Texas Department of Transportation

Houston District

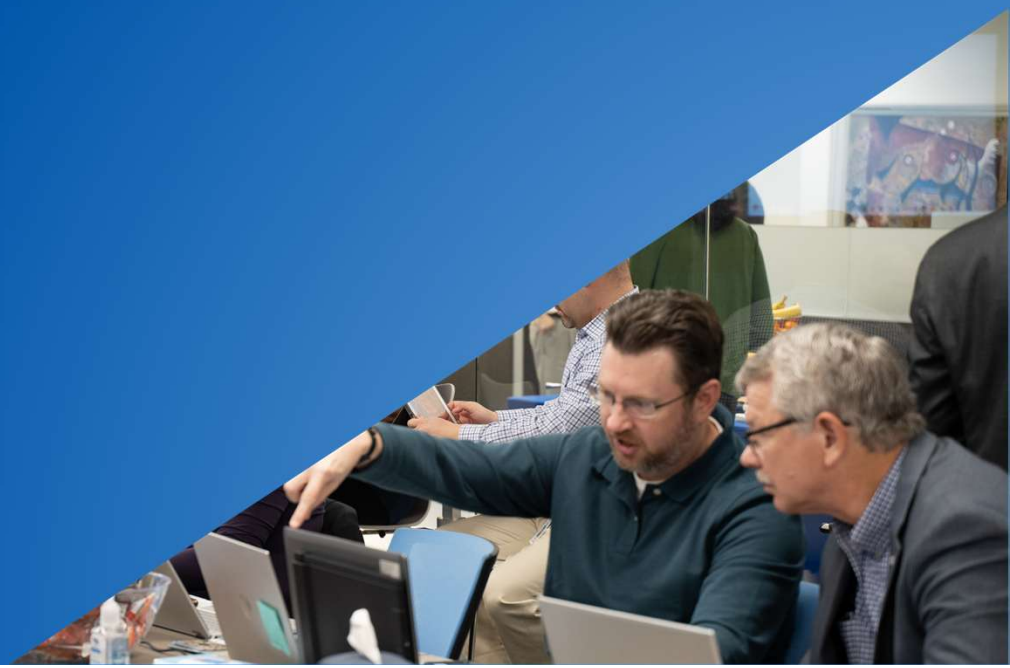
I-45 North Houston Highway Improvement Project (NHHIP)

