



# Texas Transportation Commission Meeting

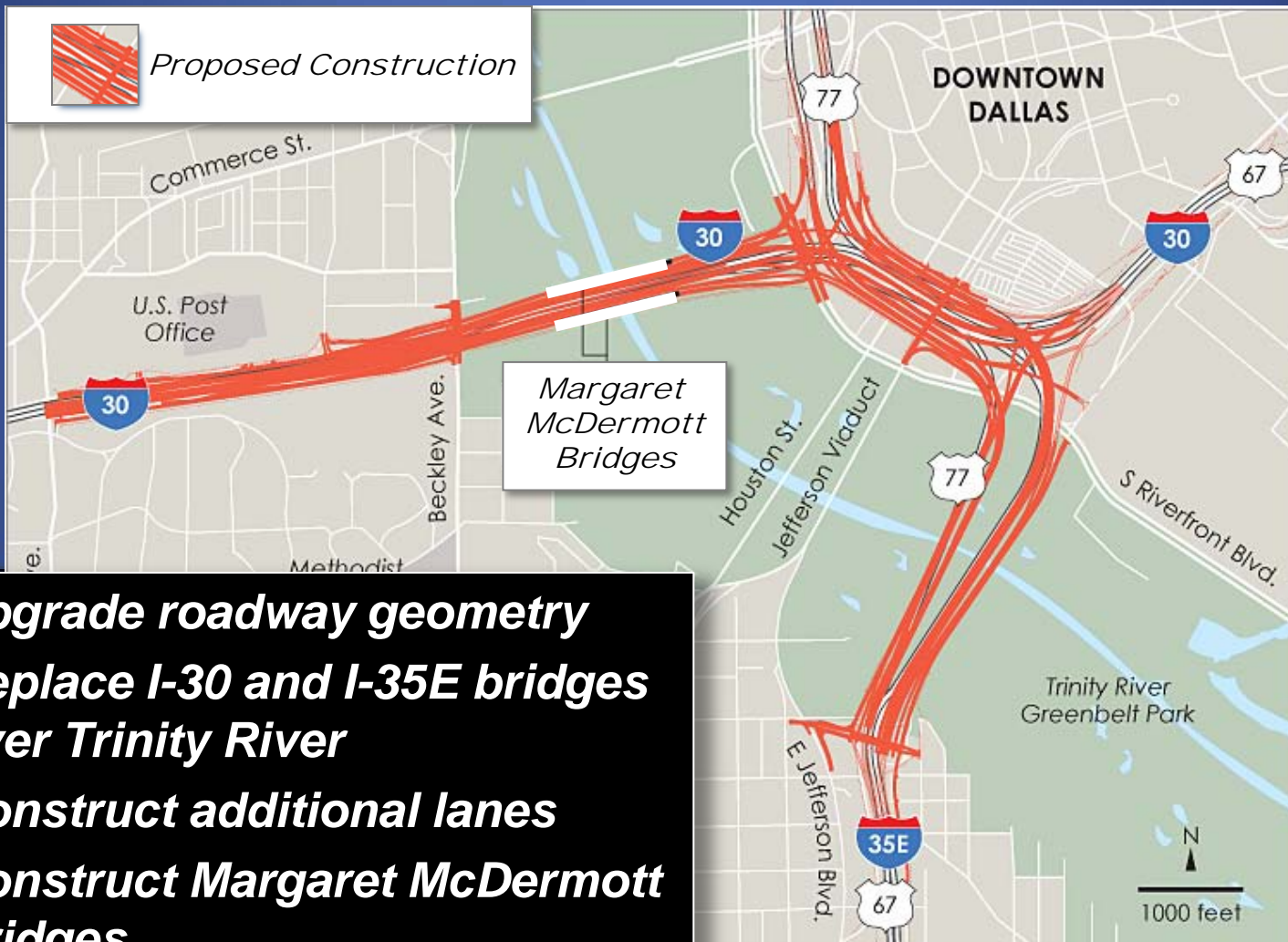
November 15, 2012

## Item 3.

### Dallas Horseshoe Project



# Dallas Horseshoe Project Overview



- **Upgrade roadway geometry**
- **Replace I-30 and I-35E bridges over Trinity River**
- **Construct additional lanes**
- **Construct Margaret McDermott Bridges**



