



GOVERNMENT OPERATIONS COMMITTEE 2025

**DAVID WURDLOW, COLIN LUPOLD P.E., PTOE
AND PARIS WOODS**



Agenda

- Rail Safety
- Where we are today
- Improvement Strategies
- Technology & Communications
- Quiet Zones
- Funding
- *Fed programs, state programs, and regional collaborations*

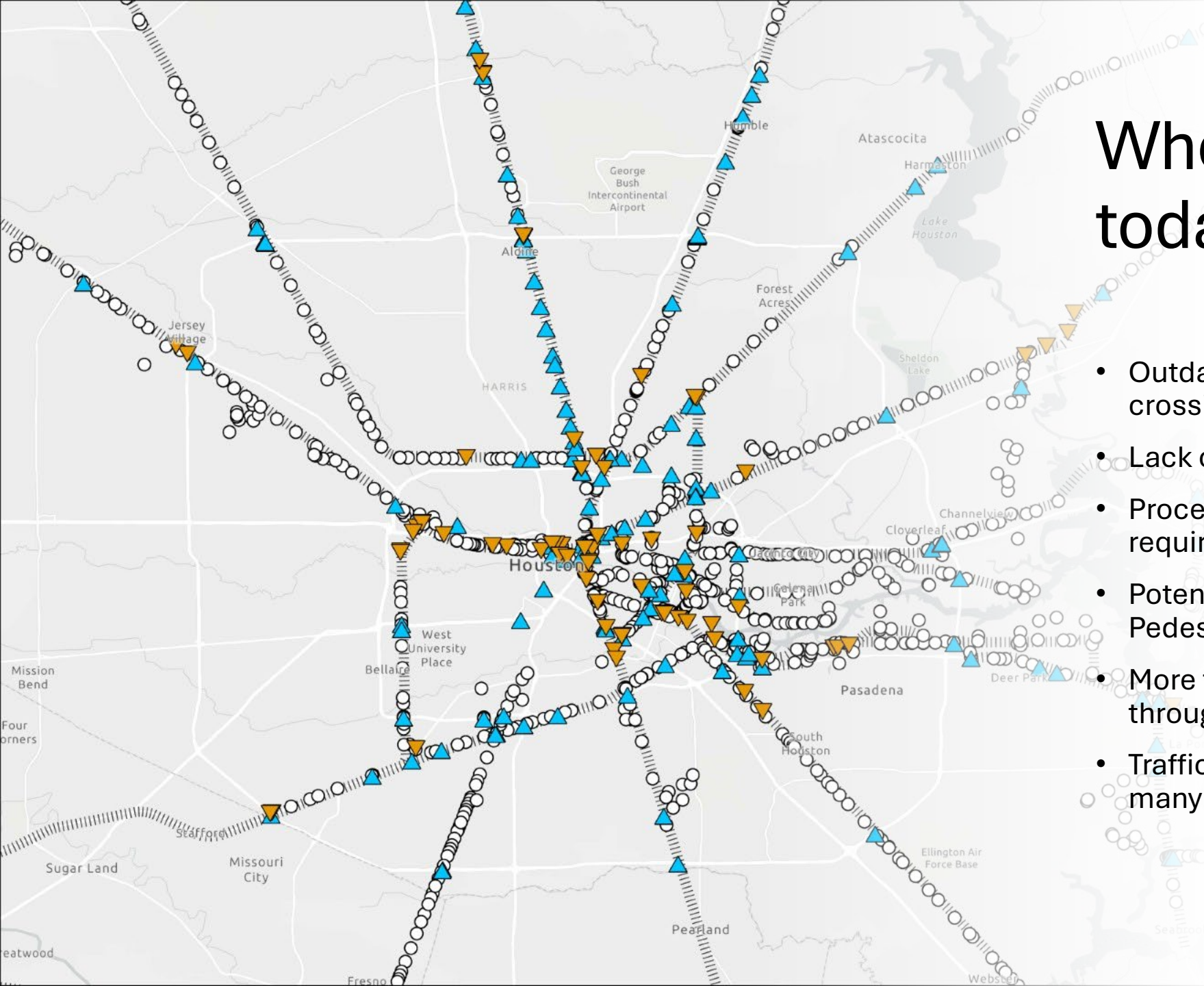
Rail Safety

- At Grade Crossing – Provide safer crossings by updating infrastructure and technology.
- Grade Separations and Pedestrian Bridges– Prioritizing safety infrastructure around high traffic areas to eliminate conflicts.
- Rail Safety Education Programs – provides safety programs to schools to educate students of rail safety (partnership with Union Pacific).