Segment 3A & Overall Project Update

Midtown Super Neighborhood #62
March 12, 2025

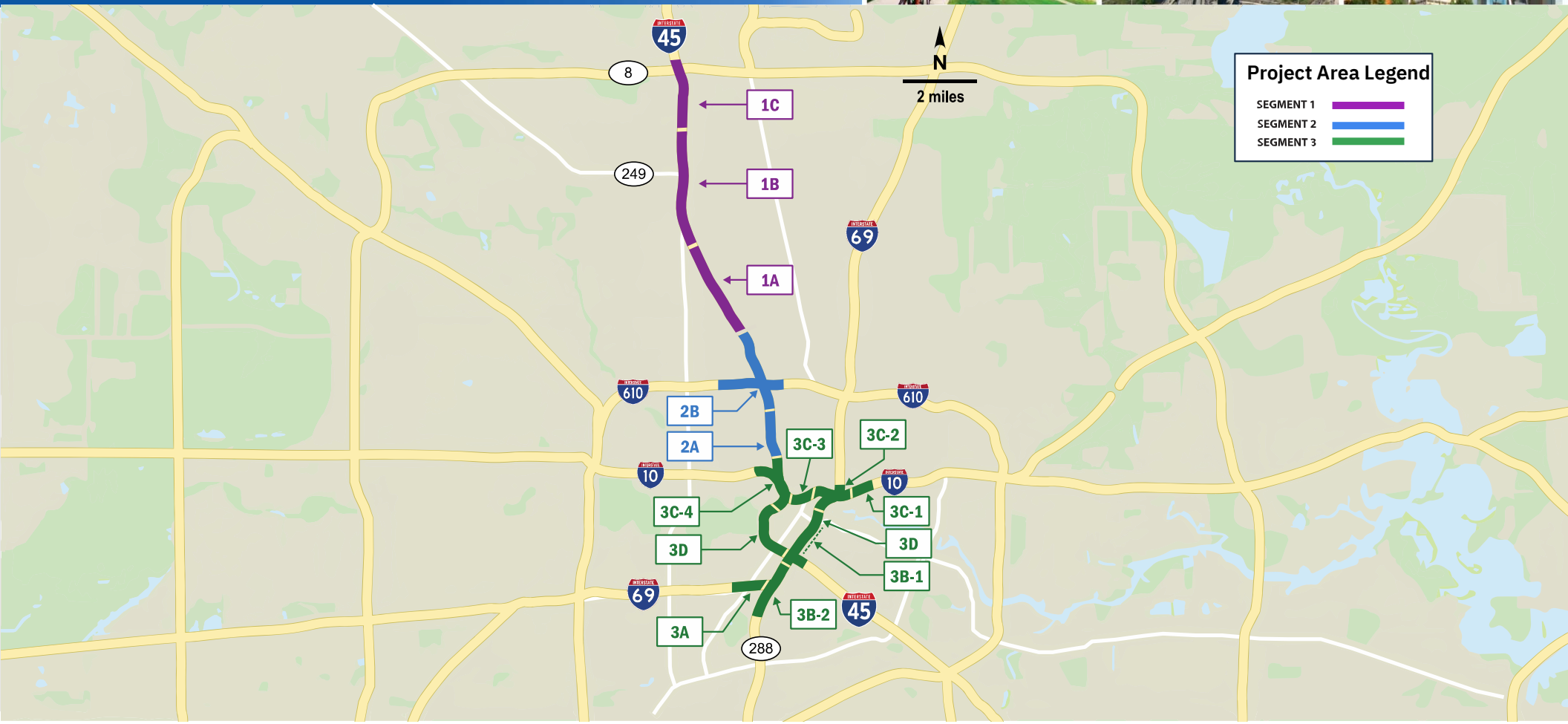


Project Overview



Project Overview





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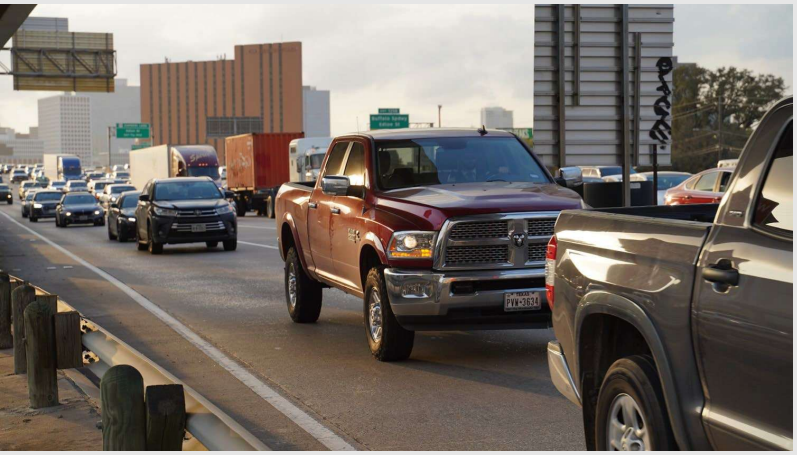
Why Is The NHHIP Needed?





7 of the top 25 Most Congested Roadway Segments in Texas

DEMANDS ON THE PROJECT INFRASTRUCTURE

- Traffic congestion, current and projected increases in the future
- Population, current and projected growth in the future
- Aging infrastructure and outdated design elements

PROJECT GOALS

- Rebuild to current design standards to enhance safety
- Mitigate congestion by improving mobility and operational efficiency
- Expand transit and carpool capacity
- Improve flood resiliency
- Support regional freight mobility
- Maintain effectiveness of hurricane evacuation routes



Segment 3

Initial Construction Projects

Segment 3B-1 Construction

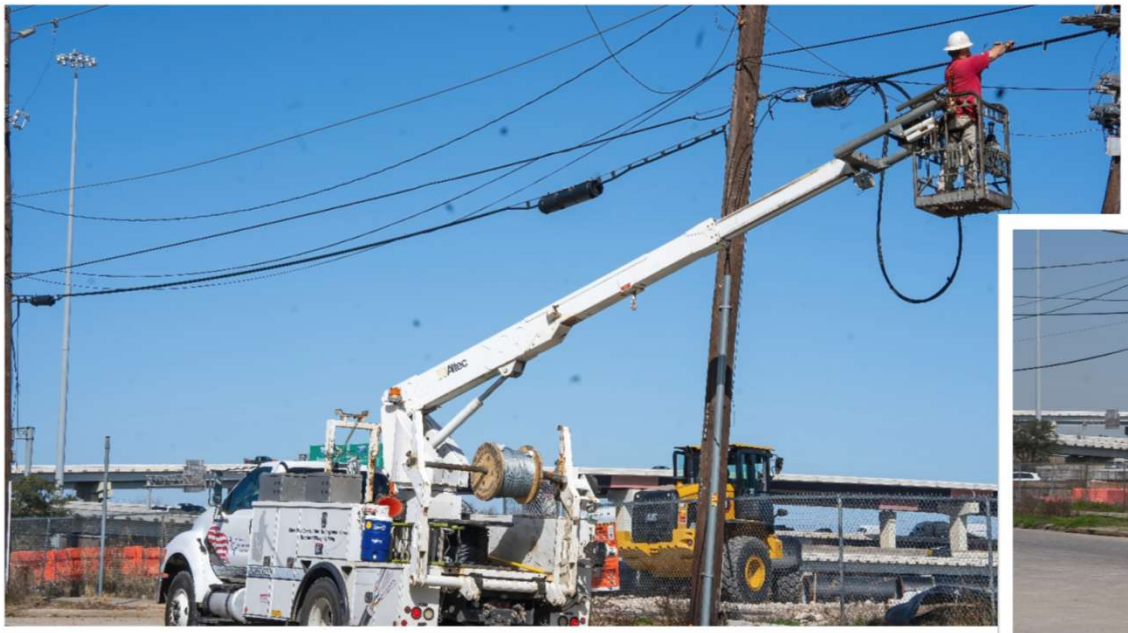


Drainage improvements along St. Emanuel Street to Buffalo Bayou (3B)

