – Lamar Constraints
  – East Segment (LPA, Design Options)
  – Deep Ellum Issues
  – Subway
  – Urban Design
• Schedule and Next Steps
Master Interlocal Agreement

• Master ILA, Article V
  – Use of Pacific/Bryan must first be approved through an AA/DEIS
  – Include subway analysis
  – Subway remains the City’s preferred solution
  – DART must provide a funding strategy
  – Seek greatest possible funding amount
Master Interlocal Agreement

• Master ILA, Article V (continued)
  – DART will commit to construction of a subway in the CBD no later than when:
  – (c.1) Over a six month period average ridership exceeds 8,000 passengers per peak hour per peak direction, and/or headways decrease to 2.5 minutes
  – (c.2) funding first becomes available earlier through one or a combination of sources
Council Action

• On September 9, 2015, the Dallas City Council passed Resolution #151657 approving the B4 Jackson Alternative with the understanding that:

SECTION 4. That the Dallas City Council endorsement of the B4 Jackson alternative with potential alignment modifications does not in any way alter DART’s commitment per the Master Interlocal Agreement to build a subway within the CBD.
CARDINAL INFRASTRUCTURE, LLC TEAM

Sherry Little
Partner
- Former Acting Administrator of the Federal Transit Administration (FTA)
- 15 years as Senior Staff in the U.S. Senate Banking Committee
- Over 7 years assisting public and private clients on a wide spectrum of vital services relating to public infrastructure projects
- Areas of Expertise:
  - Policy Development and Analysis
  - Public-Private Partnerships
  - International & Domestic Infrastructure Finance
- Provides expert guidance on statutory and regulatory components of Federal infrastructure financing including FAST Act, MAP-21, TIFIA, the American Recovery and Reinvestment Act and public-private partnerships

Severn Miller
Partner & Counsel
- Former Chief Counsel of the Federal Transit Administration (FTA)
- Over 7 years assisting public and private clients on a wide spectrum of vital services relating to public infrastructure projects
- Areas of Expertise:
  - Policy
  - Private & Government Funding
  - USDOT/FTA Compliance
  - Legal Subject Matter Expert
- Provides education and advice from initial policy and planning considerations, to financing, risk assessment, contracting and procurement in connection with infrastructure projects nationwide
Federal Funding

ISSUE PRESENTED

▷ If DART were to seek greater than 50% Federal funding for the D2 Core Capacity Project, is it likely that the Project would receive such a level of funding?

BRIEF ANSWER

▷ No.
▷ 80% of project costs authorized but not allocated or appropriated.
▷ Neither the Federal appropriations/funding legislation nor the Administration’s proposed allocations in the President’s Budget provide more than a 50% federal share for a project such as D2.
Federal Funding

- MAP-21 (2012) for the first time allowed capital grants for “Core Capacity” projects such as D2.
- “Core Capacity project” means: a “substantial corridor-based capital investment in an existing fixed guideway system that increases the capacity of a corridor by not less than 10 percent.” 49 U.S.C. 5309(a)(2).
- FTA treats Core Capacity projects as parallel to “New Starts” grants and applies the same process for both.
- First four Core Capacity projects are in line for Federal CIG funding. None have actually entered into FFGAs.
- For those four, Federal shares sought are 25%, 48%, 37%, 49%.
- This is in line with historic New Starts requests, which have a 50% Federal share or less.
Federal Funding

• Section 5309 – the *authorizing* legislation for the FTA CIG program – allows a project sponsor to seek up to 80% federal funding

• President requests an amount of CIG funding in proposed budget (*Allocation*)

• Funds must then actually be *appropriated* in a separate bill

• Congress is not required to appropriate any/all of the authorized funding or any/all of the President’s Request

• In recent practice, Congress appropriates less than the President’s budget request

• FTA must then *apportion* the amount actually appropriated among the capital projects
Process and Schedule Review

- Authorized into PD on November 5, 2015
- Complete (30% design and Final EIS/ROD) by summer 2017

- Core Capacity Project Submittal Updates to FTA
  - September 2016 (Updated information)
  - September 2017 (To support request to enter Engineering)
We are here

**PROJECT DEVELOPMENT**

<table>
<thead>
<tr>
<th>PROJECT DEVELOPMENT PHASE</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
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<tbody>
<tr>
<td><strong>PUBLIC &amp; AGENCY INVOLVEMENT</strong></td>
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<td><strong>PRELIMINARY ENGINEERING</strong></td>
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<td>10-20% PRELIMINARY ENGINEERING</td>
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<td>30% PRELIMINARY ENGINEERING</td>
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<td><strong>SUPPLEMENTAL DEIS</strong></td>
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<tr>
<td>EXISTING CONDITIONS</td>
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<tr>
<td>IMPACT ASSESSMENT</td>
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<td>MITIGATION OPTIONS</td>
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<tr>
<td>FULL CORRIDOR &amp; DESIGN OPTIONS</td>
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<td>PUBLIC COMMENT PERIOD</td>
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<td><strong>FINAL EIS</strong></td>
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<tr>
<td>FULL CORRIDOR &amp; SELECTED DESIGN OPTION</td>
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<td>MITIGATION COMMITMENTS</td>
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<td>FTA RECORD OF DECISION</td>
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<tr>
<td><strong>MITIGATION MONITORING PROGRAM</strong></td>
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*THE MITIGATION MONITORING PROGRAM WILL CONTINUE THROUGH PROJECT ENGINEERING AND CONSTRUCTION.*