Where we are today

- Outdated infrastructure at RR crossings
- Lack of dedicated funding
- Process can take years to complete required improvements
- Potentially Hazardous conditions for Pedestrians
- More than 700 at-grade RR crossings throughout the City
- Traffic Signal system interacts with many gated, at-grade RR crossings



Improvement Strategies

- Partner with Railroads for crossing upgrades.
 - Union Pacific can fund technical upgrades to train control systems and **active warning devices** at certain crossings.
- Upgrades to sidewalks, medians, signing and pavement markings and other **traffic control devices** for proper channelization and traffic control.
 - Potential opportunity to utilize CDSF to update sidewalks, curbs and medians at RR crossings.
- Clear Zone improvements.
- Crossing closures and consolidations, or Grade separation for road safety and risk mitigation/elimination.
- Quiet Zone initiative.
- Integration to adjacent traffic signal operations and Intelligent Transportation System (ITS).

Technology & Communications

high impact

- Leverage technology to provide rapid relief to communities
- Examples:
 - Use cameras and sensors to track where trains are stalled
 - Communications Network to tie data to Transtar for widespread sharing
 - Potential to collaborate with apps for public access (e.g. Google Maps, Waze)
 - Use dynamic message signs (DMS) to communicate detours to drivers
 - Coordinate with adjacent traffic signals to efficiently facilitate traffic





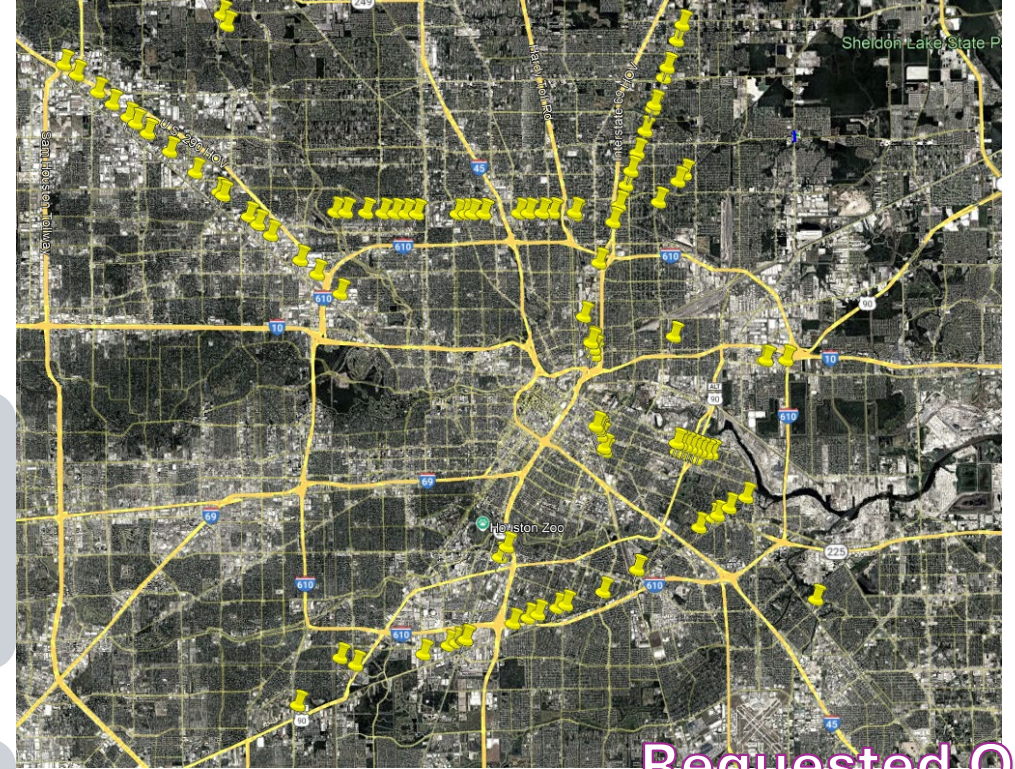
40 requested Quiet Zones (QZs), consisting over 154 railroad crossings - pending funding



QZs **improve quality of life** and can include **safety enhancements**



Typical cost to implement can range from \$50k to greater than \$500k per crossing