- Construction of drainage outfall to Buffalo Bayou (including detention pond), and reconstruction of St. Emanuel St.
  - Installation of 12x12 box culverts to capture water during heavy rain events
- Construction began in October 2024
  - Construction Cost: $121.8 Million
  - Contractor: Harper Brothers Construction, LLC
  - Anticipated completion in 2027
- Active public engagement and will continue through construction completion

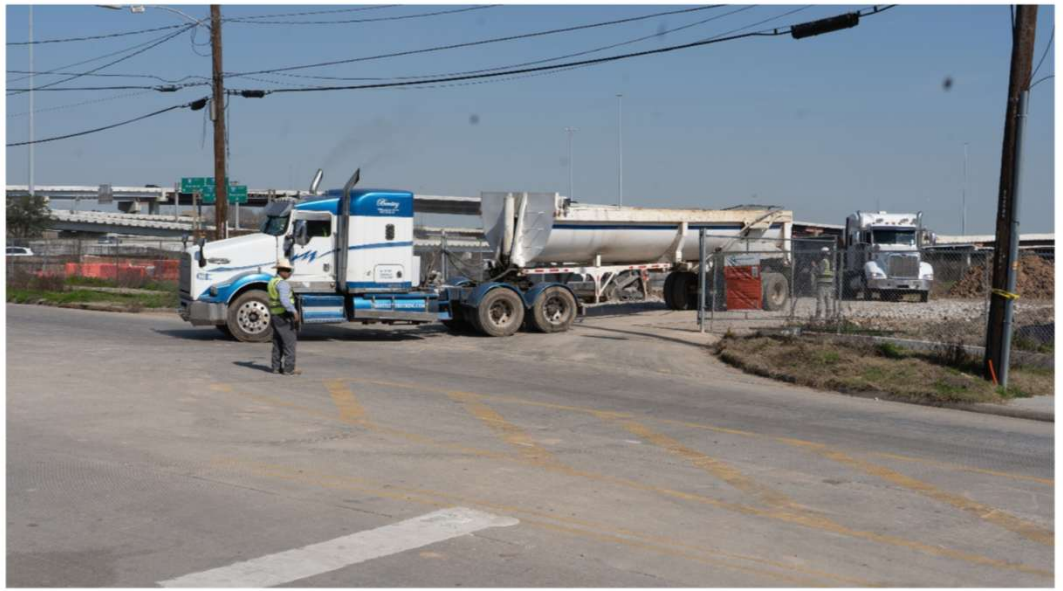
Segment 3B-1 Utility Relocation & Construction





Utility Relocation near I-69 at Runnels St.

