

# Memorandum



CITY OF DALLAS

DATE February 22, 2013

TO Members of the Transportation and Environment Committee:  
Linda L. Koop (Chair), Sheffie Kadane (Vice Chair), Sandy Greyson,  
Delia Jasso, Vonciel Jones Hill, Pauline Medrano

SUBJECT **Dallas Horseshoe Project**

On Monday, February 25, 2013, the Transportation and Environment Council Committee will be briefed on the Dallas Horseshoe Project. The material is attached for your review.

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

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

C: The Honorable Mayor and Members of the City Council  
Mary K. Suhm, City Manager  
Thomas P. Perkins, Jr. City Attorney  
Rosa Rios, City Secretary  
Craig Kinton, City Auditor  
Daniel F. Solis, Administrative Judge  
A.C. Gonzalez, First Assistant City Manager  
Ryan S. Evans, Assistant City Manager  
Forest Turner, Assistant City Manager  
Joey Zapata, Assistant City Manager  
Jeanne Chipperfield, Chief Financial Officer  
Edward Scott, Director, Controller's Office  
Frank Libro, Public Information Office  
Rick Galceran, Director, Public Works  
Theresa O'Donnell, Director, Sustainable Development and Construction  
Stephanie Cooper, Assistant to the City Manager – Council Office

# DALLAS HORSESHOE PROJECT

TEXAS DEPARTMENT OF TRANSPORTATION – DALLAS DISTRICT



City of Dallas - Transportation and Environment Council Committee  
February 25, 2013



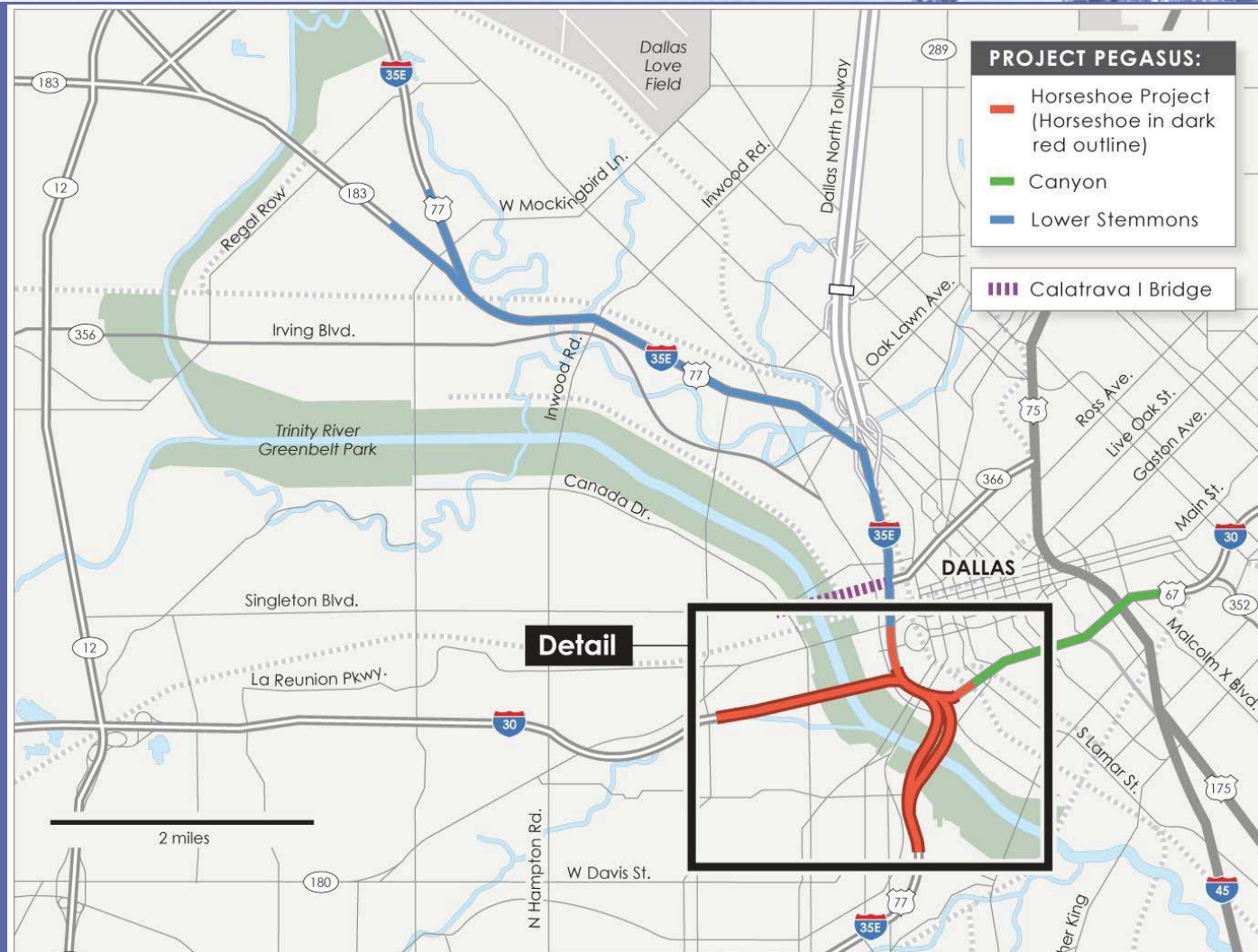
# DALLAS HORSESHOE PROJECT

## OUTLINE

- Background: Project Pegasus
- Breakout Project: Horseshoe
  - Proposed Project
  - Purpose & Need
  - Coordination Efforts
  - Work Complete/Underway
  - Schedule

# DALLAS HORSESHOE PROJECT

## BACKGROUND: PROJECT PEGASUS



- IH 30 from Sylvan Avenue to IH 45
- IH 35E from Empire Central Drive (North of SH 183) to 8<sup>th</sup> Street