# Purpose and Need

**Ranked the 7<sup>th</sup> most congested roadway in Texas in 2011 – Weekday volume exceeds 460,000**



*Margaret McDermott Bridges*



## Nation's 10 worst commuting trouble spots

Here are the worst commuting "choke points" in the USA, according to the American Automobile Association:

- **Boston.** Interstate 93 north and south. Boston's central artery cuts an elevated pass through downtown. It was built in the 1950s to carry 90,000 cars daily, but it now overflows with 190,000 cars each day. The 6-8 hours of stop-and-go traffic each day is expected to stretch to 14-16 hours by 2010.
- **Chicago.** Interstate 88 at the Eisenhower Expressway. Traffic from western suburbs comes to a halt as 34,000 cars from I-88 merge with 43,000 cars from the Eisenhower Expressway (Interstate 290) every day. The road goes down to a single lane for 1 1/2 blocks before opening to multiple lanes. What should be a 20-minute trip to the city can take more than an hour.
- **Dallas.** Interstate 35 at Interstate 30. Known as the "Mix Master" by local motorists, these two highways merge and struggle to carry more than 200,000 vehicles a day from downtown through the steep hills of "The Canyon."
- **Houston.** U.S. 59 at the 610 Loop. Only one lane exits on U.S. 59 to the 610 loop, causing delays in all directions at an intersection that handles more than 330,000 vehicles a day. Stop-and-go conditions can occur for five-six hours.
- **Los Angeles.** Interstates 5, 10, 60 and 101. About 566,000 vehicles travel through this intersection daily, overwhelming the capacity of these major commuter highways. Motorists changing lanes as they approach create a traffic bottleneck that extends for miles.
- **Minneapolis.** Interstate 35W and the southern portion of the Minnesota Trunk Highway 62. This section has a traffic volume of 169,979 vehicles a day, and delays are estimated at 7.4 million hours per year.
- **New Orleans.** Interstates 10 and 610, eastbound. Traffic routinely backs up at this interchange every morning. Although it has recently undergone construction to ease the problem, a bottleneck still occurs at the I-10/I-610 split as New Orleans-bound traffic is squeezed into two lanes before opening up.
- **New York City.** Gowanus Expressway. The expressway (Interstate 278) is a major route connecting Brooklyn, Queens, Long Island and Manhattan. The primary congestion point is a 3.8-mile segment between the Brooklyn Battery tunnel and the Belt Parkway that carries 175,000 vehicles a day. Delays can occur for six or more hours.
- **Seattle.** Interstate 5 and Interstate 90 interchange. This area has an average daily volume for both directions of 260,000 vehicles, with an average accident rate of 5.6 accidents per 1 million vehicles. However, this section typically operates below capacity for 10 hours per day. There is lots of weaving and merging through the collector-distributor lanes.
- **Washington, D.C., area.** Springfield, Va. Interstates 495, 395 and 95. "The Mixing Bowl" is where the major interstates of the D.C. metro area converge, resulting in a volume of 400,000 vehicles daily and 179 reported crashes during a two-year period. The interchange is undergoing construction that is expected to last eight years and is the second-largest project of its kind in the USA.