Runnels St. Detention Pond Excavation

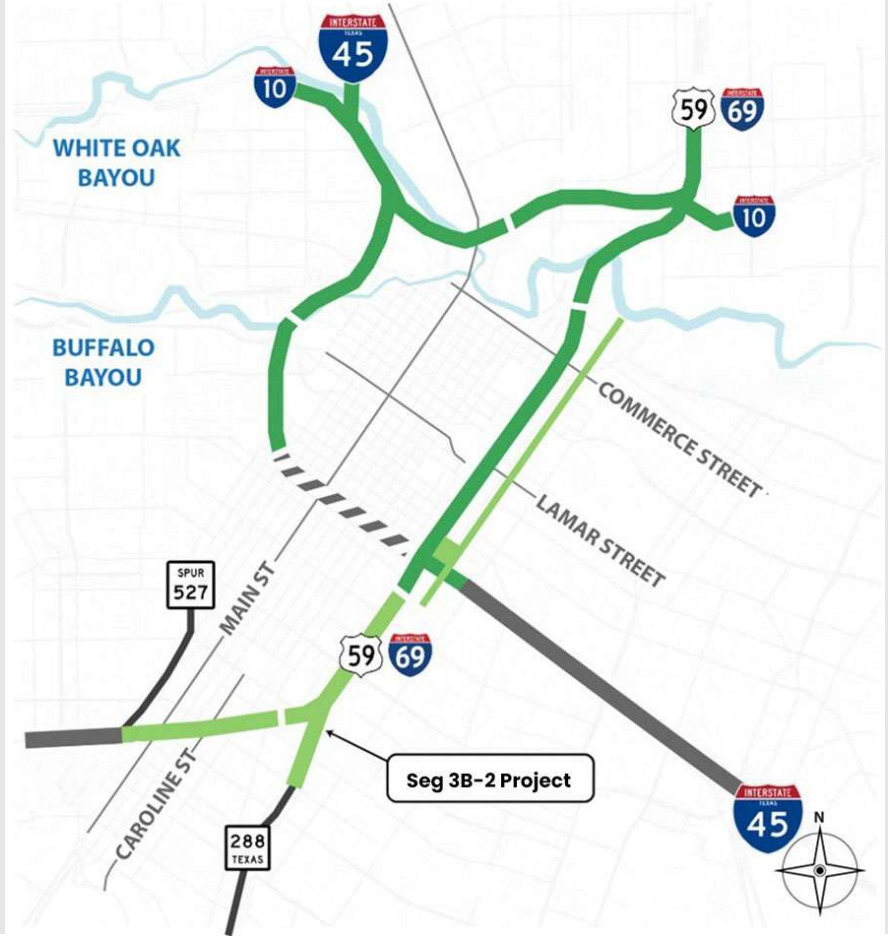


Segment 3B-2 Construction



Construction Project
I-69 between SH 288 and I-45 South (3B)

- Reconstruction of the I-69 northbound and southbound mainlanes from State Highway 288 to I-45 including the I-69/SH 288 interchange.
- Opportunity for arch bridges to incorporate signature design reflecting community input.
- Construction began in January 2025
  - Construction Cost: $695.5 Million
  - Contractor: Williams Brothers Construction Company, Inc.
  - Anticipated completion in 2033
- Active public engagement will continue through construction completion.



Segment 3B-2 Construction

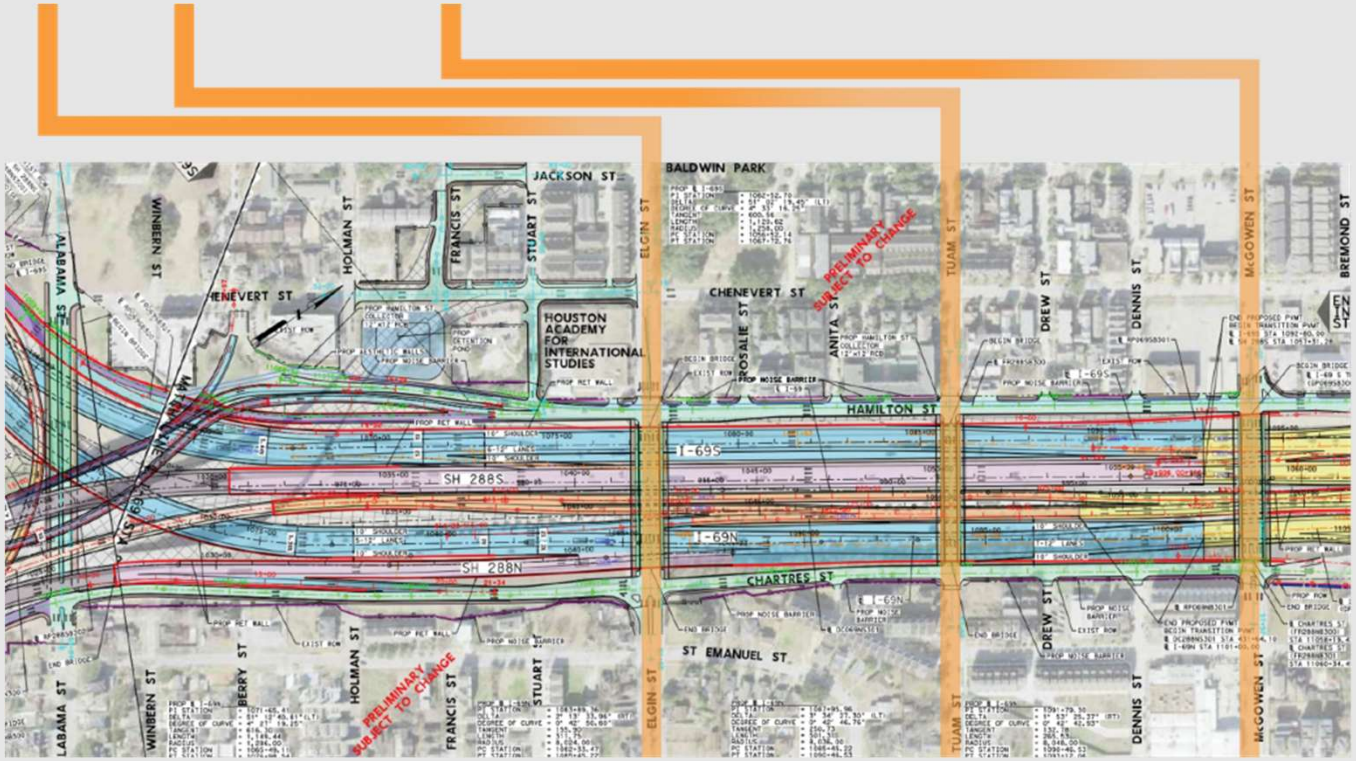


Crews building new Pump Station at I-45 & I-69

Segment 3B-2 Arch Bridges



Cross street reconfiguration for arch bridges at **Elgin**, **Tuam**, and **McGowen** Streets