# DALLAS HORSESHOE PROJECT

COMPONENTS OF PROJECT PEGASUS: LOWER STEMMONS





# DALLAS HORSESHOE PROJECT

## COMPONENTS OF PROJECT PEGASUS: CANYON





# DALLAS HORSESHOE PROJECT

COMPONENTS OF PROJECT PEGASUS: HORSESHOE



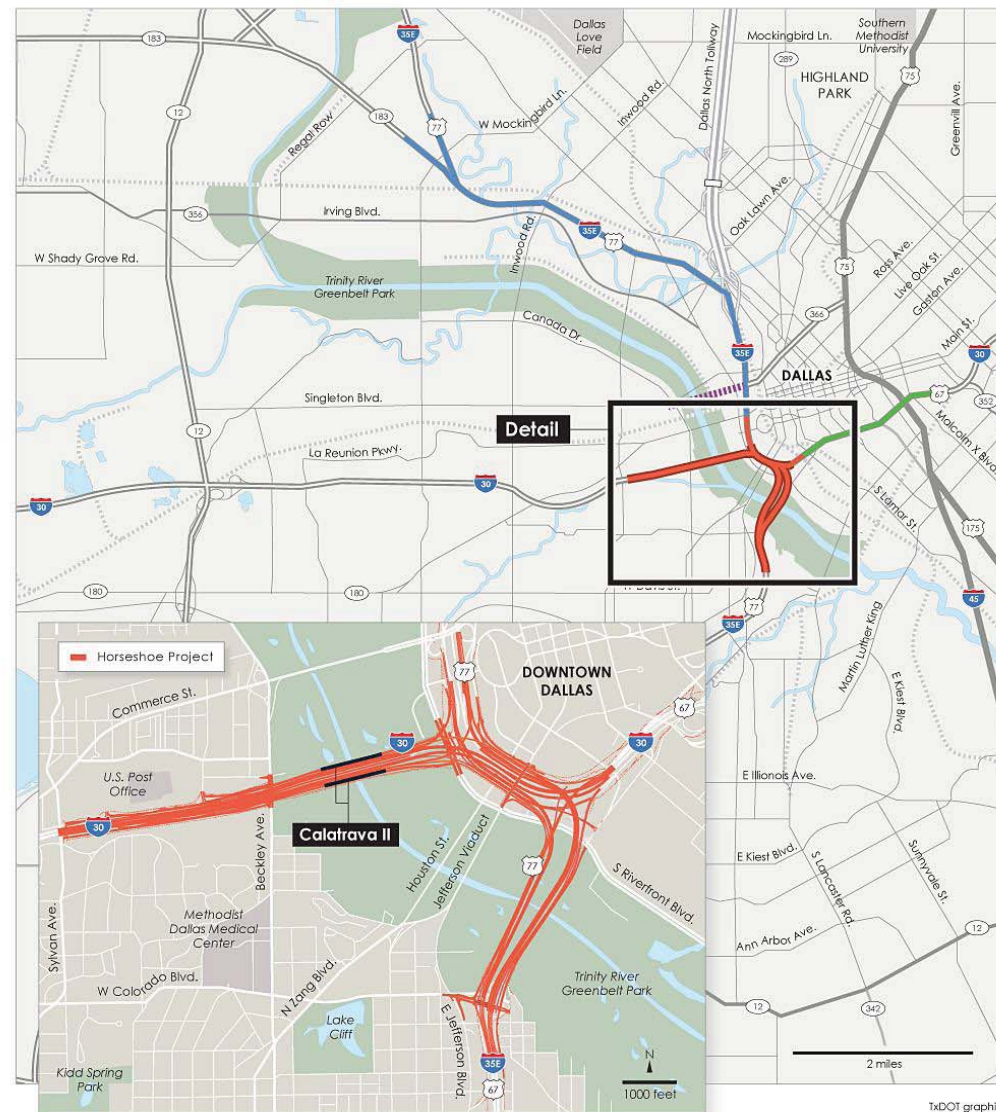
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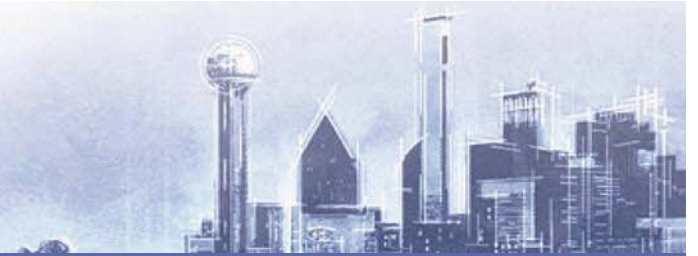


