Welcome to the Cotton Belt Regional Rail Corridor Community Meeting. The format for tonight’s meeting is an open house. Please make your way around the room to interact and ask questions to staff members at each station. Comment cards have been provided so that your comments and questions are recorded for this project.

Informational topics highlighted at this meeting include:

- Environmental Process Highlights
- Corridor Station Layouts
- Corridor Maps
- Schedule
- Funding

We welcome your comments and questions about this project. Please fill out a comment card or connect with us by email at CottonBelt@DART.org. You can also follow the project online at www.DART.org/CottonBelt.

Thank you for your participation.
COTTON BELT CORRIDOR
Project Implementation Schedule

<table>
<thead>
<tr>
<th>Activity</th>
<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>
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<tr>
<td>ENVIRONMENTAL IMPACT STATEMENT</td>
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<tr>
<td>FINAL DESIGN</td>
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<tr>
<td>DESIGN/BUILD CONSTRUCTION</td>
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<tr>
<td>TESTING</td>
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<td>REVENUE SERVICE</td>
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## Cotton Belt Potential Funding Sources

<table>
<thead>
<tr>
<th>Source</th>
<th>Funding (000s)</th>
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<tbody>
<tr>
<td>RRIF Loan</td>
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<tr>
<td>FTA (CMAQ or STPMM)</td>
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<td>FTA (Formula)</td>
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<td>FTA (CMAQ)</td>
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<td>Local *</td>
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<td><strong>Total</strong></td>
<td><strong>$1,135,000</strong></td>
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*Anticipated local sources may include a combination of the following:
- DART cash contribution
- City of Plano (tax increment financing)
- City of Richardson (tax increment financing)
- City of Addison (cash contribution)
- City of Coppell (equivalent of 3/8 cent sales tax)
- Fare revenue
- Naming rights, advertising
- Other value capture sources
Archival research is ongoing and upon completion, DART will continue coordination with the Texas Historical Commission regarding the eligibility of the historic-age structures in the APE. Impacts will be determined upon further development of the design.

Who?
The Study Team has conducted field studies and will coordinate eligibility recommendations through DART and the Texas Historical Commission.

What?
Field investigations and archival research to identify structures 50 years old or older.

Where?
Along the Cotton Belt Corridor the Area of Potential Effect (APE) is 175 feet from the centerline the existing right-of-way adjusted to 250 feet in areas with new right-of-way.

Why?
National Historic Preservation Act
Section 106 of the NHPA
Section 4(f) of the Transportation Act
Antiquities Code of Texas | Chapter 26

What's next?
Archival research is ongoing and upon completion, DART will continue coordination with the Texas Historical Commission regarding the eligibility of the historic-age structures in the APE. Impacts will be determined upon further development of the design.

What's an impact?
Adverse effects occur when a project directly or indirectly alters characteristics that qualify it for inclusion in the Register. Examples can include physical destruction or alteration which could change the property's eligibility; change to the property's setting; and visual or audible intrusions. Adverse effects can be avoided if an impacted property is restored, repaired, or remediated in accordance with the Secretary's Standards and in collaboration with the SHPO.
NOISE & VIBRATION ASSESSMENT PROCESS

1. DOCUMENT EXISTING NOISE AND VIBRATION LEVELS AT LOCATIONS REPRESENTATIVE OF SENSITIVE LAND USES

2. ESTIMATE NOISE AND VIBRATION LEVELS WITH THE PROJECT OPERATING PLAN AND VEHICLE SPECIFICATIONS

3. IDENTIFY IMPACTS AND PROPOSE MITIGATION CONSISTENT WITH FTA AND DART GUIDANCE

WHAT KINDS OF LAND USES ARE CONSIDERED SENSITIVE?

- LAND WHERE QUIET IS ESSENTIAL TO PURPOSE
  - AMPitheater
  - Recording Studios
  - Some Historic Properties

- PLACES WHERE PEOPLE SLEEP
  - Homes
  - Apartments
  - Hotels
  - Hospitals

- INSTITUTIONAL USES WITH DAYTIME/EVENING USE
  - Churches
  - Libraries
  - Schools
  - Theaters
  - Cemeteries
  - Museums
  - Historic Sites/Parks

TYPES OF MITIGATION

MITIGATION FOR NOISE IMPACTS IF WARRANTED

If Noise or Vibration Impacts are Identified, Mitigation Measures May Involve Treatments:

1. At the Noise Source,
2. Along the Source-to-Receiver Propagation Path, or
3. At the Receiver

Typical Noise Mitigation Techniques Include:
- Stringent transit vehicle and equipment noise specifications
- Rail vehicle treatments to minimize noise
- Quiet Zones to eliminate horn noise
- Installation of sound barriers (noise walls)
- Track treatments (e.g., moveable-point frogs and wayside rail lubricators)
- Enhanced maintenance
- Alignment modifications
- Insulation of affected buildings

MITIGATION FOR VIBRATION IMPACTS IF WARRANTED

Common Vibration Mitigation Measures are Similar to Those for Noise Reduction and Include:
- Stringent transit vehicle and equipment specifications
- Rail vehicle treatments
- Track treatments (e.g., moveable-point frogs, resilient rail fasteners, ballast mats, resiliently-supported ties and floating track slabs)
- Enhanced maintenance
- Restricted vehicle speeds
- Use of deep trenches
- Alignment modifications
- Building vibration isolation (for new construction)
Noise is a Common Concern When Planning a Rail Project