*Similar to bridges over I-69 in Montrose area

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Segment 3B-2 – Bridge Aesthetics
Concept 1 Enhanced (Aerial View)



Segment 3B-2 – Bridge Aesthetics
Concept 1 Enhanced (Driver View)





Segment 3B-2 – Bridge Aesthetics
Concept 1 Enhanced (Pedestrian View)





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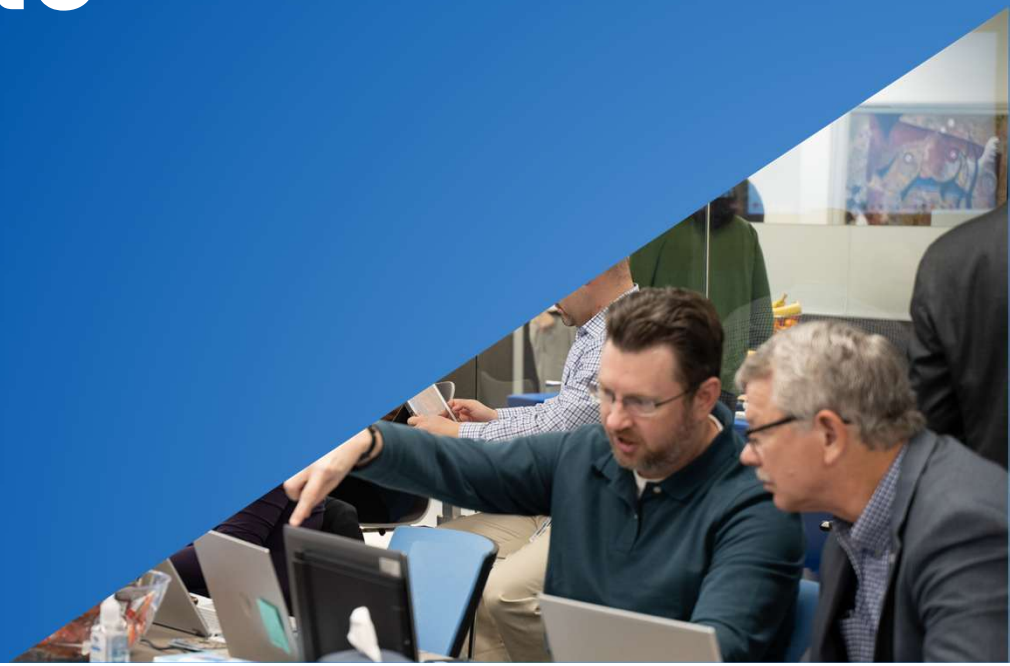
I-45 North Houston Highway Improvement Project (NHHIP)



