



GOVERNMENT OPERATIONS COMMITTEE 2025

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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



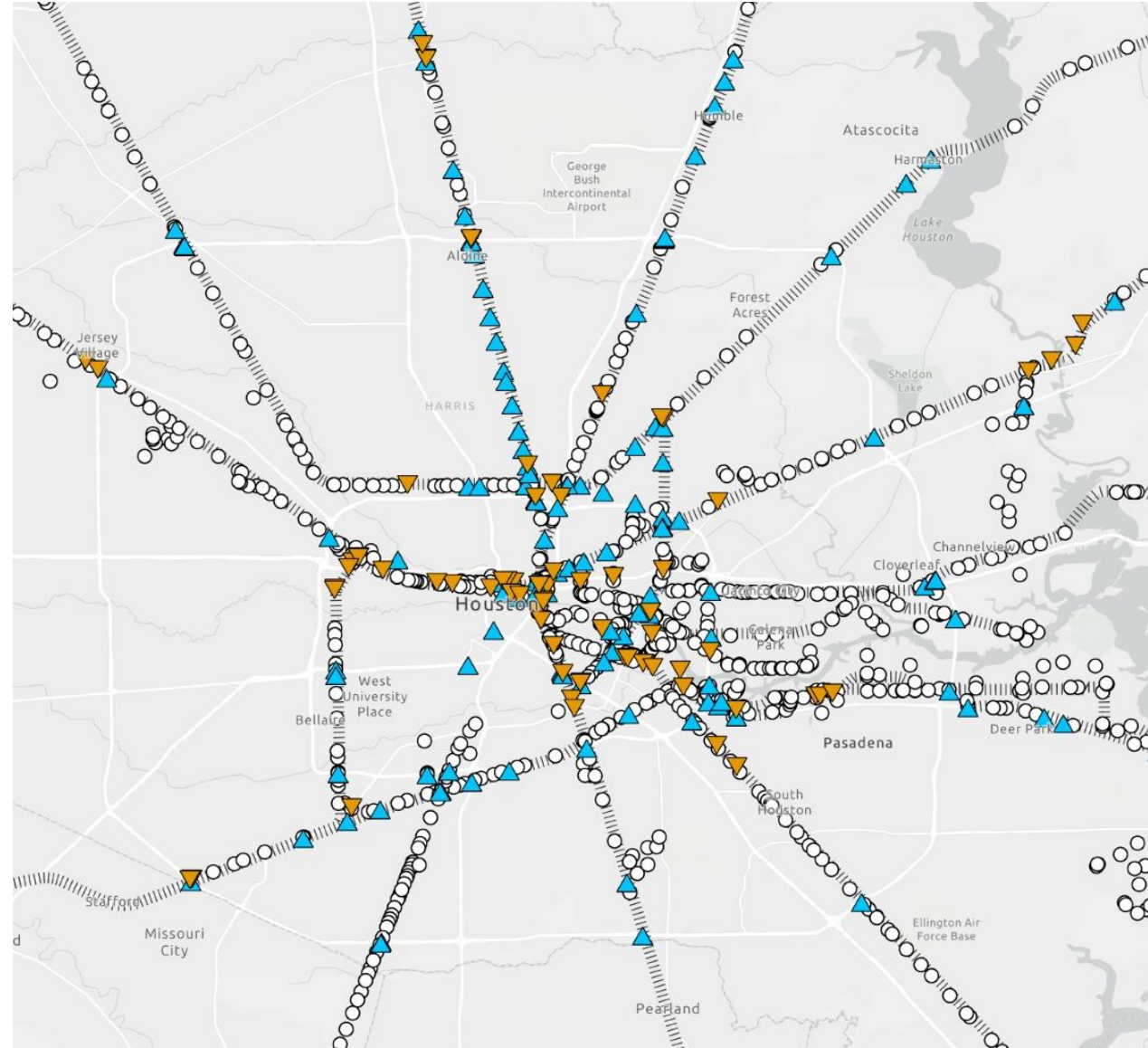
RAIL SAFETY

- 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- Outdated infrastructure at RR crossings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 the 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