Source: American Automobile Association



# Purpose and Need

## Bridge Deterioration



### Nation's 10 worst commuting trouble spots

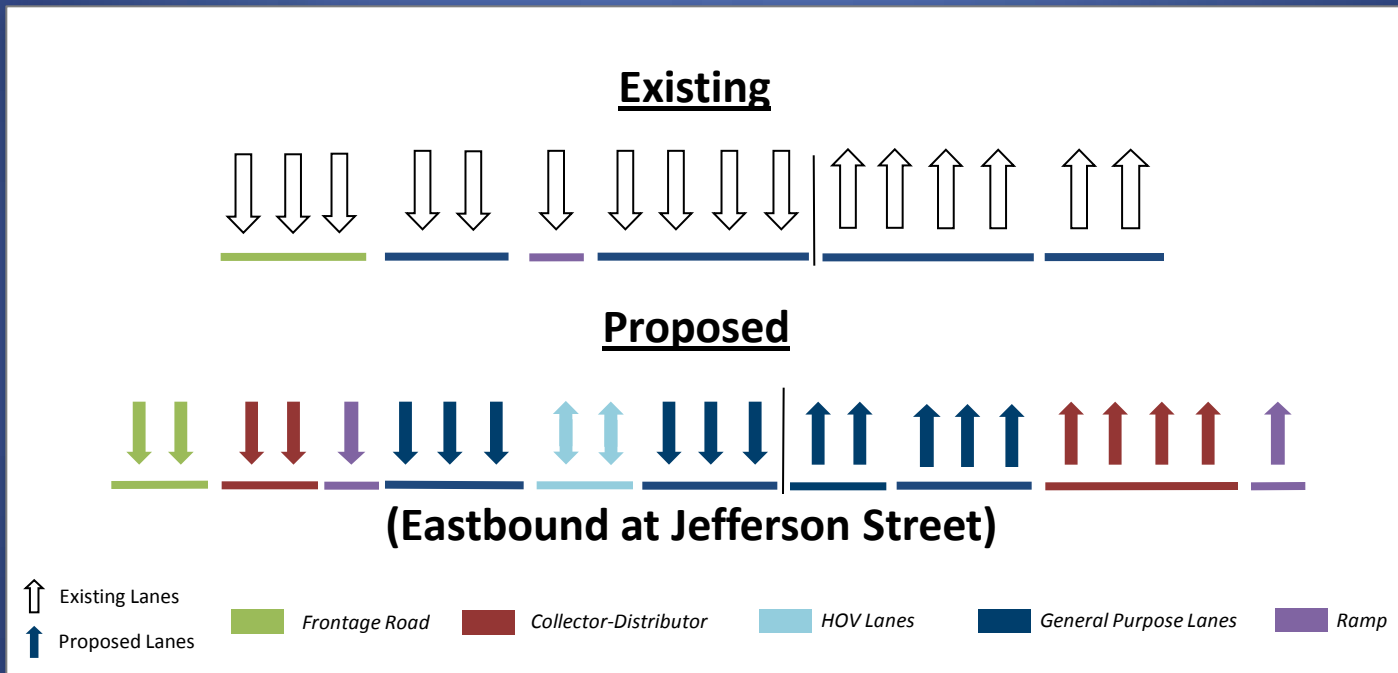
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- **New York City.** Gowanus Expressway. The expressway (Interstate 278) is a major route connecting Brooklyn, Queens, Long Island and Manhattan. The primary collection has a traffic volume of 169,979 vehicles a day, and delays are estimated at 7.4 million hours per year.
- **San Francisco.** The Golden Gate Bridge. The bridge has an average daily volume for both directions of 260,000 vehicles, with an average accident rate of 5.6 accidents per 1 million vehicles. However, this section typically operates below capacity for 10 hours per day. There is lots of weaving and merging through the collector-distributor lanes.
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American Automobile Association



# Horseshoe Project Configuration



*Plus the Calatrava-designed Margaret McDermott Bicycle/Pedestrian Bridges*



# Margaret McDermott Bridges





## Dallas Horseshoe Project Funding

\$100,755,000	PROP 12 P2 PE/ROW
\$ 87,104,000	PROP 12 P2 TMA
\$400,500,000	PROP 12 P2 Bridge
\$ 10,000,000	PROP 12 P1
\$ 13,300,000	PROP 14
\$ 21,450,000	SH 121 Regional Toll Revenue
\$106,375,987	Cat 10 HPS/DEMO Earmarks
\$ 75,000,000	Cat 6 Federal Bridge
<u>\$ 4,450,000</u>	<u>Cat 7 STP-MM</u>
\$818,934,987	Total Funding



## Procurement History

- December 9, 2011 – RFQ released
- January 9, 2012 – Industry Workshop
- March 29, 2012 – Three firms shortlisted
- July 3, 2012 – Final RFP issued to shortlisted firms
- May 23 – August 17, 2012 – One-on-One meetings
- September 25, 2012 – Technical Proposals received
- October 8, 2012 – Financial Proposals received





# Shortlisted Proposers

## **Dallas Horseshoe Solutions:**

### Equity Members

- Granite Construction Company
- CH2M Hill Engineers, Inc.
- Traylor Bros., Inc.