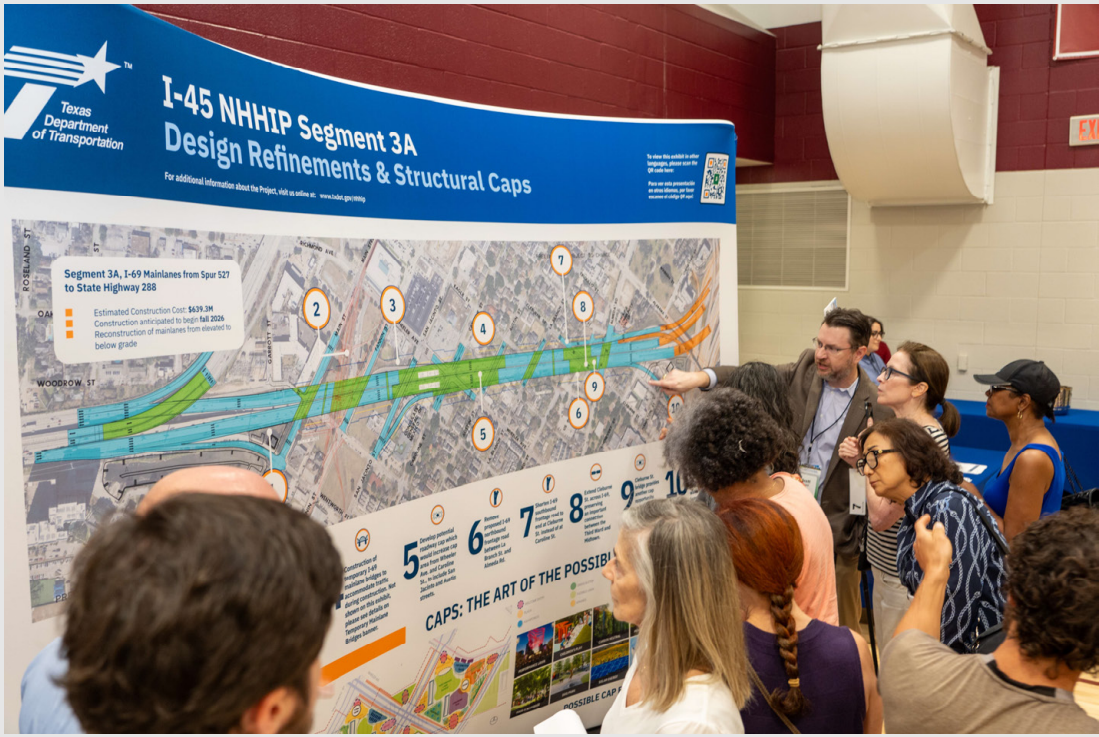
Segment 3A Update



September 2024 Public Meeting

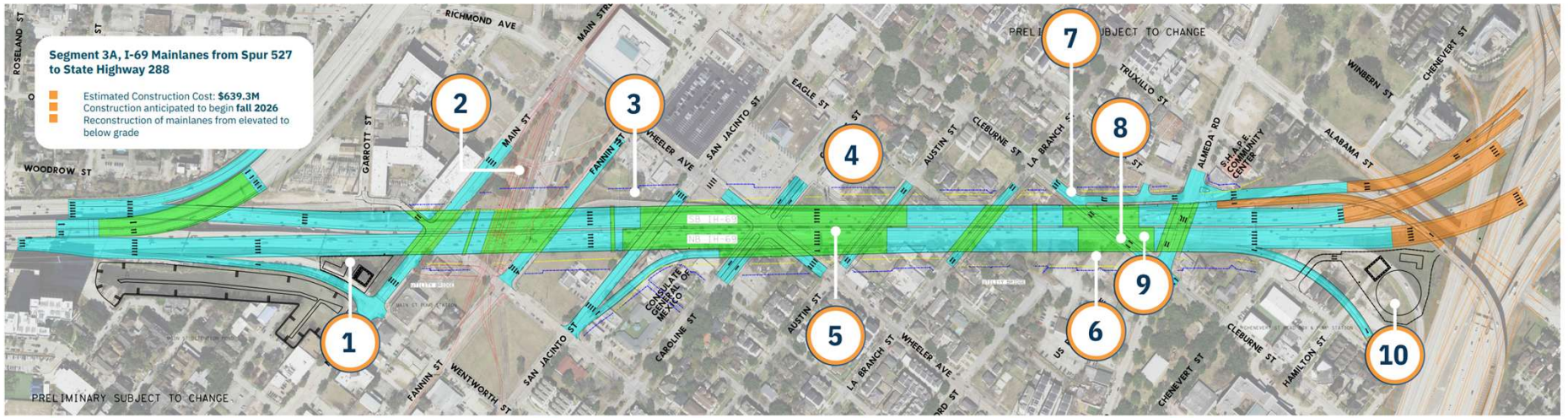


- **Segment 3A Reevaluation Highlighted**
- **Proposed Design Changes Shown**
- **Reevaluation Approved in February 2025**



Proposed Design Changes





1 Build Main St. pump station to pump water during heavy rain events and improve existing detention pond.

2 Reconstruct METRO facilities at the Wheeler Transit Center due to impact from I-69 mainlanes.

3 Additional right of way (ROW) required to accommodate retaining wall soil anchors for length of the project.

4 Construction of temporary I-69 mainlane bridges to accommodate traffic during construction. Not shown on this exhibit, please see details on Temporary Mainlane Bridges banner.

5 Develop potential roadway cap which would increase cap area from Wheeler Ave. and Caroline St., to include San Jacinto and Austin streets.

6 Remove proposed I-69 northbound frontage road between La Branch St. and Almeda Rd.

7 Shorten I-69 southbound frontage road to end at Cleburne St. instead of at Caroline St.

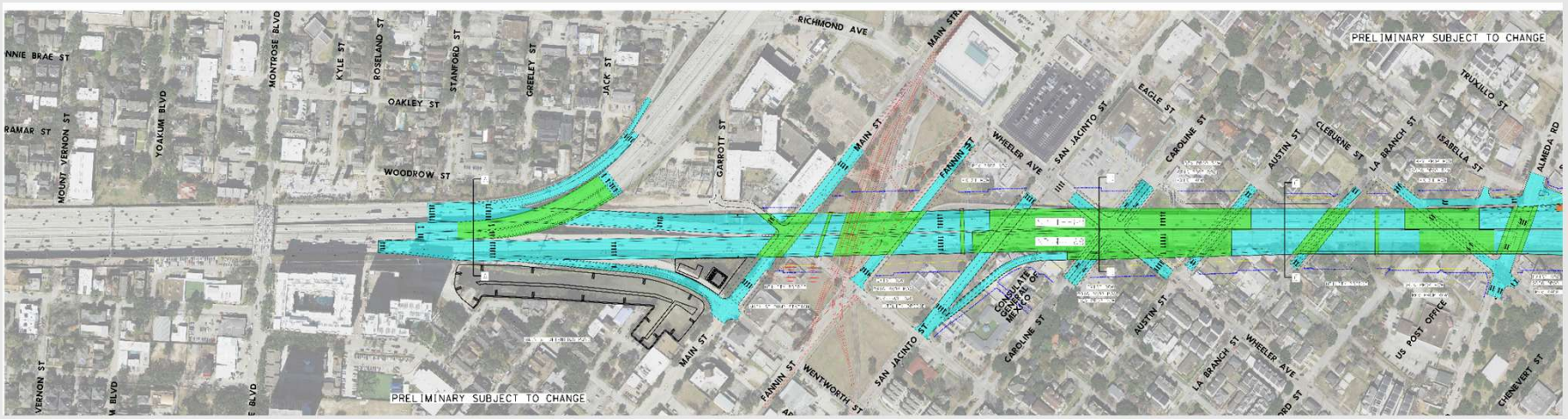
8 Extend Cleburne St. across I-69, preserving an important connection between the Third Ward and Midtown.

