Memorandum

DATE 22 August 2014

to The Honorable Members of the Transportation and Trinity River Project Committee:
Vonciel Jones Hill (Chair), Lee Kleinman (Vice Chair), Deputy Mayor Pro Tem Monica Alonzo,
Mayor Pro Tem Tennell Atkins, Sandy Greyson, and Sheffie Kadane

SUBJECT Cotton Belt Corridor

On Monday, 25 August 2014, you will be briefed on the Cotton Belt Corridor. The briefing materials are
attached for your review.

Please feel free to contact me if you need additional information.

Jill A. Jordan, P.E.
Assistant City Manager

Attachment

c: A. C. Gonzalez, City Manager
Warren M.S. Ernst, City Attorney
Craig D. Kinton, City Auditor
Rosa A. Rios, City Secretary
Daniel F. Solis, Administrative Judge
Ryan S. Evans, First Assistant City Manager
Forest E. Turner, Assistant City Manager

Joey Zapata, Assistant City Manager
Charles M. Calo, (I) Assistant City Manager
Theresa O'Donnell, (I) Assistant City Manager
Jeanne Chipperfield, Chief Financial Officer
Sana Syed, Public Information Officer
Elsa Cantu, Assistant to the City Manager – Mayor & Council

"Dallas-Together, we do it better"
Presentation Outline

- Overview
  - Corridor Location
  - Ownership
  - TEX Rail Project
- Project Development
  - Anticipated Private Sector Proposal
  - DART Alternatives Development
- Next Steps
Overview

- Two independent projects
  - The Fort Worth Transportation Authority [“The T”]
  - Dallas Area Rapid Transit [“DART”]
- Serves a large part of the region
  - Located in Dallas, Collin and Tarrant counties
  - Thirteen (13) Cities
  - Two (2) Universities (University of Texas at Dallas and Texas A&M Research & Ext Center)
- Important transit connections
  - D/FW Airport and Orange Line Connection
  - DART Green Line and Red Line Connections
- DART owns fifty-two (52) miles of Cotton Belt right-of-way
Cotton Belt Corridor
TEX Rail Project
TEX Rail Status

- The T submitted New Starts application for TEX Rail in October 2011
  - Seeking $405 million in federal funding
- In August 2013, The T Board redefined project as Minimum Operable Segment [“MOS”] from Downtown Fort Worth to the D/FW Airport station
  - Revised environmental document under review by Federal Transit Administration [“FTA”] and Federal Aviation Administration [“FAA”]
- Anticipated revenue service in 2018
Recent History

- **DART Public Private Partnership [“PPP’] meeting**
  - May 2009

- **Cotton Belt Conceptual Engineering and Funding Study (NCTCOG)**
  - Completed April 2010

- **Cotton Belt Innovative Finance Initiative (NCTCOG)**
  - Initiated July 2010 and Completed December 2011

- **DART Board**
  - Authorized the President/Executive Director in May 2010 to enter into an Memorandum of Understanding [“MOU”] with the Regional Transportation Commission [“RTC”] to receive proposals to advance Rail Service in the Corridor
  - No proposals were received; MOU no longer in effect
Potential Dallas Stations

- Cypress Waters-North Lake
- Knoll Trail-DNT area
  - Opportunity for significant redevelopment and economic benefit to city
- Preston Road
  - Neighborhood residents have voiced concerns
- Coit Area
  - Texas A&M area redevelopment
  - University of Texas at Dallas
  - Transit Oriented Development
Project Benefits

- Provide passenger rail connections and service between the DART, Denton County Transit Authority [“DCTA”], and The T service areas

- Provide for crosstown movement and connections to D/FW Airport

- Reduce congestion/travel delays along the northern tier of the region
Project Benefits (continued)

- Provide reliable connections between existing and proposed transit system

- Promote development along the corridor through Transit Oriented Development [“TOD”] opportunities

- Opportunity to incorporate Cotton Belt Hike and Bike Trail within the Project
DART Rail Service Coverage

- Cotton Belt can help fill a gap in rail transit service for Far North Dallas

- Rail transit along LBJ corridor could also help address gap in Far North Dallas service
Project Development

