Cotton Belt Corridor

Area Focus Group (AFG)
Carrollton/Addison
August 29, 2017

John Hoppie, Capital Planning
Agenda

- Design Update
  - Alignment/Cross-section/Stations/Facilities
- Environmental Update
  - Documentation of Existing Conditions
- Traffic Update
- Arapaho Bridge
- Ridership
- Community Integration
- Community Open Houses
Design Update: Engineering

Revised Drawings: (Double Track Scenario)

• Horizontal alignment
• Vertical alignment
• Typical sections
• Downtown Carrollton Facilities

• Mercer Yard
• Equipment Maintenance Facility
Design Update: Stations

Revised Station Location and Length (350-foot)

• Side Platform Concept
• Center Platform Concept
• Conceptual Architectural Rendering
• Station Plan Views
Design Update: Stations
Design Update: Stations
Design Update: Stations
Focus Area Stations

Downtown Carrollton

Addison
Downtown Carrollton Station
Addison Station
Cotton Belt Facilities
Equipment Maintenance Facility (EMF)
Equipment Maintenance Facility (EMF)

NOTES
1) ALL TURNOUTS ARE NO 9, EXCEPT MAINLINE WHICH ARE NO 11.
2) MAXIMUM DEGREE OF CURVE IS 11.5 DEGREE
3) TRACK CENTERS IN STORAGE AND RIP TRACKS IS 16' C-C
4) TRACK CENTERS IN SHOP, PIT AND SERVICE TRACKS IS 30' C-C

Preliminary

EQUIPMENT MAINTENANCE FACILITY - LUNA ROAD
OPTION 2

PRELIMINARY

FOR INTERNAL REVIEW ONLY, NOT FOR PERMITTING, DESIGN OR CONSTRUCTION

PRELIMINARY
Relocated Mercer Yard
Environmental Update

Documentation of Existing Conditions

- Land Use
- Parks and Recreation
- Vegetation and Waters Resources
- Historic Resources
A noise monitoring program has been initiated to characterize the existing noise conditions at representative noise-sensitive receptors along the Cotton Belt Corridor.

- Noise Monitors* were installed at 27 locations to collect long-term (24-hour) noise measurements along the corridor.
- Noise Monitors* were installed at 11 locations to measure short-term noise (1 hour).

*Noise Monitors were NTi Audio model XL2 that conform to American National Standards Institute (ANSI) Standard S1.4 for Type 1 (Precision) sound level meters.
Noise - Next Phase

- Assessment
- Identification of Impacts (Per FTA Criteria)
- Recommend Mitigation
- Generally Quiet Zones will be recommend along the most of the corridor
2010 Proposed Grade Separations
## Traffic Update

<table>
<thead>
<tr>
<th>STREET CROSSING LOCATION (Carrollton/Addison AFG)</th>
<th>CITY</th>
<th>ANALYSIS RESULTS</th>
<th>MITIGATION REQUIRED *</th>
</tr>
</thead>
<tbody>
<tr>
<td>Addison Road</td>
<td>Addison</td>
<td>The northbound queue length extends beyond Arapaho Road during the pm peak hour and the southbound queue length extends beyond Lindbergh Road during the am peak hour. Aeronautical and physical constraints to grade separation.</td>
<td>Yes</td>
</tr>
<tr>
<td>Midway Road</td>
<td>Addison</td>
<td>Analysis reconfirms need for grade separation of Midway Road.</td>
<td>Yes</td>
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<tr>
<td>Marsh Lane</td>
<td>Addison</td>
<td>The northbound queue length extends beyond Arapaho Road during the pm peak hour and the southbound queue length extends beyond Country Square Drive during the am peak hour.</td>
<td>Yes</td>
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<tr>
<td>Luna Road</td>
<td>Carrollton</td>
<td>The northbound queue length extends beyond the PGB Turnpike Exit Ramp intersection during the evening peak hour and the southbound queue length extends beyond the PGB Turnpike Exit/Entrance Ramps intersection during the morning peak hour. Physical constraints to grade separation.</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*Mitigations could include: Signal synchronization, intersection improvements adding capacity, or grade separation*
Midway Grade Separation

Cotton Belt RR

Arapaho

Midway

let's go.
Midway Grade Separation
Arapaho Bridge
Cotton Belt Bridge (No Arch)
Cotton Belt Bridge (Arch)
Cotton Belt Bridge (Arch)
Cotton Belt Bridge (No Arch)
## Cotton Belt Ridership

<table>
<thead>
<tr>
<th>STATION NAME</th>
<th>DAILY RIDERSHIP</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Opening Day</td>
<td>2040</td>
<td></td>
</tr>
<tr>
<td>DFWIA AB Terminal Station</td>
<td>1,200</td>
<td>1,200</td>
<td></td>
</tr>
<tr>
<td>North DFW Station</td>
<td>800</td>
<td>1,300</td>
<td></td>
</tr>
<tr>
<td>Cypress Waters Station</td>
<td>200</td>
<td>900</td>
<td></td>
</tr>
<tr>
<td>Downtown Carrollton Station</td>
<td>1,000</td>
<td>2,000</td>
<td></td>
</tr>
<tr>
<td>Addison Station</td>
<td>1,000</td>
<td>1,700</td>
<td></td>
</tr>
<tr>
<td>Knoll Trail Station</td>
<td>500</td>
<td>600</td>
<td></td>
</tr>
<tr>
<td>Preston Rd Station</td>
<td>300</td>
<td>500</td>
<td></td>
</tr>
<tr>
<td>Coit Rd Station</td>
<td>600</td>
<td>700</td>
<td></td>
</tr>
<tr>
<td>UT Dallas Station</td>
<td>700</td>
<td>900</td>
<td></td>
</tr>
<tr>
<td>CityLine/Bush Station</td>
<td>1,000</td>
<td>1,400</td>
<td></td>
</tr>
<tr>
<td>12th Street Station</td>
<td>200</td>
<td>300</td>
<td></td>
</tr>
<tr>
<td>Shiloh Station</td>
<td>400</td>
<td>700</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>7,900</strong></td>
<td><strong>12,200</strong></td>
<td></td>
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</tbody>
</table>
Community Integration

Community Integration features such as fences, walls, trails, landscaping, etc. will be incorporated into the project subsequent to identification of impacts and required mitigation.

- DART will work in cooperation with NCTCOG and local jurisdictions for implementation community integration features.
Sound Walls:

- Noise impact analysis will determine where walls are required.
- DART will work in cooperation with local jurisdictions for consideration of additional walls.
Trails:

- DART will work in cooperation with NCTCOG and local jurisdictions for implementation of trails along corridor.
Cotton Belt Regional Trail (NCTCOG)
Open Houses

Monday, September 18, 2017, 6:30 p.m.
DeWitt Perry Middle School Cafeteria
1709 East Belt Line Road, Carrollton, TX 75006
(Parking and entrance off Warner Street)

Wednesday, September 20, 2017, 6:30 p.m.
Richardson Civic Center
411 West Arapaho Road, Richardson, TX 75080

Monday, September 25, 2017, 7:00 p.m.
Parkhill Junior High School Cafeteria
16500 Shady Bank Drive, Dallas, TX 75248