Requested QZs



Crossing Closure



Four Quadrant Gate System



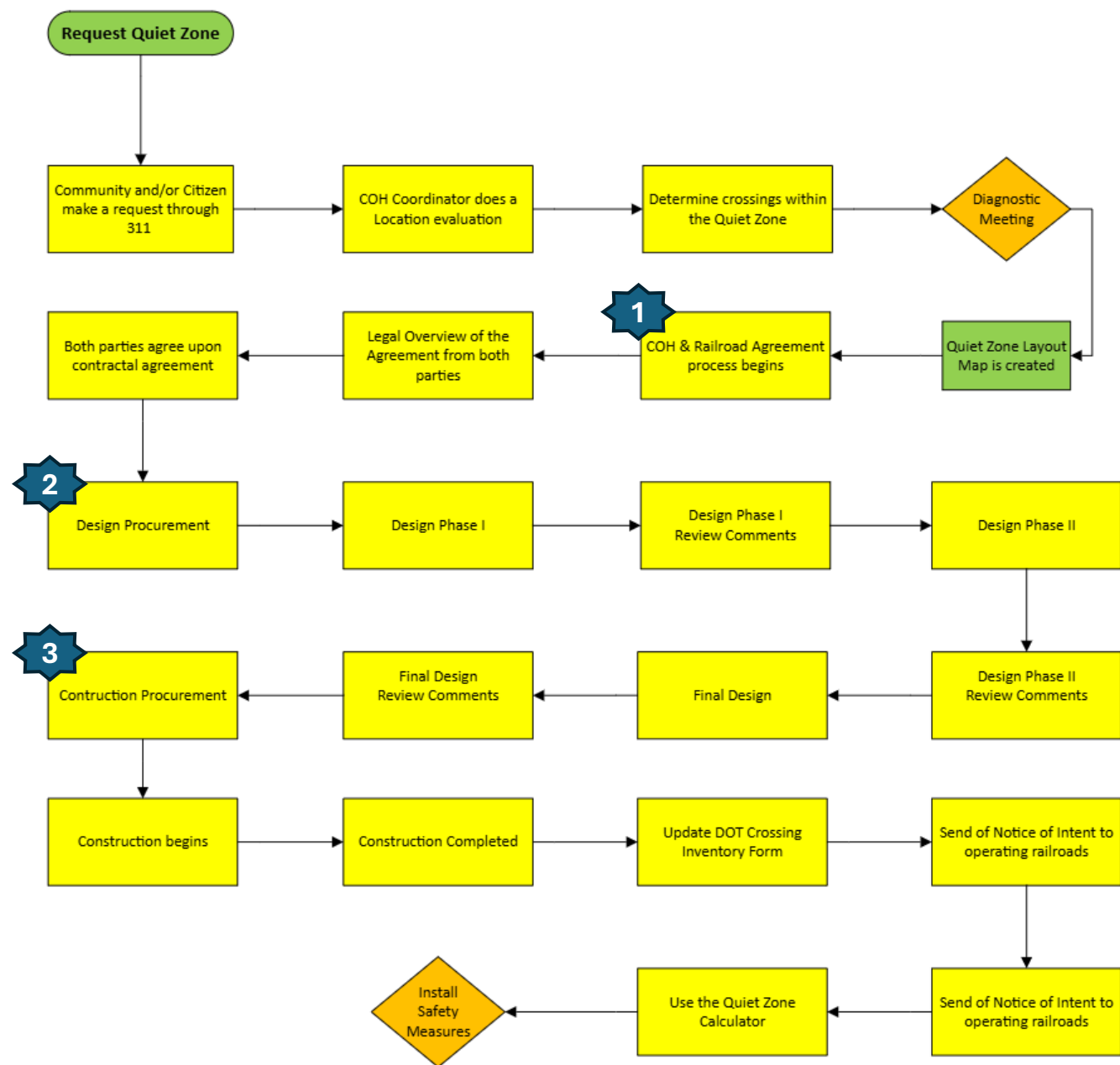
Gates with Channelization Devices

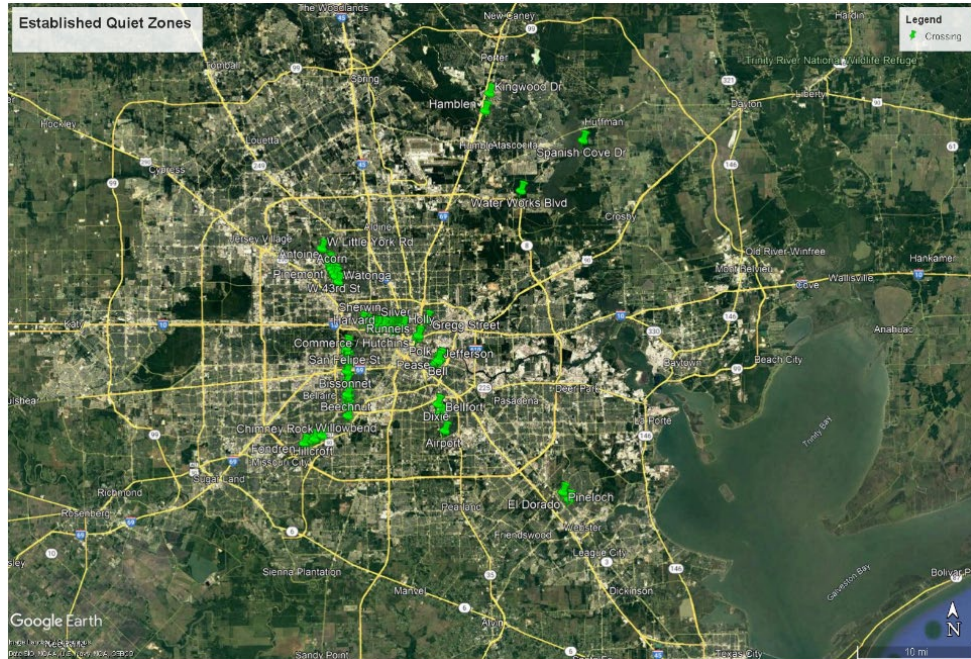


Gates with Medians

Funding is required to facilitate:

- 1** Preliminary Engineering (PE) Agreement with Railroad
- 2** Engineering Design
- 3** Contractor Construction

