Cotton Belt Corridor

Area Focus Group (AFG)
North Dallas
September 11, 2017

John Hoppie, Capital Planning
Agenda

• AFG Concerns
• Design Update
  – Alignment/Cross-section/Stations
• Environmental Update
  – Documentation of Existing Conditions
• Traffic Update
• Ridership
• Community Integration
• Community Open Houses
AFG Concerns

- AFG is seeking further assurance through binding resolution or codification that freight will be abandoned permanently in North Dallas
- AFG has requested elimination of some or all of North Dallas Stations
- AFG requests that DART consider alternate vehicles such as hydrogen cell which may be quieter.
AFG Concerns

AFG is seeking further assurance through binding resolution or codification that freight will be abandoned permanently in North Dallas

• DART has actively sought and achieved the abandonment of freight in North Dallas through Surface Transportation Board action (January 27, 2010)

• DART has no plans to reintroduce freight into the corridor

• Current design focuses on community integration of passenger rail only. Freight is not part of the environmental documentation in North Dallas
AFG Concerns

AFG has requested elimination of some or all of North Dallas Stations

- There is both opposition and support for the North Dallas stations
- All stations are being cleared environmentally
- DART Board has requested to participate in the station location process
- City of Dallas Council Resolution #161692; October 11, 2016
City of Dallas Resolution

City of Dallas Council Resolution #161692, October 11, 2016

Section 1. That the City Council has identified its highest immediate priorities for improved transit services, and urges the DART Board to include these projects for priority implementation in their 2017 20-Year Financial Plan in this order:

2. Expedited implementation of expanded bus services targeted toward the transportation needs of low income and transit-dependent riders. The City Council requests that DART develop, adopt and implement a Level of Service policy consistent with transit industry best practices including but not limited to the following service area metrics:

   e. Transit rail stations should be within 3 miles of all service areas within the City of Dallas to support multi-modal transportation options;
City of Dallas Resolution
AFG Concerns

AFG requests that DART consider alternate vehicles such as hydrogen cell which may be quieter.

• Hydrogen cell vehicle are being tested in Germany but have not been qualified for use in the USA.
• Proposed vehicle is state-of-the art for Regional Rail available in USA
• Vehicle procurement will not exclude qualified alternative vehicle*

* FRA Compliant
* Buy America Compliant
* TEXRail Compatible
* Comparable Operating Costs
* Fuel availability
* EPA Tier IV Emission Standards
* DART Size Requirements
Regional Rail Vehicle

• Regional Rail Vehicle
• Environmentally and Community Friendly
  – Tier 4 EPA Emissions Standards
  – Noise similar to LRT
• Meets FRA Standards
• Compatible with TEX Rail (FLIRT)
• Self-propelled
Design Update: Engineering

Revised Drawings: (Double Track Scenario)

• Horizontal alignment
• Vertical alignment
• Typical sections
Typical Sections: Double Track

DOUBLE TRACK AT-GRADE #2

DOUBLE TRACK AT-GRADE #1
Typical Sections: Initial Build

INITIAL BUILD AT-GRADE #2

INITIAL BUILD AT-GRADE #1
Typical North Dallas Cross-section
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
Proposed North Dallas Stations

Knoll Trail

Preston Road

Coit
Colt Station
Traffic Analysis (DRAFT)

<table>
<thead>
<tr>
<th>STREET CROSSING LOCATION (North Dallas AFG)</th>
<th>CITY</th>
<th>DRAFT GRADE CROSSING ANALYSIS</th>
<th>MITIGATION REQUIRED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Davenport E-W</td>
<td>Dallas</td>
<td>No mitigation required</td>
<td>No</td>
</tr>
<tr>
<td>Campbell</td>
<td>Dallas</td>
<td>No mitigation required</td>
<td>No</td>
</tr>
<tr>
<td>Davenport Road N-S</td>
<td>Dallas</td>
<td>No mitigation required</td>
<td>No</td>
</tr>
<tr>
<td>Hillcrest</td>
<td>Dallas</td>
<td>Potential for some mitigation</td>
<td>Yes*</td>
</tr>
<tr>
<td>McCallum</td>
<td>Dallas</td>
<td>No mitigation required</td>
<td>No</td>
</tr>
<tr>
<td>Meandering</td>
<td>Dallas</td>
<td>No mitigation required</td>
<td>No</td>
</tr>
<tr>
<td>Dickerson</td>
<td>Dallas</td>
<td>No mitigation required</td>
<td>No</td>
</tr>
<tr>
<td>COIT</td>
<td>Dallas</td>
<td>Analysis reconfirms need for grade separation of Coit Road</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*Mitigation could include: Signal synchronization, intersection improvements, or adding capacity
Proposed Traffic Mitigation