QUIET ZONES

QUALITY OF LIFE & SAFETY IMPROVEMENTS



Crossing Closure



Four Quadrant Gate System



Gates with Channelization Devices



Gates with Medians

QUIET ZONES

QUALITY OF LIFE & SAFETY IMPROVEMENTS



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



QZs improve the quality of life and can include safety enhancements

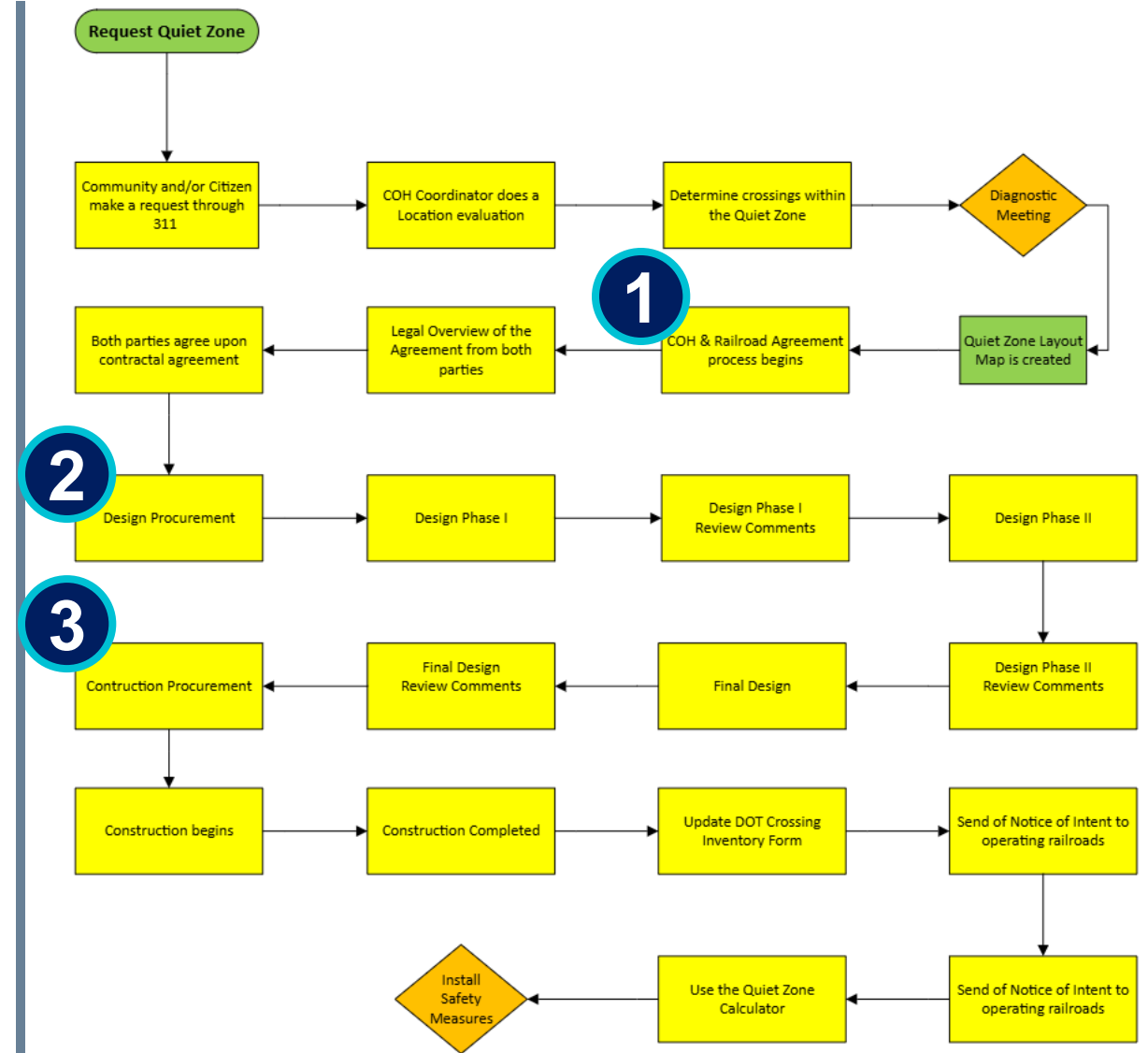


Typical cost to implement can range from \$50k to greater than \$500k per crossing