## BREAKOUT PROJECT: HORSESHOE



# DALLAS HORSESHOE PROJECT

## HORSESHOE: PROPOSED PROJECT

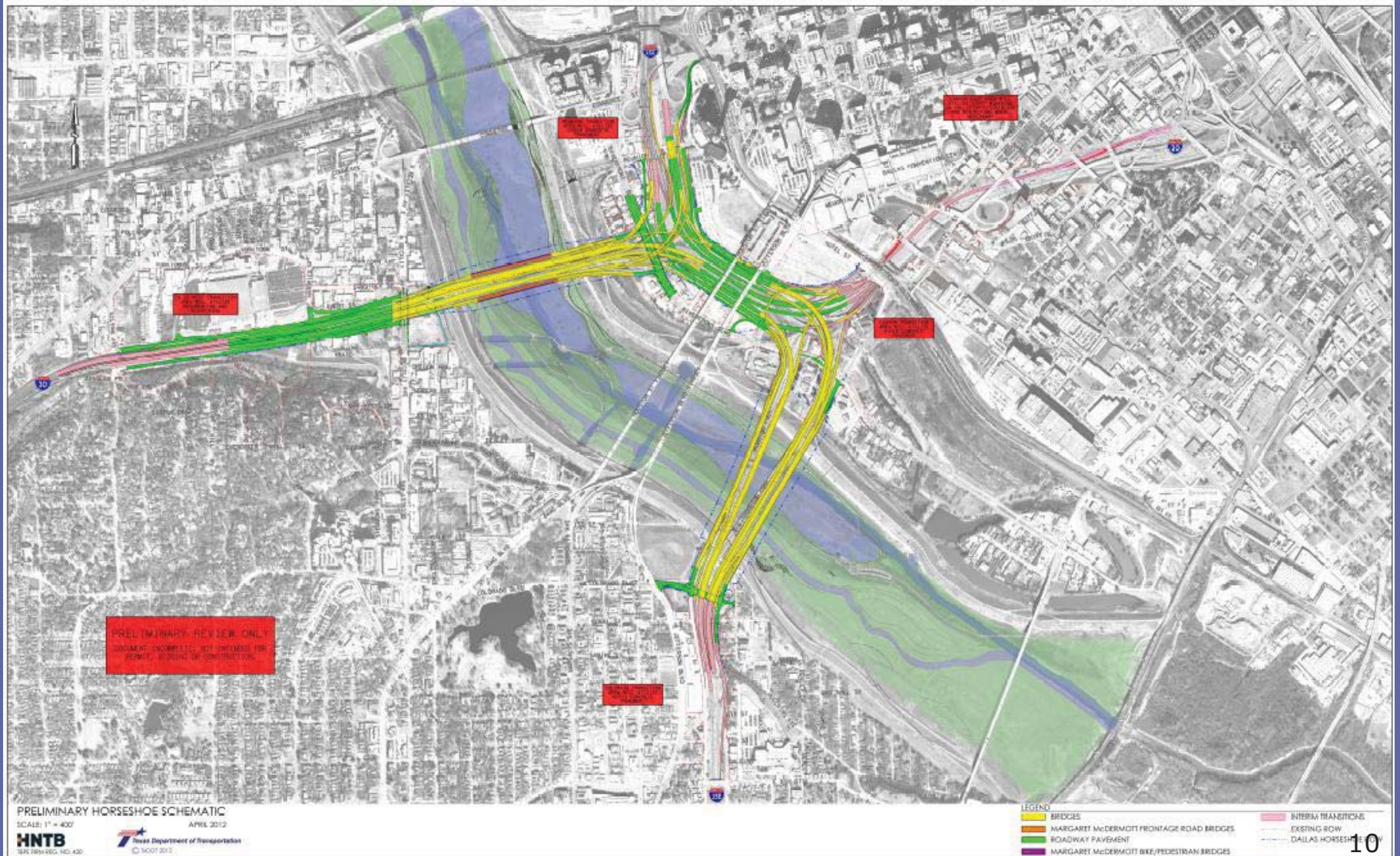


- Replace I-30 & I-35E bridges crossing the Trinity River
- Upgrade outdated roadway geometry of the Mixmaster interchange
- Construct additional lanes to add capacity
- Build the Margaret McDermott signature Bridges



# DALLAS HORSESHOE PROJECT

## HORSESHOE: PROPOSED PROJECT



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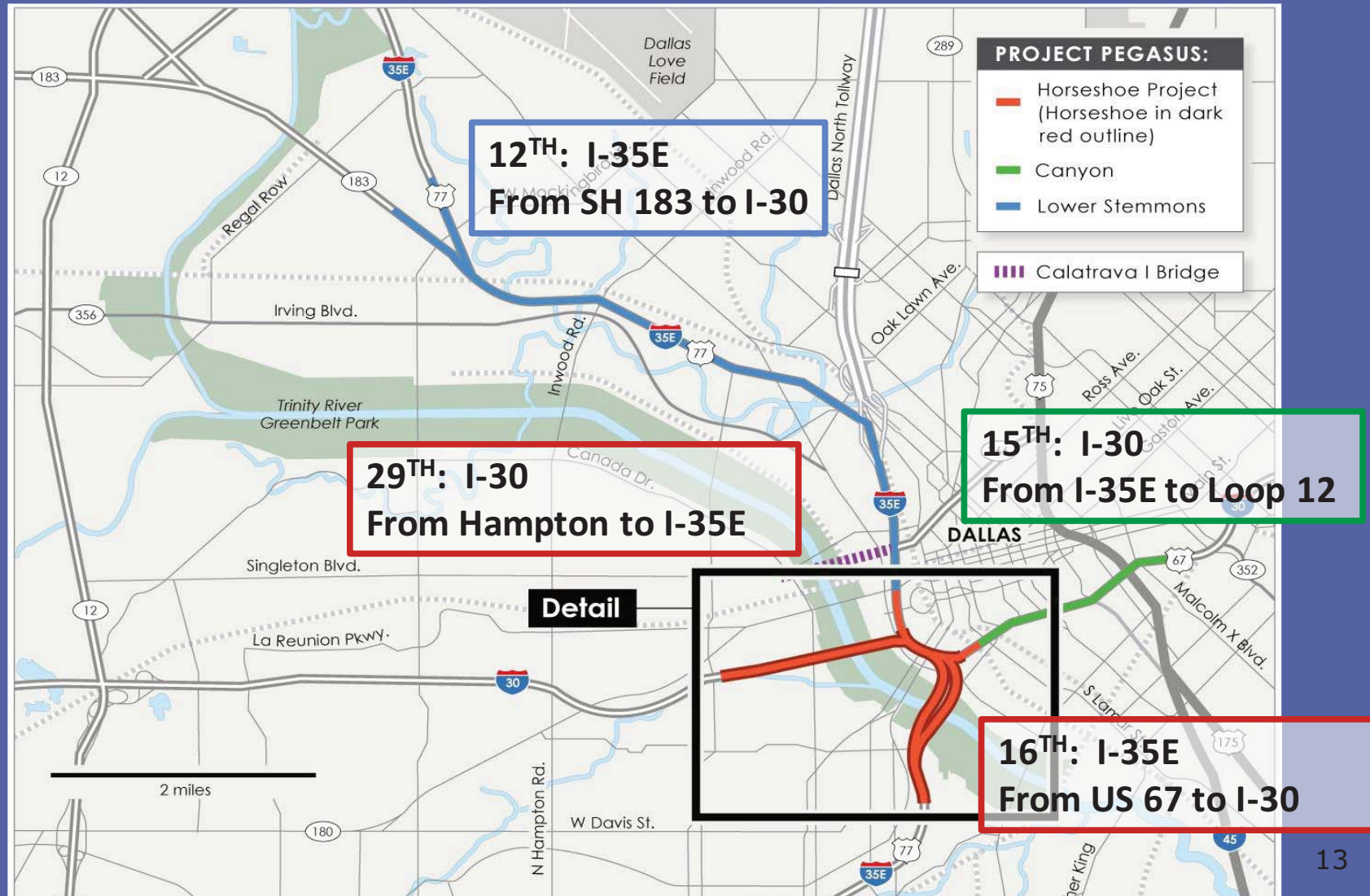