### Non-equity Members

- Infrastructure Corporation of America
- Excelsis, Inc.
- Pavetex Engineering and Testing, Inc.
- Kimley-Horn & Associates, Inc.
- Cobb Fendley & Associates, Inc.
- Alliance Geotechnical Engineering
- Structural Engineering Associates
- Landtech Consultants, Inc.
- Summit Engineering, Inc.
- VAK Construction Engineering Services, LLC



## Shortlisted Proposers

### **NorthGate Horseshoe Constructors JV:**

#### Equity Members

- Kiewit Infrastructure Group Inc.
- Zachry Construction Corporation

#### Non-equity Members

- Parsons Transportation Group, Inc.
- Lamb-Star Engineering, L.P.
- Kiewit Offshore Services, Ltd.
- Halff Associates, Inc.
- Civil Associates, Inc.
- Terracon Consultants, Inc.
- HVJ Associates, Inc.
- The Transtec Group, Inc.
- Hayden Consultants, Inc.
- IEA, Inc.
- Mandy Vassigh Engineering, Inc.
- Maldonado-Burkett Intelligent Transportation Systems, LLP
- e. Construct USA, LLC
- CP&Y, Inc.
- Delcan
- VRX, Inc.
- SRLS Texas, LLC



# Shortlisted Proposers

## **Pegasus Link Constructors:**

### Equity Members

- Fluor Enterprises, Inc.
- Balfour Beatty Infrastructure, Inc.

### Non-equity Members

- Parsons Brinckerhoff, Inc.
- Transfield Services North America, Transportation Infrastructure
- AECOM Technical Services, Inc.
- American Bridge Company
- Raba Kistner Infrastructure, Inc.
- Kleinfelder Central, Inc.
- K-Strategies Group LLC
- Pinnacle Consulting Management Group, Inc.
- STL Engineers
- MBK Engineers
- Surveying and Mapping, Inc.
- Maldonado-Burkett Intelligent Transportation Systems, LLP
- Rios Engineering, LLC
- EJES, Incorporated
- IEA, Inc.
- Aguirre & Fields, LP
- David Mason & Associates of Texas, LLC
- AMEC Environment & Infrastructure, Inc.



## Evaluation of Proposals

- TxDOT implemented a pre-established and rigorous evaluation procedure to select the proposal that offers the best value
- Separate pass/fail, technical and financial evaluations
- Evaluation subcommittees provided scoring recommendations to Evaluation Selection Recommendation Committee (ESRC)
- ESRC provided scoring recommendations to Project Steering Committee



## Scoring of Proposals

Best Value scoring based on price, schedule, and technical factors:

<u>Component</u>	<u>Point Value</u>
Price (includes discount for early completion)	70
Technical Solutions	15
Project Management Plan	12
<u>Quality Management Plan</u>	<u>3</u>
Total	100



# Results

**Detailed Evaluations  
were completed  
resulting in.....**



## Results (cont.)

# Pegasus Link Constructors

- Fluor Enterprises, Inc.
- Balfour Beatty Infrastructure, Inc.

**is recommended to the Texas Transportation Commission as providing the best value**



## Results (cont.)

- **Pegasus Link Constructors** .....**91.72** pts
  - Fluor Enterprises, Inc.
  - Balfour Beatty Infrastructure, Inc.
  
- **Dallas Horseshoe Solutions** .....**86.50** pts
  - Granite Construction Company
  - CH2M Hill Engineers, Inc.
  - Traylor Bros., Inc.
  
- **NorthGate Horseshoe** .....**83.14** pts
  - Kiewit Infrastructure Group Inc.
  - Zachry Construction Corporation





# Best Value Price

• Design & Construction	\$718,741,351
• Capital Maintenance (years 1-5)	<u>\$ 11,641,090</u>
• Capital Maintenance (years 6-15)	\$ 23,208,005
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Total Contract	\$753,590,446



	<u>Estimated</u>	<u>Best Value</u>
• Design-Build	<u>\$738.8M</u>	<u>\$718.8M</u>
• Row/Utilities/Etc.	\$ 79.2M	\$ 79.2M
	\$818.0M	\$798.0M



## Next Steps

- Negotiate final terms of DBA and CMA
- FHWA concurrence with award
- Execution of the DBA and CMA
- Start construction in early 2013
- Complete construction in approximately 4 years



# Questions

***Staff recommends and requests your approval of this minute order.***