9 Cleburne St. bridge provides another cap opportunity.

10 Install pump station and head box within existing ROW to pump water during heavy rain events.

Potential Cap Locations

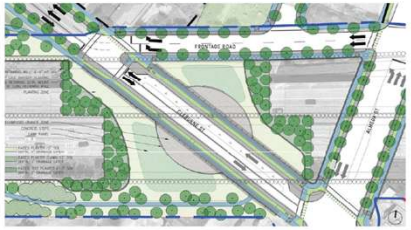




Wheeler Transit Center / Fannin St. Cap

Wheeler Avenue / Caroline St. Cap

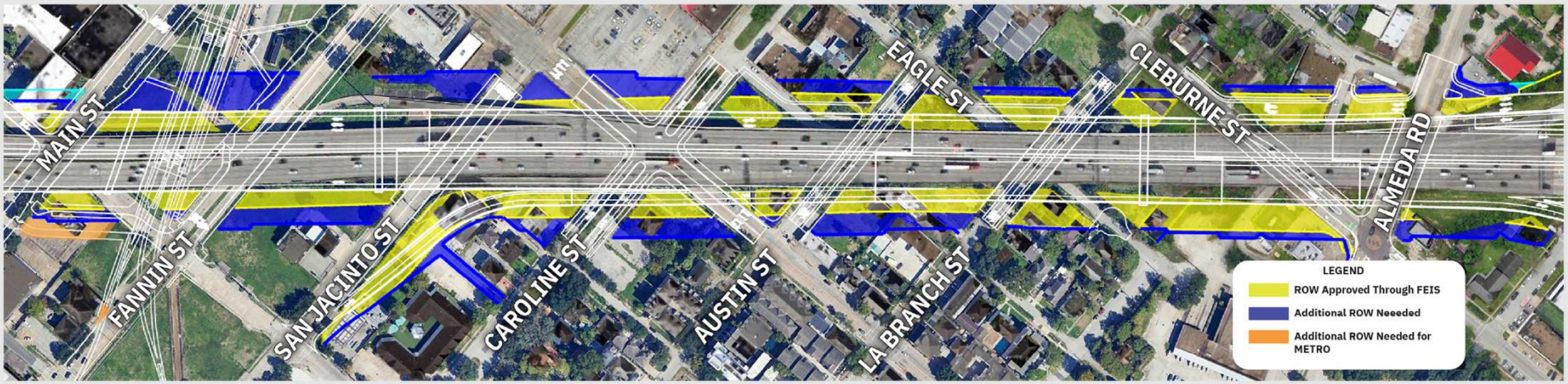
Almeda Rd. / Cleburne St. Cap



Roadway Caps-Potential Amenities



Additional Right of Way Needed



Why Is Additional Right of Way Needed?

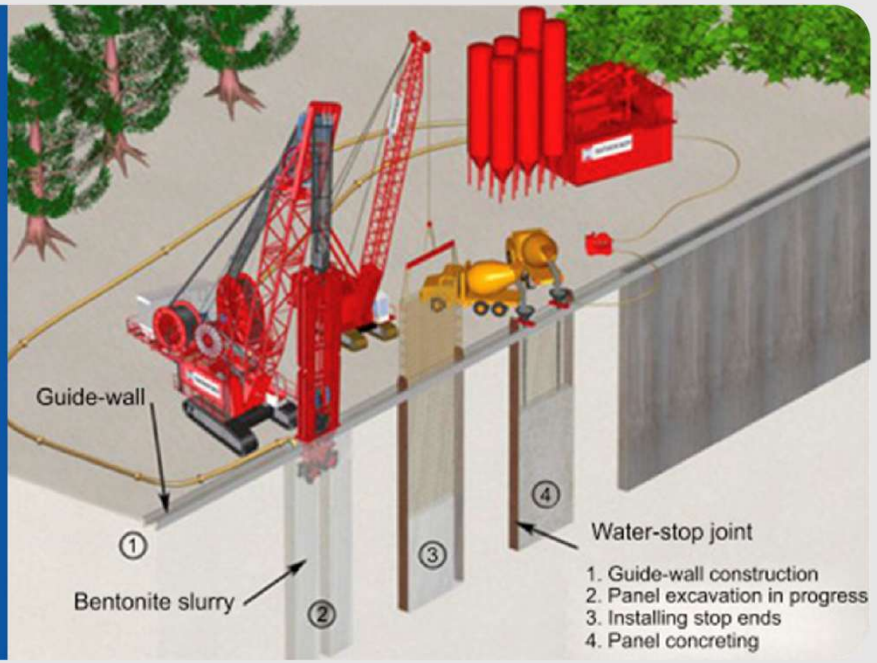


Specialized Walls (D-Walls) needed due to shallow ground-water:

- D-Walls are built as solid concrete rectangular sections (or panels).
- The sections or panels are interlocked with watertight vertical joints.
- D-Walls water tightness prevents water seepage into the roadway and subsidence behind the walls from lowering the groundwater.