# DALLAS HORSESHOE PROJECT

## HORSESHOE: PURPOSE & NEED

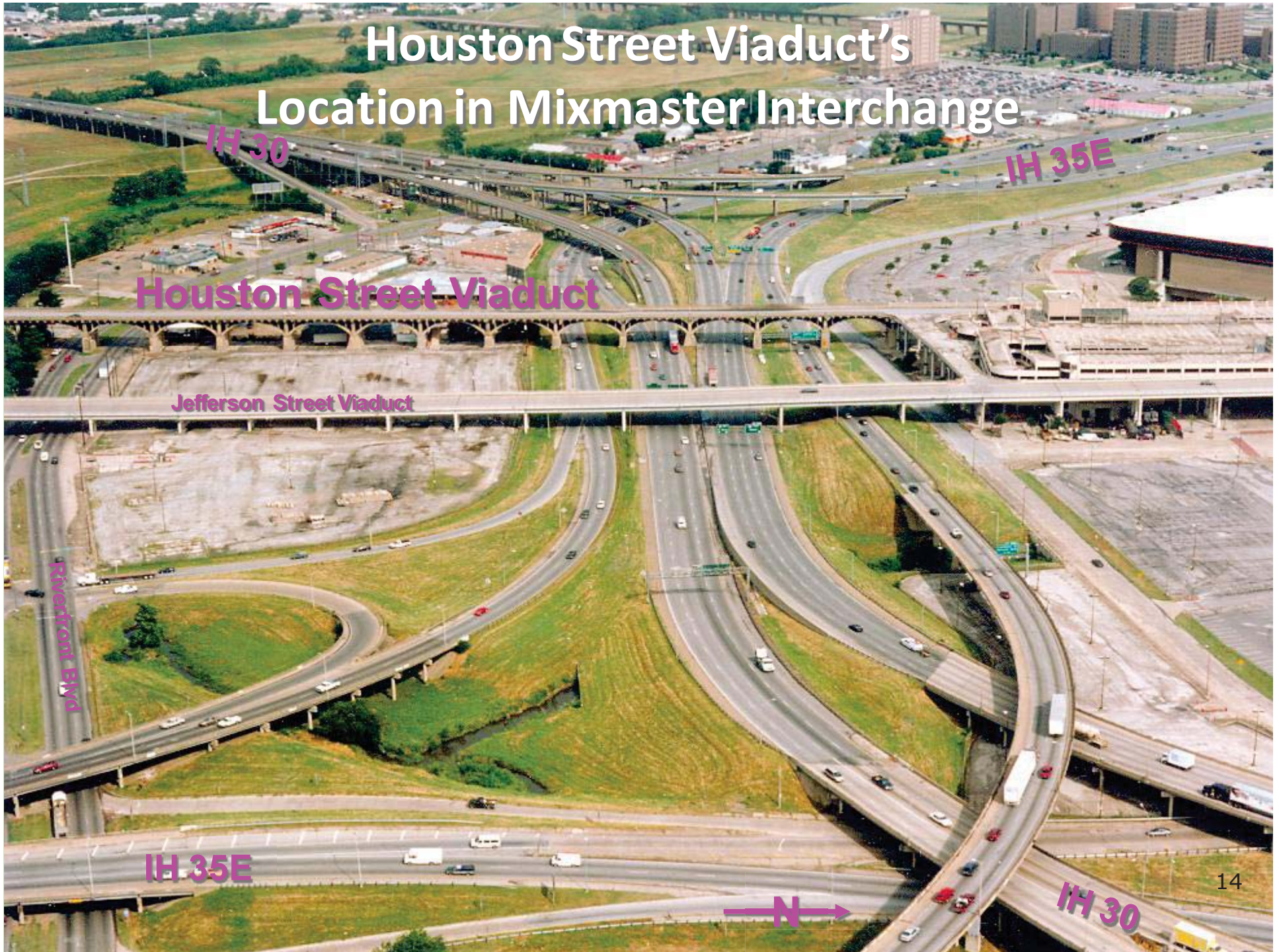
- I-30 & I-35E carry over 460,000 vehicles per weekday
- Rated in the top 20 most congested roadways in Texas
- Outdated roadway geometry
- Bridge deterioration
- Increasing costs to maintain & repair

## 2010 TEXAS TOP 20 CONGESTED ROADWAYS





# Houston Street Viaduct's Location in Mixmaster Interchange





# DALLAS HORSESHOE PROJECT

## HORSESHOE: OUTDATED ROADWAY GEOMETRY



USA Today, September 9, 2000

### Nation

Here are the worst "choke points" in the country, according to the American Road & Builders Builders Association:

► **Boston.** Interstate 93 cuts an elevated path through downtown. It was built in the 1950s to carry 90,000 cars but it now overflows with 150,000 cars each day. The stop-and-go traffic is expected to stretch to 2010.