**ANTICIPATED KEY MILESTONE MEETINGS**

1. PD KICKOFF MEETINGS
2. PUBLIC MEETING: EXISTING CONDITIONS / ISSUE IDENTIFICATION AT 10% PRELIMINARY ENGINEERING
3. IMPACT ASSESSMENT FINDING / MITIGATION OPTIONS AT 20% PRELIMINARY ENGINEERING
4. PUBLIC HEARING FOR SDEIS
Traffic Analysis
Traffic Analysis Overview

• Traffic analysis being done in two phases
• Phase 1 using City of Dallas traffic model
  – Analysis in progress
  – Focused on eastern end of project
• Phase 2 will use more detailed micro-simulation model
  – Future task
  – Corridor wide analysis covering more of the downtown area
Synchro Model

- City updated model and provided to DART Team
- DART supplemented traffic counts at 9 locations
- Agreed upon 0.5% per year traffic growth rate
- Analysis for:
  - 2016: Existing
  - 2021: No Build and Build
  - 2041: No Build and Build
Study Intersections: D2 East Segment

- Jackson
- Wood
- Young

- Common intersections
- Additional perimeter intersections
Jackson Street LPA Alignment
Assumptions for Traffic Movements under “Build” Scenario

Continued Movement

Restricted Movement

Street Travel Direction

(Street Closure)
Wood Street Alignment
Assumptions for Traffic Movements under “Build” Scenario

Street Travel Direction
- Continued Movement
- Restricted Movement

18
Young Street Alignment
Assumptions for Traffic Movement under “Build” Scenario
(Drop 1 Lane in each Direction)

Continued Movement

Restricted Movement

Street Travel Direction
Traffic Next Steps

• Analyze No Build and Build conditions for years 2021 and 2041

• Refine analysis using microsimulation for refined LPA corridor

• Identify impacts and develop mitigation such as:
  – Signal timing enhancements
  – Signal progression improvements
  – Intersection improvements
  – Signage/circulation patterns
Noise/Vibration
Noise/Vibration Overview

• Noise and Vibration Impact Assessment Process
• Measurement Locations
• Measurement Results
• Next Steps
  – Analysis/Modeling
  – Impact Identification
  – Mitigation (if necessary)
Noise/Vibration Assessment Process

• Document existing noise and vibration levels at locations representative of sensitive land uses
  – Category 1: concert halls, recording studios, etc.
  – Category 2: residences, hotels, hospitals
  – Category 3: churches, schools, cemeteries, parks, etc.
• Estimate noise and vibration levels with the project
  – Operating plan
  – Vehicle specifications
• Identify impacts in accordance with FTA and DART guidance
• Propose mitigation measures (if necessary)
Noise/Vibration Measurements
<table>
<thead>
<tr>
<th>Site No.</th>
<th>Measurement Location Description</th>
<th>Noise Exposure (dBA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST-11</td>
<td>W HOTEL</td>
<td>MUSEUM WAY &amp; NORTH HOUSTON STREET</td>
</tr>
<tr>
<td>ST-12</td>
<td>UPLIFT LUNA PREP SCHOOL</td>
<td>MUNGER AVE &amp; LAWS STREET</td>
</tr>
<tr>
<td>ST-13</td>
<td>ALOFT HOTEL</td>
<td>SOUTH FIELD STREET &amp; WOOD STREET</td>
</tr>
<tr>
<td>ST-14</td>
<td>LIVE BUTLER</td>
<td>YOUNG STREET AND SOUTH ERVAY STREET</td>
</tr>
<tr>
<td>ST-15</td>
<td>FIRST PRESBYTERIAN CHURCH CHAPEL</td>
<td>YOUNG STREET AND SOUTH HARWOOD STREET</td>
</tr>
<tr>
<td>ST-16</td>
<td>FIRST PRESBYTERIAN CHURCH</td>
<td>WOOD STREET AND SOUTH HARWOOD STREET</td>
</tr>
<tr>
<td>ST-17</td>
<td>LONE STAR GAS LOFTS</td>
<td>JACKSON STREET AND SOUTH HARWOOD STREET</td>
</tr>
<tr>
<td>ST-18</td>
<td>CAMDEN FARMERS MARKET APARTMENTS</td>
<td>FARMERS MARKET WAY AND CANTON STREET</td>
</tr>
<tr>
<td>ST-19</td>
<td>MARQUIS ON GASTON (RESIDENCES)</td>
<td>NORTH GOOD LATIMER EXPRESSWAY AND MONUMENT STREET</td>
</tr>
</tbody>
</table>

1) The Leq measurement data were used to estimate the Ldn using FTA methodology. This approach tends to be conservative and underestimate the existing noise levels, which can result in the assessment of higher levels of noise impact for a project.

