Memorandum

DATE April 10, 2009

TO Members of the Transportation and Environment Committee:
Linda L. Koop (Chair), Shellee Kadane (Vice Chair), Jerry R. Allen, Carolyn R. Davis, Vonciei
Jones Hill, Angela Hunt, Pauline Medrano and Ron Natinsky

SUBJECT Central Expressway Alignment from Commerce Street to Live Oak Street

Attached is the “Central Expressway Alignment from Commerce Street to Live Oak Street” briefing that will be presented to you April 13, 2009.

Please contact me if you need additional information.

[Signature]

Ramon P. Miguez, P.E.
Assistant City Manager

FP090409 Central Alignment

Attachment

c: The Honorable Mayor and Members of the City Council
Mary K. Suhm, City Manager
Thomas P. Perkins, Jr., City Attorney
Deborah Watkins, City Secretary
Craig Kinton, City Auditor
Judge C. Victor Landreth, Administrative Judge
Ryan S. Evans, First Assistant City Manager
Jill A. Jordan, P.E., Assistant City Manager
A.C. Gonzalez, Assistant City Manager
Forest Turner, Interim Assistant City Manager
David Cook, Chief Financial Officer
Jeanne Chipperfield, Director, Budget and Management Services
Edward Scott, Director, Controller’s Office
Helena Stevens-Thompson, Assistant to the City Manager – Council Office
Rick Galceran, P.E., Director, Public Works and Transportation

"Dallas, The City That Works: Diverse, Vibrant and Progressive."
Central Expressway Alignment

from

Commerce Street to Live Oak Street

Presented to the
Transportation and Environment Committee

By

Public Works and Transportation

April 13, 2009
Purpose of Briefing

- Provide update on the status of the project and the need for improvements
- Seek committee’s approval of the recommended alignment prior to City Council consideration on April 22, 2009
Background

- Realignments of Central Expressway and Pearl Expressway were recommended in the Comprehensive Transportation Plan for the Central Business District in June 2005
- Projects were approved in the 2006 Bond Program
  - Central Expressway $12.6 M
  - Pearl Expressway $ 4.3 M
- Includes improvements to John W. Carpenter Plaza - part of the envisioned Emerald Bracelet
- Design was authorized in February 2008 and includes alignment process and right-of-way acquisition
Project Location
Central Expressway and Pearl Expressway
Project Goals

- Enhance connectivity and traffic flow for current and future growth
- Provide enhanced pedestrian amenities
- Improve aesthetics
- Increase the functional area of John W. Carpenter Plaza
Streetscape Improvements

- Enhanced Paving
  - Sidewalks (10 feet wide)
  - Crosswalks at major intersections
- Pedestrian Lights
- Street Trees
- Median Planting
- Benches
- Trash Receptacles
John W. Carpenter Plaza

- Three separate parcels combined into one
- Park enlarged from 3.7 acres to 5 acres
- Future connection to the envisioned Emerald Bracelet
- Enhanced perimeter includes:
  - New paving
  - New pedestrian lights
- Increased use and enhanced safety of park
Current Roadway Operation
Central Expressway from Commerce Street to Live Oak Street

- Commerce Street to Pacific Avenue – four lane, one-way northbound roadway operation
- Southbound Central Expressway turns westward to intersect Pearl Expressway near the DART east bus transfer area and continues one-way operation into Farmers Market area
- Central Expressway functions as the northbound leg of the Pearl Expressway / Central Expressway couplet
 Proposed Roadway Operation

Central Expressway from Commerce Street to Live Oak Street

- Commerce Street to Pacific Avenue – six lane divided, two-way boulevard
- Pacific Avenue to Live Oak Street - realignment of southbound Central Expressway
- Elimination of Pearl Expressway / Central Expressway Connection
- Dual left turn lanes accommodated at Elm Street and Pacific Avenue to compensate for lost Pearl Expressway / Central Expressway Connection
- Central Expressway and Pearl Expressway each converted to two-way operation
- Improvements simplify circulation in the city’s center, Main Street, and Farmers Market
Proposed Realignment
Suggested Changes to Proposed Roadway Operation
Input by Downtown Dallas and Other Stakeholders