► **Chicago.** Interstate 55 Eisenhower Expressway from western suburbs to downtown is a single lane for 1 1/2 miles. It carries 43,000 cars every day. The road should be a 20-mile-long multi-lane highway that can take more

► **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."



traffic

H  
30 WEST  
Ft Worth  
MERGE RIGHT  
MERGE LEFT

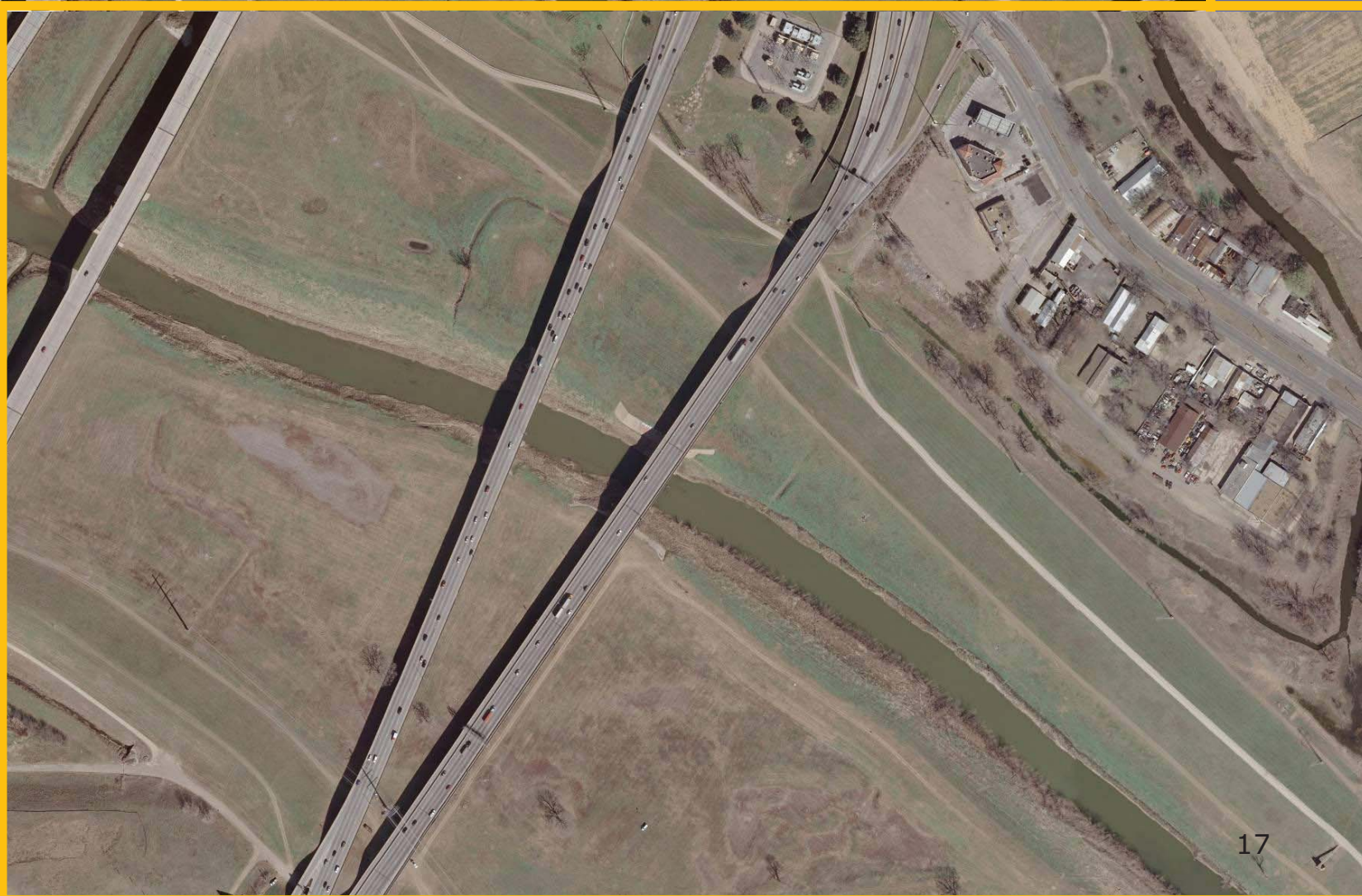
The Dallas Morning News: Erich Schlegel



# DALLAS HORSESHOE PROJECT

## I-30 AND I-35E: BRIDGE SUFFICIENCY RATINGS







# DALLAS HORSESHOE PROJECT

## I-30 BRIDGE PICTURES



# DALLAS HORSESHOE PROJECT

## I-35E NB BRIDGE PICTURES





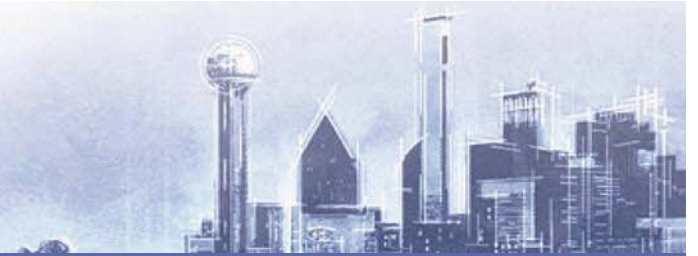
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# DALLAS HORSESHOE PROJECT