Source: Cross-Spectrum Acoustics Inc., 2016

Noise Exposure (dBA)
Ldn – 24 hour cumulative
Leq – Peak hour
Noise/Vibration Next Steps

• Analysis and modeling
• Impact identification
• Mitigation design (as necessary)
Project Status
Locally Preferred Alternative Discussion Areas

1. Museum Way Station concept
2. Lamar Constraints/Griffin Option
3. SoCo Loft area
4. East Segment (LPA, Design Options)
5. Farmers Market Options
6. Deep Ellum Issues
Museum Way Station Concept
Lamar Constraints/Griffin Option

- Proposed Shraman South Asian Museum and Learning Center
- Subsurface Utility Locations, Building foundations
- SoCo Lofts
SoCo Loft Option 1
SoCo Loft Option 2
Griffin Option
East Segment Design Options

Jackson (LPA)

Wood

Young

SECTION A-A

SECTION B-B

SECTION C-C
First Presbyterian Church Concept 1
First Presbyterian Church Concept 2
East Segment Design Options

Jackson/Wood Couplet

**Jackson Street**
- **Existing Typical Section - Looking East (One Way Westbound)**

**Wood Street**
- **Existing Typical Section - Looking East (One Way Eastbound)**

**Jackson Street**
- **Proposed Typical Section - Looking East**

**Wood Street**
- **Proposed Typical Section - Looking East**
East Segment Design Options
Proposed Harwood Park
Farmers Market Option 1
Farmers Market Option 2
Farmers Market Option 3
Deep Ellum Issues

• Key issues:
  – Traffic circulation/access
  – Pedestrian movements
  – Urban design concerns
Summary of Staff Recommended LPA Refinements

• Consider shifting from Lamar to Griffin
  – Wider right-of-way
  – Fewer utility/building foundation constraints
  – Ongoing meetings with property owners along corridor

• Focus on Young Street for East Segment
  – Only street with sufficient right-of-way
  – Maintains accessibility to nearby properties
  – No Church property required

• Continue with current Deep Ellum alignment
  – Focus on addressing traffic, pedestrian, urban design concerns
## Subway Review

### Capital Costs (Million, 2015 $)

<table>
<thead>
<tr>
<th>Alternative/Design Option</th>
<th>Current Scenario (21 % subway; 79% at-grade)</th>
<th>Subway Scenario*</th>
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<tbody>
<tr>
<td>Lamar/Young/Jackson</td>
<td><strong>$520 +/-</strong></td>
<td>$1,147</td>
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<tr>
<td>Lamar/Young/Wood</td>
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<td>Lamar/Young</td>
<td>$520</td>
<td>$1,138</td>
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</table>

**NOTES:**

* Planning level estimate, based on conceptual alignment definition.

**Cost estimates for the LPA (Lamar/Young/Jackson) and Lamar/Young/Wood Design Options will be developed as part of the current project development/preliminary engineering work.
Urban Design
Urban Design

• Key issue for stakeholders
• DDI forming an Urban Design Advisory Committee
• Coordination with the City of Dallas
• Recommend focused discussion on this topic at future meeting
# Upcoming Meetings to Discuss and Refine LPA Corridor

<table>
<thead>
<tr>
<th>Organization</th>
<th>Date</th>
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</thead>
<tbody>
<tr>
<td>City of Dallas Transportation and Trinity River Project Committee (Pending)</td>
<td>August 22, 2016</td>
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<tr>
<td>DART Board Planning Committee Briefing</td>
<td>August 23, 2016</td>
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<tr>
<td>Public/Stakeholder Meetings</td>
<td>To Be Determined</td>
</tr>
<tr>
<td>DART Board Planning Committee (Action)</td>
<td>September 27, 2016</td>
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<tr>
<td>DART Board Committee of the Whole (Action)</td>
<td>October 4, 2016</td>
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<tr>
<td>Dallas City Council (Action)</td>
<td>To Be Determined</td>
</tr>
<tr>
<td>DART Board (Action)</td>
<td>October 25, 2016</td>
</tr>
</tbody>
</table>
Next Steps

• Approval of LPA Refinements
• Continue development of preliminary engineering
• Complete environmental impact analyses
• Document comparative evaluation of east segment options
• Continue regular Stakeholder Work Group meetings