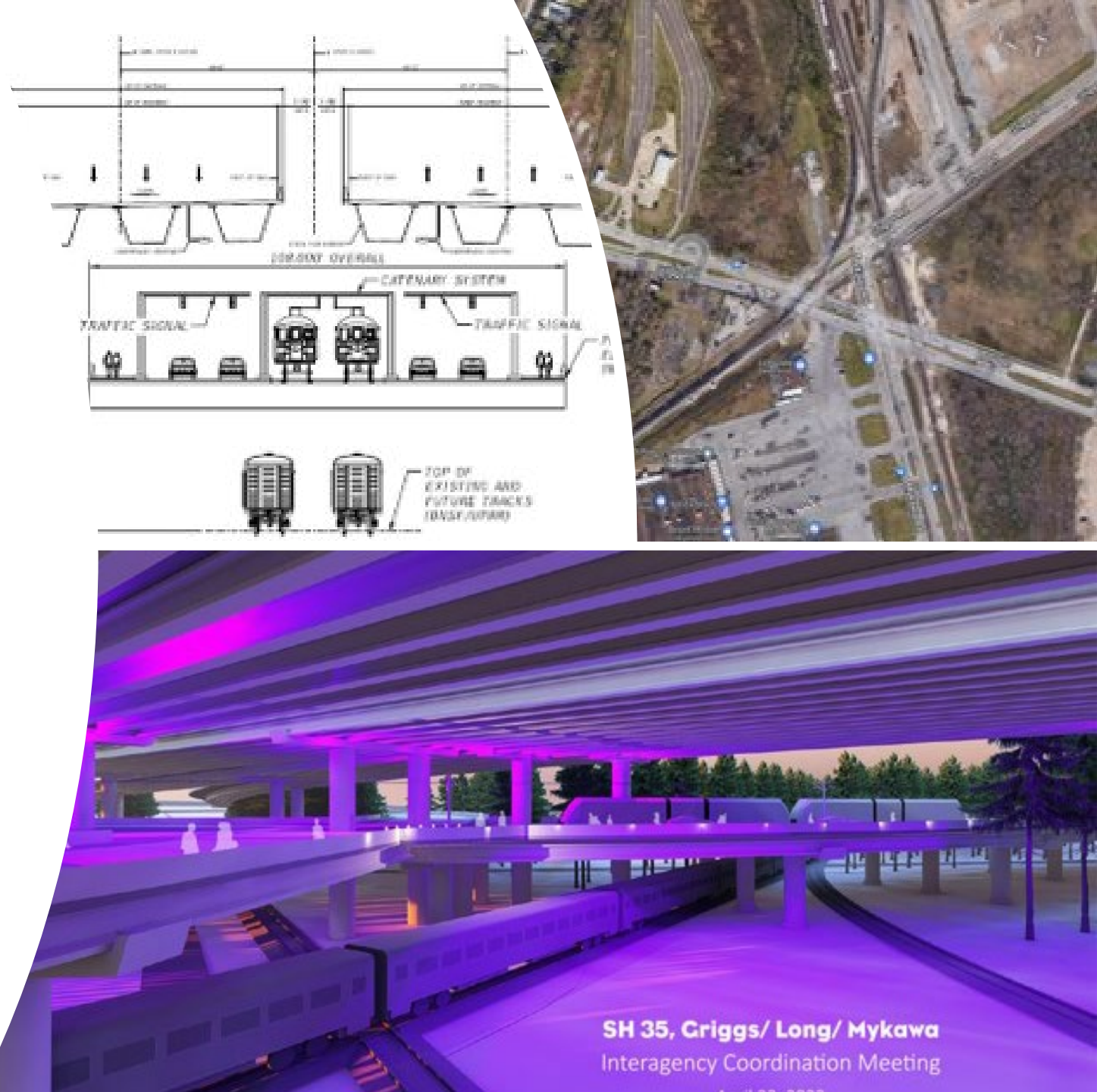




QZ Name	From Street	To Street	Year Est.
West Loop	E. Briarhollow Lane	Willowbend Blvd	2006
Runnels	Runnels	Commerce/Hutchins	2010
Washington Corridor	Sherwin St	Oliver St	2010
Hwy 3/Old Galveston	Pineloch	El Dorado Blvd	2010
Mykawa	Airport Blvd	Dixies Dr	2011
First Ward	Oliver St	Holly St	2011
Spanish Cove	Spanish Cove Dr	Spanish Cove Dr	2012
South Main/Westbury	Fondren Rd	Chimney Rock Rd	2012
Kingwood-Hamblen	Kingwood Dr	Hamblen Dr	2012
East End I Phase I	Telephone Rd	Polk St	2014
Greater Inwood	Watonga Blvd	W Little York	2016
Silver/Sawyer	Silver St	Sawyer St	2015
Water Works Blvd	Water Works Blvd	Water Works Blvd	2016
Gregg Street	Gregg Street	Gregg Street	2018

Grade Separation

- Benefit: Eliminate crossing conflicts and reduce delays related to railroad operations
- Implications:
 - Impacts to local access and connectivity
 - ROW acquisition generally required
 - Public Involvement and Community Engagement
 - Significant Design & Construction Cost
 - Significant construction disruption



Antoine Grade Separation



Funding Opportunities

- Federal Discretionary

- Railroad Crossing Elimination Program (RCE)
- Consolidated Rail Infrastructure and Safety Improvements (CRISI)
- Better Utilizing Investments to Leverage Development (BUILD) (formerly RAISE/TIGER)
- Nationally Significant Multimodal Freight & Highway Projects (INFRA)
- National Infrastructure Project Assistance Program (MEGA)
- Safe Streets for All (SS4A)
- Community Project Funding (earmarks)

- Federal Formula

- Surface Transportation Block Grant (STBG)