## HORSESHOE: COORDINATION EFFORTS

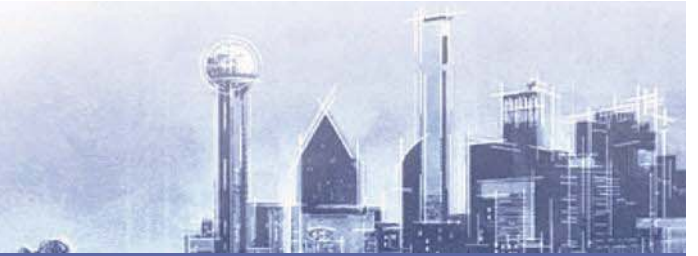


- **City of Dallas**
  - **Construction of the Margaret McDermott Bridges**
  - **Accommodating the future Trinity Lakes Project**
  - **Accommodating the future Jefferson/Memorial Project**
  - **Operational improvements for connections to downtown (During construction and after)**
  - **Easements across the Trinity River floodway**
  - **Beckley and Riverfront construction**
  - **Floodplain management and access**
  - **Able Sumps**



# DALLAS HORSESHOE PROJECT

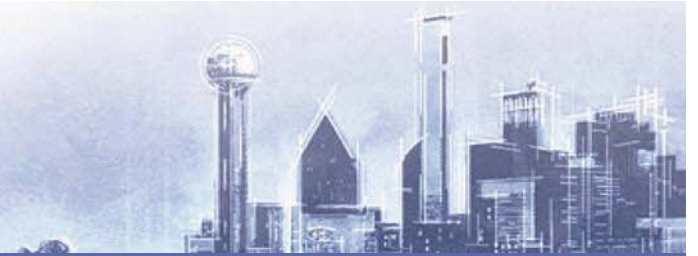
## HORSESHOE: COORDINATION EFFORTS



- **NCTCOG**
  - **Project Funding**
- **USACE**
  - **Section 408 permitting**
- **NTTA**
  - **Accommodating the future Trinity Parkway**
- **Dallas County**
  - **Riverfront Blvd. reconstruction**

# DALLAS HORSESHOE PROJECT

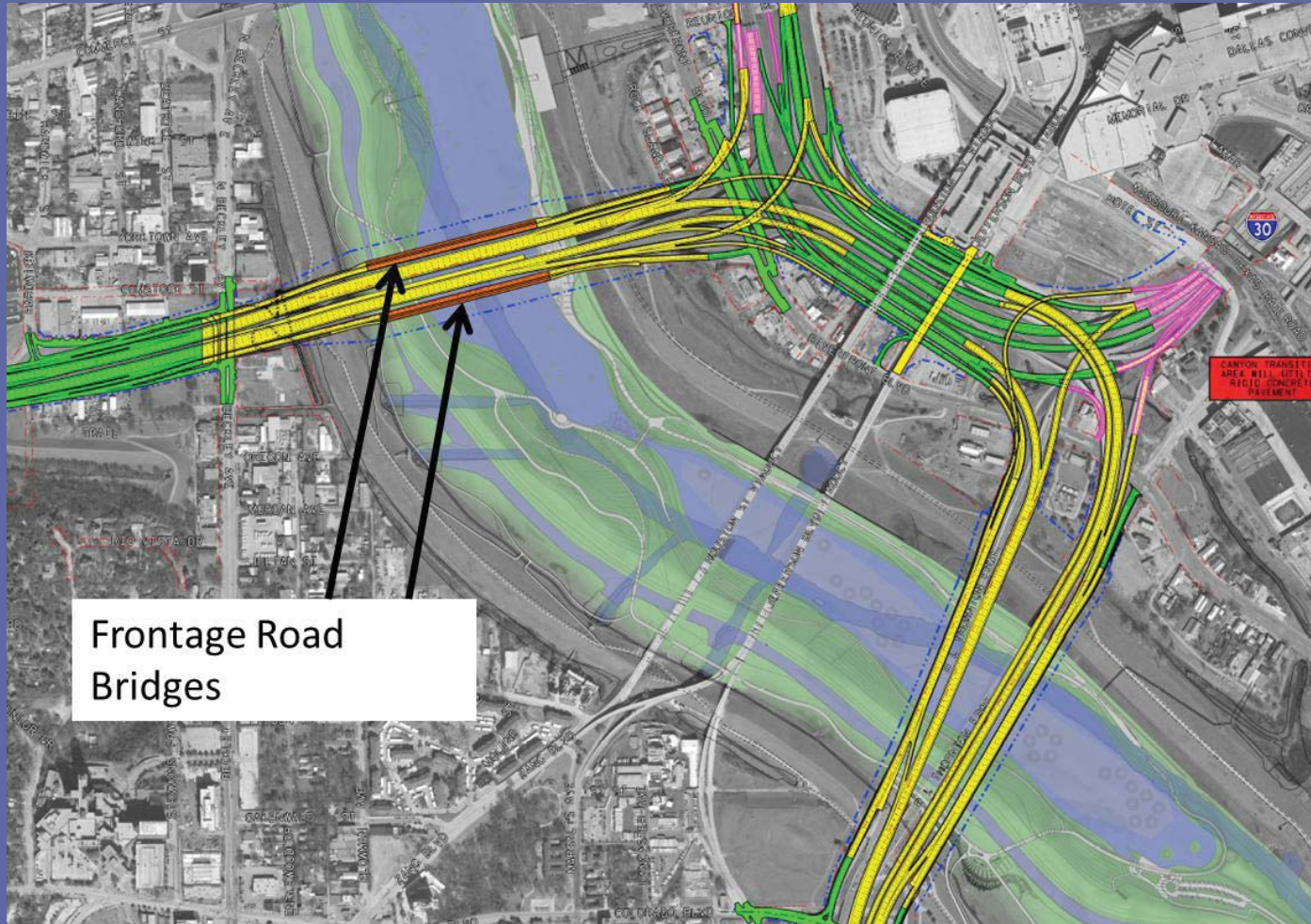
## HORSESHOE: COORDINATION EFFORTS



- **Utilities**
  - **Oncor – Transmission Tower Relocation**
  - **DWU – Water and wastewater accommodations**
- **Local Stakeholders**
  - **Methodist Hospital**
  - **Hyatt Regency Reunion**
  - **Fuel City**
  - **American Airlines Center**