Soil Anchors are needed to help stabilize the tall D-Walls in order to:

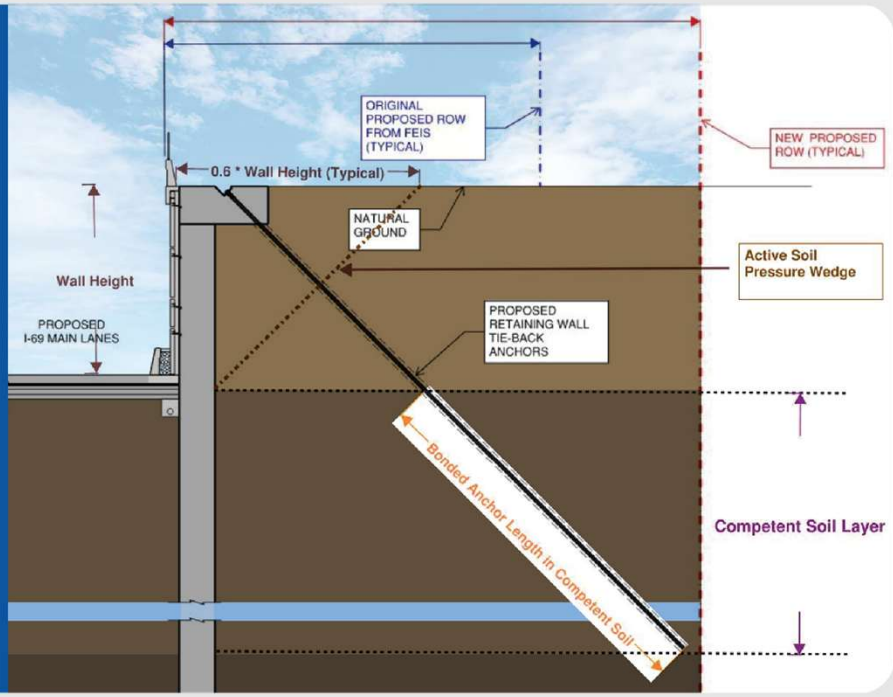
- Reduce wall movement
- Reduce ground movements behind the walls



Why Is Additional Right of Way Needed?



Here are the D-Wall and Anchors Typical Section & Design Considerations:

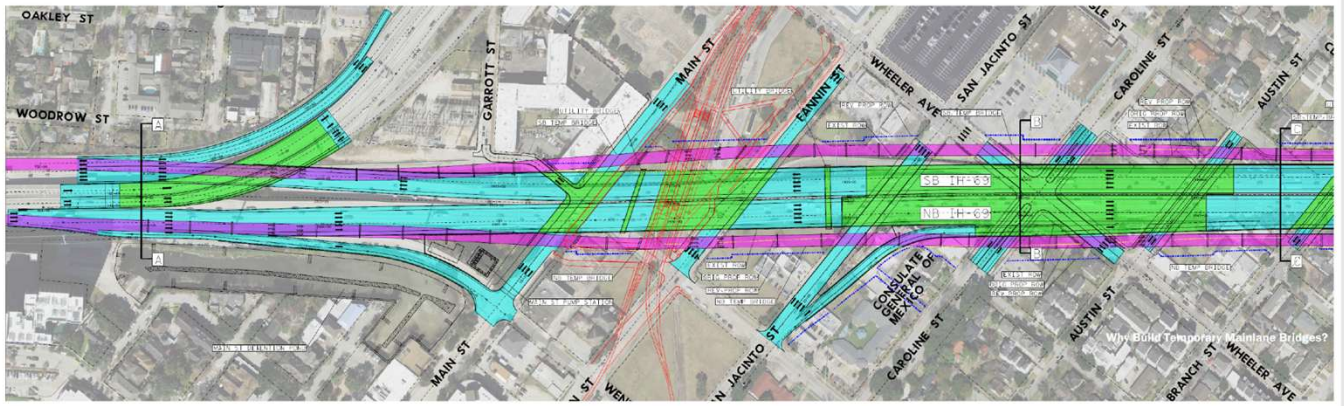


Temporary Mainlane Bridges During Construction



Constructing 3-lane, 38-feet-wide temporary bridges in both directions for length of the project:

- Allows 3 travel lanes in both directions to be maintained, reducing travel impacts
- Isolates traffic away from construction zone, improving safety



This Segment 3A map shows the proposed temporary mainlane bridges in purple, outside the existing I-69 mainlanes.

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