The information provided in this fact sheet describes:

- How noise levels between transit and non-transit sources compare
- The typical noise produced from rail operations
- The process by which potential impacts are identified
- Common techniques to mitigate noise impacts

Comparison of Noise Levels

The figure below illustrates how noise levels between transit and non-transit sources compare when experienced by people in their home or neighborhood. For example, the proposed Cotton Belt vehicle at 50 mph causes a momentary maximum noise level of about 79 dBA as it passes at a distance of 50 ft, a little louder than the steady noise level from an air compressor at 50 ft. The noise level at 50 ft from a Cotton Belt Vehicle idling at a station is comparable to the noise observed when standing about 3 ft from a clothes washer.

Mitigation measures, such as noise barriers, can provide noise reductions of 5 to 10 dB.
Typical Sources of Noise from Train Operations

Noise generated from train operations is generally associated with:

- Wheel/rail interaction – noise is generally highest where condition of the track and/or wheels are worn and needing maintenance, and where there is special track work and tracks cross
- Horns and crossing bells – safety requirements where a train crosses a street
- Diesel engines/cooling fans – when not treated to minimize noise

How are Impacts Identified?

The following steps are used to identify potential noise impacts:

1. Identify locations of sensitive uses
2. Measure existing noise levels
3. Estimate noise levels with project in operation
4. Identify impacts and propose mitigation

The locations of sensitive uses (homes, churches, parks, etc.) are based on aerial mapping, surveys and community input. Input from the community is important in making sure that all sensitive uses are identified. DART uses established Federal Transit Administration (FTA) standards to identify impacts. A variety of mitigation options are considered to best address the impact.

Options Available to Mitigate Identified Noise Impacts

TECHNIQUES THAT WILL BE USED TO MINIMIZE NOISE OF TRAIN OPERATIONS:

- Insulation of power generators in internal train compartments to minimize noise
- Maintenance of vehicle and track elements to reduce noise levels

ADDITIONAL TECHNIQUES TO MINIMIZE NOISE AT SENSITIVE LOCATIONS INCLUDE:

- Reducing noise near street crossings by working with local jurisdictions to obtain waivers to establish “Quiet Zones” (where train horns are not routinely sounded) and by using lower noise level warning devices (such as electronic horns and bells) targeted at the crossings
- Installing sound barriers (noise walls) to shield sensitive areas along the tracks
- Making alignment modifications (shifting the alignment or raising/lowering the alignment) and
- Incorporating designs that reduce noise at rail discontinuities where tracks cross each other
Potential Traffic and Safety Concerns

- Impacts on traffic flow at street crossings where train operations are frequent
- Impacts on surrounding traffic circulation patterns for local and feeder streets
- Impacts on accessibility to surrounding land uses (from auto or pedestrian standpoint)
- Potential pedestrian crossing issues to community facilities such as schools (example, where a project passes through a school attendance zone boundary)
- Safety issues associated with increased train frequency and/or speed

Common Techniques to Mitigate Traffic and Safety Concerns

**SAFETY**

- Designate pedestrian crossings designed to facilitate safety
- Provide safety information through education outreach
- Design elements that maximize safety by adding adequate lighting and minimize interaction of pedestrians and motorized vehicles
- Use safety fencing to discourage crossing at uncontrolled locations

**TRAFFIC**

- Traffic signage and pavement markings
- Modify existing traffic signals and install new traffic signs
- Coordinate signal timing between intersections
- Improve intersection improvements with free right turn lanes or double left turn lanes
- Design solutions to improve circulation and accessibility (relocate driveways)
- Grade separation to maintain traffic flow
New Technology Vehicle

Dallas Area Rapid Transit (DART) has specified the use of a new technology vehicle for the Cotton Belt Corridor Regional Rail Project, a proposed 26-mile regional rail alignment spanning from DFW Airport to Shiloh Road in Plano. This new light-weight rail vehicle will be designed to be more environmentally and community friendly than traditional commuter rail. It can also be used for other future rail corridors in the region.

The Dallas/Fort Worth Region has coordinated with the rail industry to accelerate the development of a regional rail vehicle. This vehicle will use an engine that reduces emissions by meeting the Environmental Protection Agency’s most stringent air quality standards, and will be compliant with the Federal Railroad Administration so it can share track with existing freight. The Cotton Belt Vehicle will be similar to the vehicle selected by the Fort Worth Transportation Authority for the TEX Rail Project from Fort Worth to DFW Airport.

Feature of New Vehicle

- Advanced technology vehicle:
  - Multiple electric motors powered by a single diesel generator
  - Generator insulated in a separate internal compartment to minimize noise
  - Exhaust emissions reduced by approximately 90 percent from typical commuter vehicle technology
- Lighter and smaller than typical commuter rail vehicle resulting in lower noise/vibration levels
- No overhead wires mean less visual clutter
- Wide entrance doors and low floors for easy accessibility
- Sleek appearance and improved structural design
12TH STREET STATION

PROPOSED BUS AREA

PROPOSED PARKING AREA

LEGEND

PRELIMINARY