# DALLAS HORSESHOE PROJECT

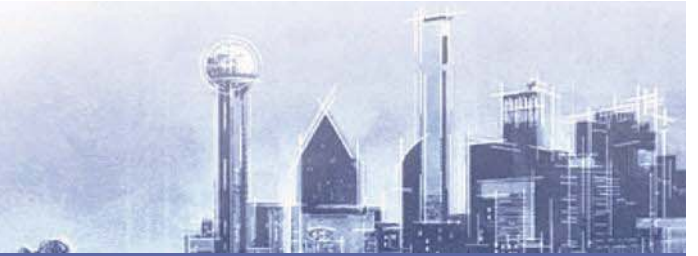
## HORSESHOE: Margaret McDermott Bridges





# DALLAS HORSESHOE PROJECT

HORSESHOE: Margaret McDermott Bridges



- Hike/Bike facilities along the IH 30 eastbound and westbound frontage roads
- Designed and engineered to 100% by Santiago Calatrava, LLC
- Under contract with the City of Dallas
- Built by the Design-Build Contractor

# DALLAS HORSESHOE PROJECT

HORSESHOE: Margaret McDermott Bridges





# DALLAS HORSESHOE PROJECT

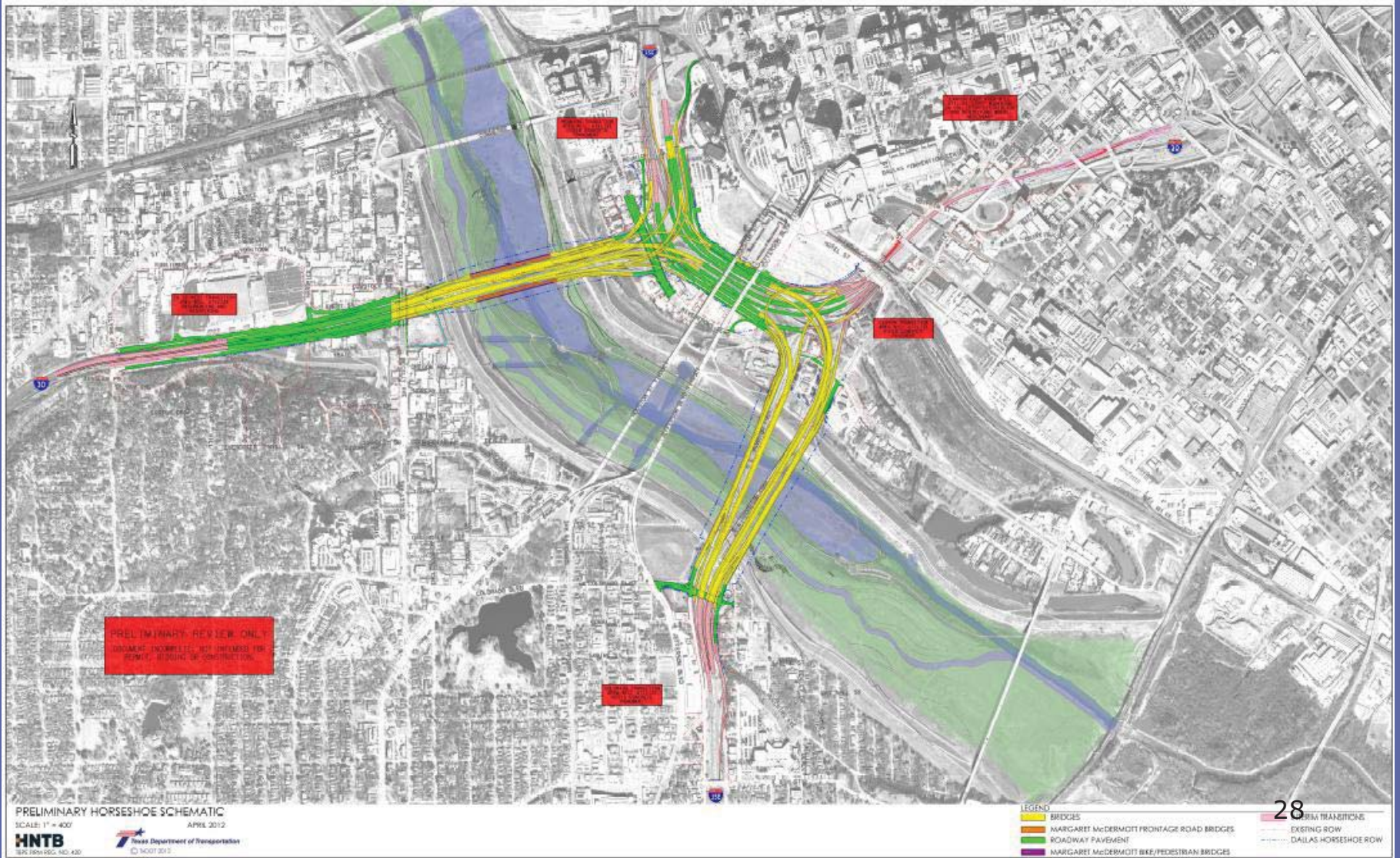
CROSSING THE TRINITY RIVER LEVEES





# DALLAS HORSESHOE PROJECT

## ACCOMMODATING FUTURE TRINITY LAKES PROJECT





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# DALLAS HORSESHOE PROJECT

HORSESHOE: WORK COMPLETE/UNDERWAY



- Commission approved funding
- Commission approval to “Design-Build”
- I-30 and I-35E: 30% design complete
- Horseshoe FONSI September 18, 2012
- USACE 408 Minor October 19, 2012
- Contract Execution February 20, 2013
- ROW Acquisition
- Oncor Transmission Lines Relocation (Fall)