*Mitigation could include: Signal synchronization, intersection improvements, or adding capacity.
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.
Cotton Belt Corridor Regional Rail
Cotton Belt Project

Measurement Sites
- Long Term Noise Measurements
- Short Term Noise Measurements

<table>
<thead>
<tr>
<th>Site No.</th>
<th>2017 (measured)</th>
<th>2017 (w/o fresh coal)</th>
<th>2010**</th>
</tr>
</thead>
<tbody>
<tr>
<td>LT-11</td>
<td>59</td>
<td>59</td>
<td>57</td>
</tr>
<tr>
<td>LT-12</td>
<td>55</td>
<td>55</td>
<td>52</td>
</tr>
<tr>
<td>LT-13</td>
<td>57</td>
<td>57</td>
<td>57</td>
</tr>
<tr>
<td>LT-14</td>
<td>52</td>
<td>52</td>
<td>55</td>
</tr>
<tr>
<td>LT-15</td>
<td>55</td>
<td>55</td>
<td>54</td>
</tr>
<tr>
<td>LT-E</td>
<td>55</td>
<td>55</td>
<td>-</td>
</tr>
<tr>
<td>LT-F</td>
<td>52</td>
<td>52</td>
<td>-</td>
</tr>
<tr>
<td>LT-G</td>
<td>52</td>
<td>52</td>
<td>-</td>
</tr>
<tr>
<td>ST-C</td>
<td>56</td>
<td>56</td>
<td>-</td>
</tr>
<tr>
<td>ST-D</td>
<td>56</td>
<td>56</td>
<td>-</td>
</tr>
<tr>
<td>ST-E</td>
<td>61</td>
<td>61</td>
<td>-</td>
</tr>
</tbody>
</table>

*Noise levels at Long Term (LT) measurement sites represent 10-hour values. Noise levels at Short Term (ST) measurement sites represent one-hour Lst values.
**Measurement results obtained in December 2010 at the same or nearby location for a previous study

April, 2017

COTTON BELT

DART

Miles
0 0.25 0.5 1
N
Noise - Next Phase

- Assessment
- Identification of Impacts (Per FTA Criteria)
- Recommend Mitigation
- Generally Quiet Zones will be recommend along the most of the corridor
## 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></td>
<td>Opening Day</td>
<td>2040</td>
</tr>
<tr>
<td>DFWIA AB Terminal Station</td>
<td></td>
<td>1,200</td>
<td>1,200</td>
</tr>
<tr>
<td>North DFW Station</td>
<td></td>
<td>800</td>
<td>1,300</td>
</tr>
<tr>
<td>Cypress Waters Station</td>
<td></td>
<td>200</td>
<td>900</td>
</tr>
<tr>
<td>Downtown Carrollton Station</td>
<td></td>
<td>1,000</td>
<td>2,000</td>
</tr>
<tr>
<td>Addison Station</td>
<td></td>
<td>1,000</td>
<td>1,700</td>
</tr>
<tr>
<td>Knoll Trail Station</td>
<td></td>
<td>500</td>
<td>600</td>
</tr>
<tr>
<td>Preston Rd Station</td>
<td></td>
<td>300</td>
<td>500</td>
</tr>
<tr>
<td>Coit Rd Station</td>
<td></td>
<td>600</td>
<td>700</td>
</tr>
<tr>
<td>UT Dallas Station</td>
<td></td>
<td>700</td>
<td>900</td>
</tr>
<tr>
<td>CityLine/Bush Station</td>
<td></td>
<td>1,000</td>
<td>1,400</td>
</tr>
<tr>
<td>12th Street Station</td>
<td></td>
<td>200</td>
<td>300</td>
</tr>
<tr>
<td>Shiloh Station</td>
<td></td>
<td>400</td>
<td>700</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>7,900</strong></td>
<td><strong>12,200</strong></td>
</tr>
</tbody>
</table>
Community Integration

Community Integration features such 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.
• Noise impact analysis will determine where sound walls are required.
• DART will work in cooperation with local jurisdictions for consideration of additional walls
• Quiet Zones will be recommend at residential areas along corridor
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
COTTON BELT CORRIDOR
Project Implementation Schedule

<table>
<thead>
<tr>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>10% PRELIMINARY ENGINEERING</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENVIRONMENTAL IMPACT STATEMENT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FINAL DESIGN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DESIGN/BUILD CONSTRUCTION</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TESTING</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>REVENUE SERVICE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>