- DART Initiated Preliminary Engineering Effort
  - Notice of Intent issued in July 2010
  - Advanced Engineering and Environmental Analysis
- Preliminary Engineering Effort to Support and Provide Starting Point for Private-Sector Proposal
  - No Proposal Received
- Completed Documentation of Environmental Conditions and 5% Engineering Report
  - April 2014
  - Spent Approximately $8 million
Design Alternatives
Range of Alignment Options Evaluated

- **Base Line project options**
  - Double track rail
  - Lowest cost rail
  - Bus Rapid Transit [“BRT”]

- **Alignment alternatives**
  - Cypress Waters
  - Interface with Red Line east of Central Expressway

- **Profile options in North Dallas**
  - At-grade
  - Tunnel
# Operable Segments

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Double-Track</th>
<th>Lowest Cost Rail</th>
<th>BRT</th>
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<tbody>
<tr>
<td>DFW-Plano</td>
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<td>4</td>
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<tr>
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<td>Carrollton-Addison</td>
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<td>DFW-Addison</td>
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</table>
Regional Rail Vehicle
Major Assumptions – Double Track Rail

- 2020 revenue service start

- TEX Rail to D/FW Airport and the DCTA extension to Downtown Carrollton are completed before 2020

- Assumption of a federal grant for 20% of the capital cost, the remainder of the capital costs to be funded with debt

- DART will contribute no money to construction or operations until 2035 at the earliest
Major Assumptions – Double Track Rail

- New Diesel Multiple Unit [“DMU”] vehicles
- Full double-tracking along the whole corridor
- 20-minute peak headways, 60-minute off-peak and weekend service
Major Assumptions – Lowest Cost Rail

- 2020 revenue service start

- TEX Rail to D/FW Airport and the DCTA extension to Downtown Carrollton are completed before 2020

- Assumption of no federal grant / All capital costs to be funded with debt

- DART will contribute no money to construction or operations until 2035 at the earliest
Major Assumptions – Lowest Cost Rail

- New Diesel Multiple Unit [“DMU”] vehicles
- 30-minute peak headways, 60-minute off-peak and weekend service
- No extra work done at Downtown Carrollton to prepare for full double-tracking, no operating facility
- Rail service stops at D/FW North Station and TEX Rail and/or a bus shuttle takes passengers into D/FW Airport
- Single-track rail service, sidings where necessary
BRT Technology

Valley Rapid, San Jose, CA
BRT Examples

Sample BRT Video
Major Assumptions - BRT

- 2020 revenue service start

- Assumption of no federal grant / All capital costs to be funded with debt

- DART will contribute no money to construction or operations until 2035 at the earliest
Major Assumptions - BRT

- TEX Rail to D/FW Airport and the DCTA extension to Downtown Carrollton are completed before 2020

- Service delivered with articulated buses

- 10-20 minutes peak headways, 30-minute off-peak and weekend service

- The BRT corridor ends at D/FW North Station but the bus continues into D/FW Airport
Cross Section

- BRT split by direction (railroad track does not need to be moved)
- Shown herein as BRT 1

- BRT confined to one side (railroad track may need to be moved to make room for busway)
- Shown herein as BRT 2
Current Status

- Currently in DART Financial Plan for beyond 2035
- Strong region-wide support to develop early
- No other funding source is currently available
- DART has developed a range of options for consideration
### Summary Table: Gross Capital Cost

<table>
<thead>
<tr>
<th>Operable Segment</th>
<th>Double-Track Gross Capital Cost</th>
<th>Lowest Cost Rail Gross Capital Cost</th>
<th>BRT 1 Gross Capital Cost</th>
<th>BRT 2 Gross Capital Cost</th>
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<tbody>
<tr>
<td>DFW-Plano North Route, At-Grade</td>
<td>$1,470,526,797</td>
<td>$611,591,517</td>
<td>$360,107,663</td>
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## Summary Table: Funding through 2034

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<tr>
<th>Operable Segment</th>
<th>Double-Track Funding Required Through 2034</th>
<th>Lowest Cost Rail Funding Required Through 2034</th>
<th>BRT 1 Funding Required Through 2034</th>
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Addressing the Funding Gap

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<th>Potential Funding Sources</th>
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<th>OPEX</th>
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<td>7</td>
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Next Steps

- Which mode to pursue
- Project phasing
- Identifying funding sources
- Position the project for grant application
- Implementing alternative funding possibilities
Discussion