# DALLAS HORSESHOE PROJECT

## PROJECT FUNDING AND COST

### ■ Project Funding

■ Prop 12 P2 PE/ROW	\$100.8 M
■ Prop 12 P2 TMA	\$87.1 M
■ Prop 12 P2 Bridge	\$400.5 M
■ Prop 12 P1 (Anticipated)	\$16.3 M
■ Prop 14 (Anticipated)	\$7.0 M
■ SH 121 RTR	\$21.5 M
■ Cat 10 HPS/DEMO	\$106.4 M
■ Cat 6 Federal Bridge	\$75.0 M
■ Cat 7 STP-MM	\$4.5 M
■ Total	\$819 M

### ■ Project Cost

■ Original Estimate	\$818 M
■ Total Bid	\$798 M

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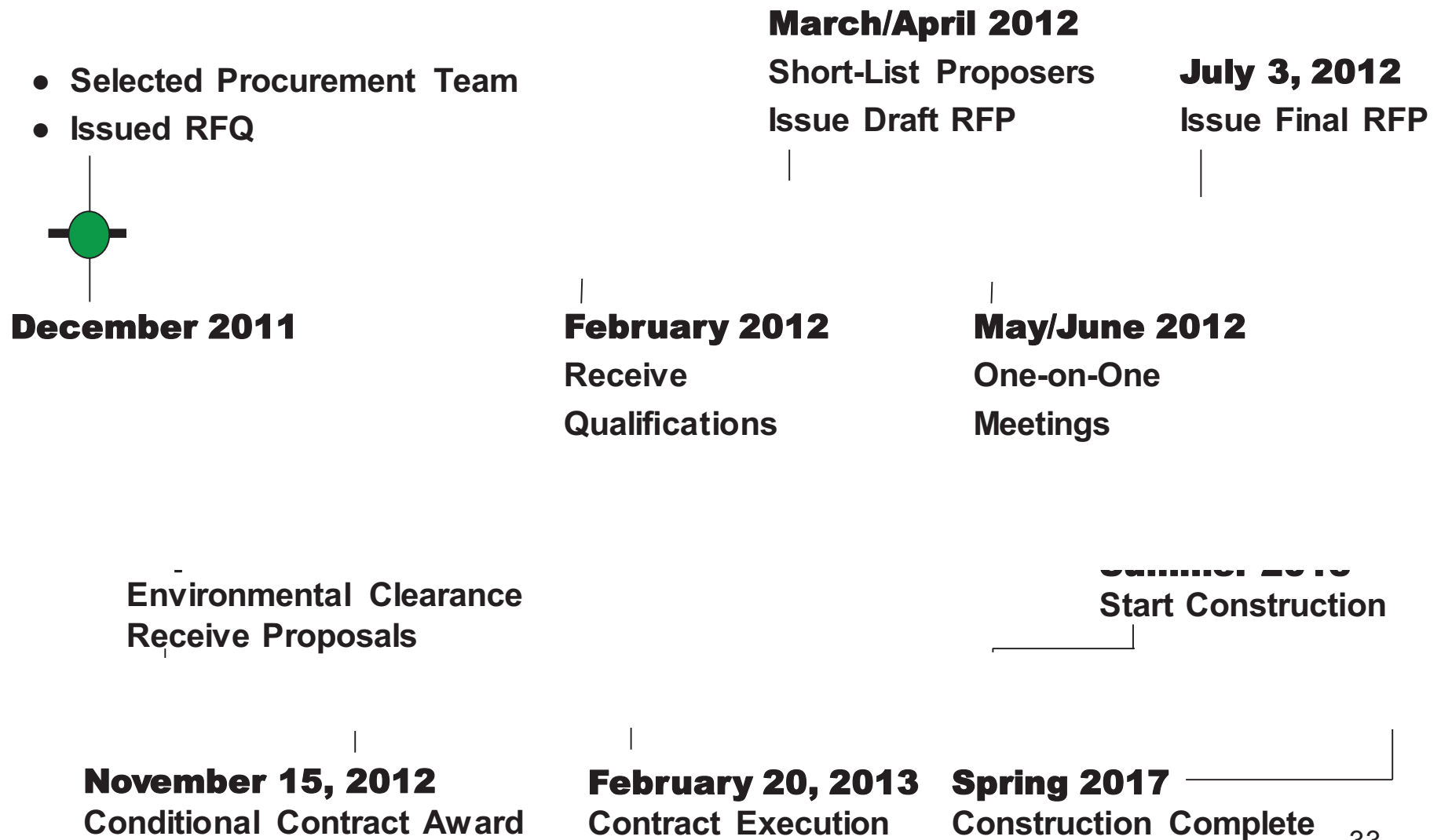
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# DALLAS HORSESHOE PROJECT

## Next Steps: Preliminary Timeline



# DALLAS HORSESHOE PROJECT

## QUESTIONS



Duane Milligan, P.E.  
Dallas Horseshoe Project  
Project Engineer

Ceason Clemens, P.E.  
Dallas District  
Deputy Project Engineer