QUIET ZONE PROCESS

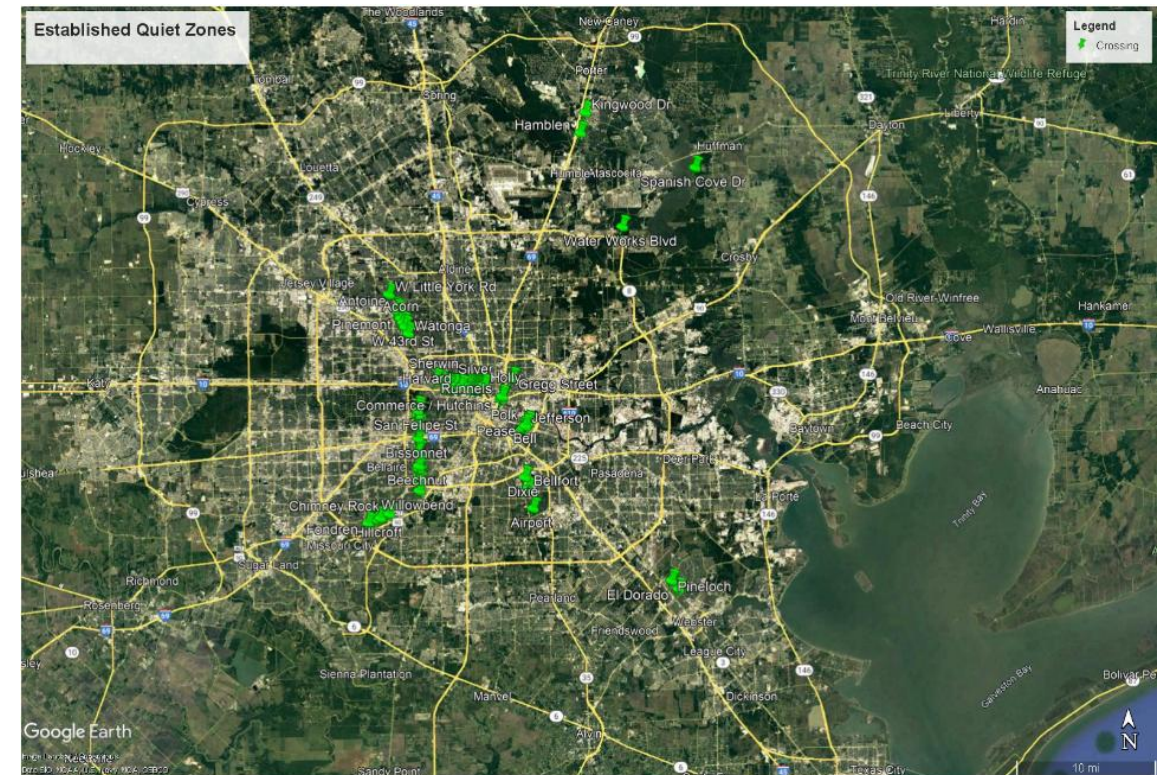
Funding is required to facilitate:

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



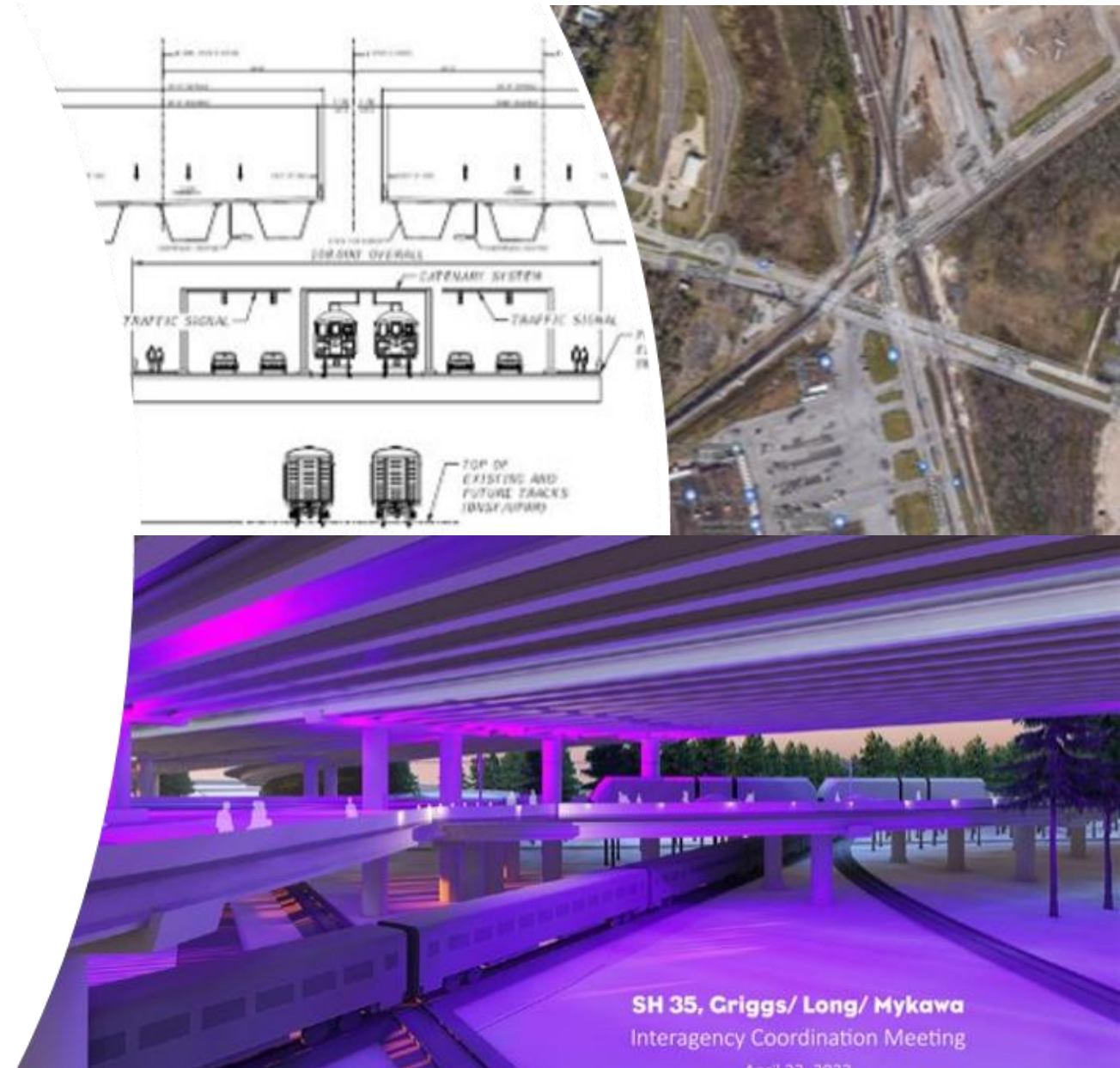
QUIET ZONES

| 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



SH 35, Griggs/ Long/ Mykawa
Interagency Coordination Meeting
April 22, 2022

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

- Railroad Grade Separation Projects (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 (H-GAC) and RCE (FRA) | \$98.3m (\$61.4m CMAQ, \$36.9m RCE) |
| Antoine Dr at BNSF, Grade Separation | STBG (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 |
| Tidwell Rd/Hirsch Rd at UPRR | Legislative Appropriation | \$5.0m |
| Various Crossings (Lawndale St, Jensen Dr, Heights Blvd, CE King Pkwy, Bellaire Blvd, Bissonnet St, San Felipe St, McFarland Dr, Sherwin St, Airport Blvd, Chimney Rock Rd, Frio St) | 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!



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