- Congestion Mitigation/Air Quality (CMAQ)
- Transportation Alternatives Set-Aside (TASA)
- Highway Safety Improvement Program (HSIP)
- Railway Highway Crossing Program (Section 130)

- State Funding

- Texas Railroad Grade Separation Grant (SB 1555)
- Legislative Appropriations (earmarks)

Recent Funding Awards

Project/Program	Source	Assistance Amount
Commerce/Navigation and Sampson/York at UPRR (West Belt), Grade Separations	CMAQ (FHWA/H-GAC) and RCE (FRA)	\$98.3m (\$61.4m CMAQ, \$36.9m RCE)
Antoine Dr at BNSF, Grade Separation	STBG (FHWA/H-GAC)	Part of \$59.0m for roadway
Broadway St at UPRR (Milby H.S.), Pedestrian Overpass	Legislative Appropriation	\$10.0m
Little York Rd/Hirsch Rd at UPRR	Legislative Appropriation	\$5.0m
<i>Tidwell Rd/Hirsch Rd at UPRR</i>	Legislative Appropriation	\$5.0m
Various Crossings (Lawndale St, Jensen Dr, Heights Blvd, Fondren Rd, Rankin Rd, W Tidwell, Hillcroft Ave, Scott St, CE King Pkwy, Bellaire Blvd, Bissonnet St, San Felipe St, Post Oak Rd, McFarland Dr, Parker St, Airtex Dr, Sherwin St, Airport Blvd, Chimney Rock Rd, Long Dr)	Section 130 (FHWA/TxDOT)	>\$5.0m
East End Triangle R.A.I.L.S Plan, Study (Harris Co.)	RCE (FRA)	\$2.0m

Regional Collaboration

- Houston Area Rail Transformation (The HART)
 - Gulf Coast Rail District*
 - Chambers Co.
 - H-GAC
 - TxDOT
 - METRO
 - Class I Railroads



* GCRD members are *City of Houston, Port Houston, Harris Co., Fort Bend Co., Waller Co., Montgomery Co. and Galveston Co.*

thank you!



HoustonPublicWorks.org



[@HouPublicWorks](https://twitter.com/HouPublicWorks)