- Intent is to follow the recommendations included in the Comprehensive Transportation Plan for the Central Business District.
- Desire to create pedestrian friendlier intersections, wider medians for planting, and “boulevard” feel.
- Requested changes include:
  - Elimination of northbound dual left turn lanes at Pacific Avenue and Elm Street.
  - Elimination of 4th northbound lane between Commerce Street and Main Street (becomes a dual left turn lane at Main Street).
  - Elimination of northbound free right turn lane at Pacific Avenue.
Impacts to Traffic and Safety
With Implementation of Suggested Changes to Proposed Roadway Operation

- Current traffic counts were collected by Jacobs Engineering (design consultant).
- A growth rate of 3% per year was assumed and used to project the traffic volumes from 2009 to 2030.
- The projected volumes were then compared to 2030 North Central Texas Council of Governments (NCTCOG) traffic volumes.
- The projected volumes are comparable/higher than the NCTCOG volumes.
## Impacts to Traffic and Safety

### Year 2030 Traffic Analysis

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<th>Intersection</th>
<th>*Intersection Delay</th>
<th>LOS</th>
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<td>Central and Main</td>
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<table>
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<tr>
<th>Intersection</th>
<th>*NB Left-turn Delay</th>
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<td>Central and Main</td>
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*Delay is in Seconds per vehicle

LOS = Level of Service
## Impacts to Traffic and Safety

### Year 2030 Traffic Analysis

<table>
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<tr>
<th>Intersection</th>
<th>*NB Left-turn Queue Length</th>
<th>*Storage Available</th>
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<tr>
<td>Central and Main</td>
<td>14</td>
<td>110</td>
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*Queue length and available storage in feet*
Conclusion and Recommendation

- Based on the results of the analysis, the intersections will operate at Level of Service E or better.

- This condition, in our opinion, is acceptable now and for the future conditions (projected 2030 traffic volumes).
Project Timeline

CBD Comprehensive Transportation Plan  June 2005
Conceptual Design  June 2005
Design Begins  February 2008
City Council Alignment Approval  April 2009
Right-of-Way Acquisition Process Begins  May 2009
Design Complete  July 2009
Right-of-Way Acquisition Complete  December 2010
Construction Begins  Spring 2011
Construction Complete  Fall 2012
Next Step

- Council to consider the recommended alignment on April 22, 2009
Appendix
STREETSCAPE IMPROVEMENTS-TYPICAL SIDEWALK

- Smooth finish concrete
- Basketweave pattern, red brick pavers
- Smooth finish concrete band

- Existing building
- Pedestrian light
- Basketweave pattern, red brick pavers
- Smooth finish concrete band
- Smooth finish concrete

- Required surface parking lot fencing
- Evergreen shrubs for screening of car bumpers
- Street tree, 4" caliper branching at 7 ft.
- Granite aggregate
- Bench
STREETSCAPE IMPROVEMENTS-TYPICAL INTERSECTION
STREETSCAPE IMPROVEMENTS - PEDESTRIAN LIGHT

NOTES:
1. FINISH: RAL 9005 WITH CLEAR TOP COAT FROM TIGER DRYLAC SERIES 44 ANTI-GRAFFITI
2. VOLTAGE: 120V
STREETSCAPE IMPROVEMENTS - TREES

- Shumard Red Oak
- Chinese Pistache
- Allee Elm
STREETSCAPE IMPROVEMENTS - ORNAMENTAL TREES

Natchez Crape Myrtle

Muskogee Crape Myrtle

Redbud 'Forest Pansy'

Desert Willow
STREETSCAPE IMPROVEMENTS - GROUND COVER

Liriope Muscari ‘Big Blue’

Variegated

Creeping Liriope

Liriope Spicata ‘Silver Dragon’
STREETSCAPE IMPROVEMENTS - BENCH

BENCH ON CONCRETE - SECTION/ELEVATION/AXONOMETRIC

NOTES:
1. ALL STL. MEMBERS COATED W/ZINC RICH EPOXY THEN POLYURETHANE COATED
2. 1/2" X 2 1/2" PLTD EXPANSION ANCHOR BOLTS PROVIDED
3. EXPANSION-ANCHOR BOLTS TO PENETRATE AND CONCRETE PER 3" X 1/2" HOLE
4. HANDLE/FORBENT NUT, A TOTAL PER BENCH, MANT NUT TO MATCH BENCH
STREETSCAPE IMPROVEMENTS - TRASH RECEPTACLE

TRASH RECEPTACLE ON CONCRETE - SECTION/ELEVATION/AXONOMETRIC

1" = 1'-0"