TxDOT Updates

SH 225 and I-610 East Planning and Environmental Linkages (PEL) Study

SH 146 Project and Construction Updates

Deer Park Community Advisory Council
The Republic Grill
May 22, 2023

What is the Purpose of Tonight's Presentation?

Introduce Study and Review Concepts
The SH 225 and I-610 East Planning and Environmental Linkages (PEL) Study

Discuss and Update
The SH 146 Expansion Project and Provide Updates on the Construction Schedule

Review Options
For Staying Involved with the PEL Study or the SH 146 Expansion Project

Listen
To Your Questions, Ideas or Concerns and Provide Answers When Needed

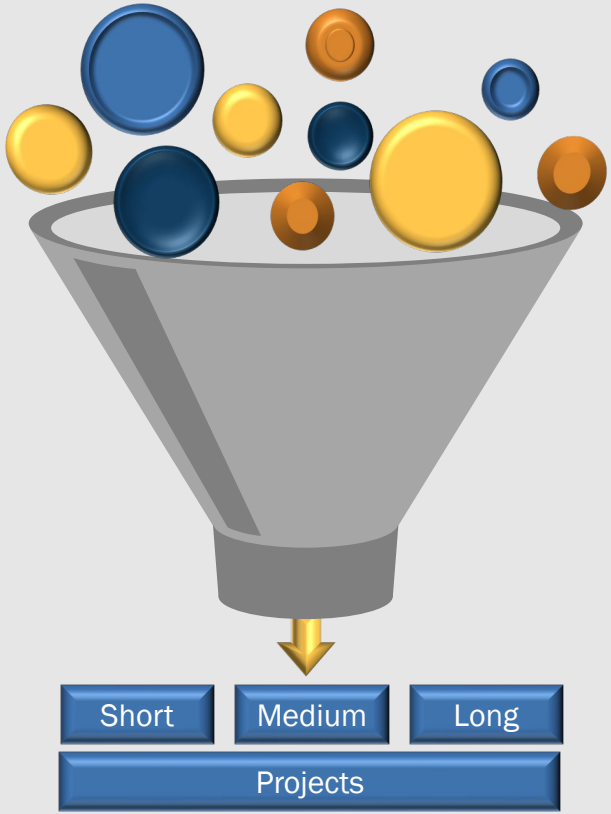
As provided for by 23 CFR 450.212, 23 CFR 450.318, and Appendix A to 23 CFR Part 450, the results or decisions of this Planning and Environmental Linkages Study may be incorporated into or used as part of the review of this project under the National Environmental Policy Act, which will be carried-out by TxDOT pursuant to 23 USC 327 and a Memorandum of Understanding dated December 9, 2019, and executed by FHWA and TxDOT.

PEL Study Location

PEL Study Limits

PEL Study Area

What is a Planning and Environmental Linkages (PEL) Study?



Purpose	Provides a high-level approach to transportation decision making
Benefits	Promotes efficiency and cost-effective solutions to fast-track transportation improvements
Participants	Stakeholders, agencies, and the public
Learn More	Watch the “What is a PEL Study Video” on the study webpage

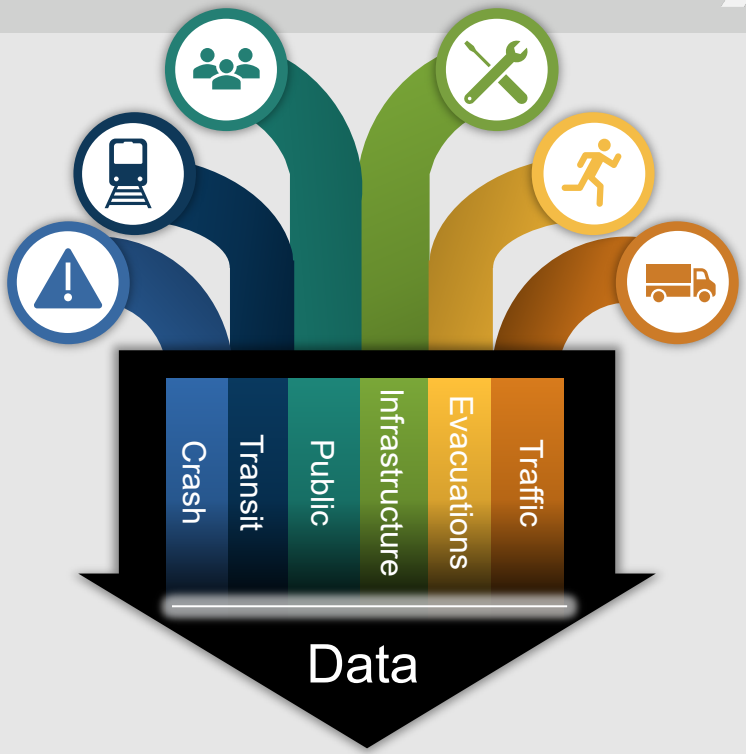
PEL Study Public and Stakeholder Engagement Activities

Purpose and Need Development

The purpose and need statement provides a basis for potential future projects to be carried forward through the National Environmental Policy Act (NEPA) process.

Existing conditions data along with input received from the public will be used to develop the Purpose and Need for the Study.

The needs identified from the data/input will be used to screen the alternatives throughout each stage of the study.



What Needs Were Identified?

Need for Enhanced Safety

Need for Multimodal Movement of People

Need for Efficient Movement of Freight and Maritime Cargo

Need for Enhanced Emergency Evacuation

Need for Upgraded Aging Infrastructure

Why are they Needed?

By 2045 the Study Area will experience

- **8.5M** Port Houston Total Truck Trips per Year
- **52%** Population Increase
- **5%** Employment Increase

**Houston-Galveston Area Council (H-GAC) Travel Demand Model*

Safety

15% Truck Crashes — **7,958** **Total Crashes** — ***215*** Severe and Fatal Crashes

Segments Above Statewide Crash Rate

SH 225: *Allen Genoa to Beltway 8*

I-610E: *Telephone Rd to SH 225*

**TxDOT CRIS Database 2017-2021*

Multimodal Movement of People

Insufficient

Transit **&** **Bicycle & Pedestrian Facilities**

**METRO & Harris County Transit Ridership Data*
**City of Houston Bike Plan & Google Earth*

Freight and Maritime Cargo

100 Most Congested Truck Roadways in Texas

I-610E 55th
SH 225 80th

**Texas A&M Transportation Institute*

I-610E Bridge not **high** enough

Washburn Tunnel not **deep** enough

**Port Houston*

Emergency Evacuation

Multiple recent man-made incidents

- Refinery explosions
- Gas leaks

Severe weather events

- Hurricanes
- Tornadoes
- Flooding

Aging Infrastructure

Life Cycle

**TxDOT PMIS & Brinsap Report*

Roadways built between 20-60 years ago

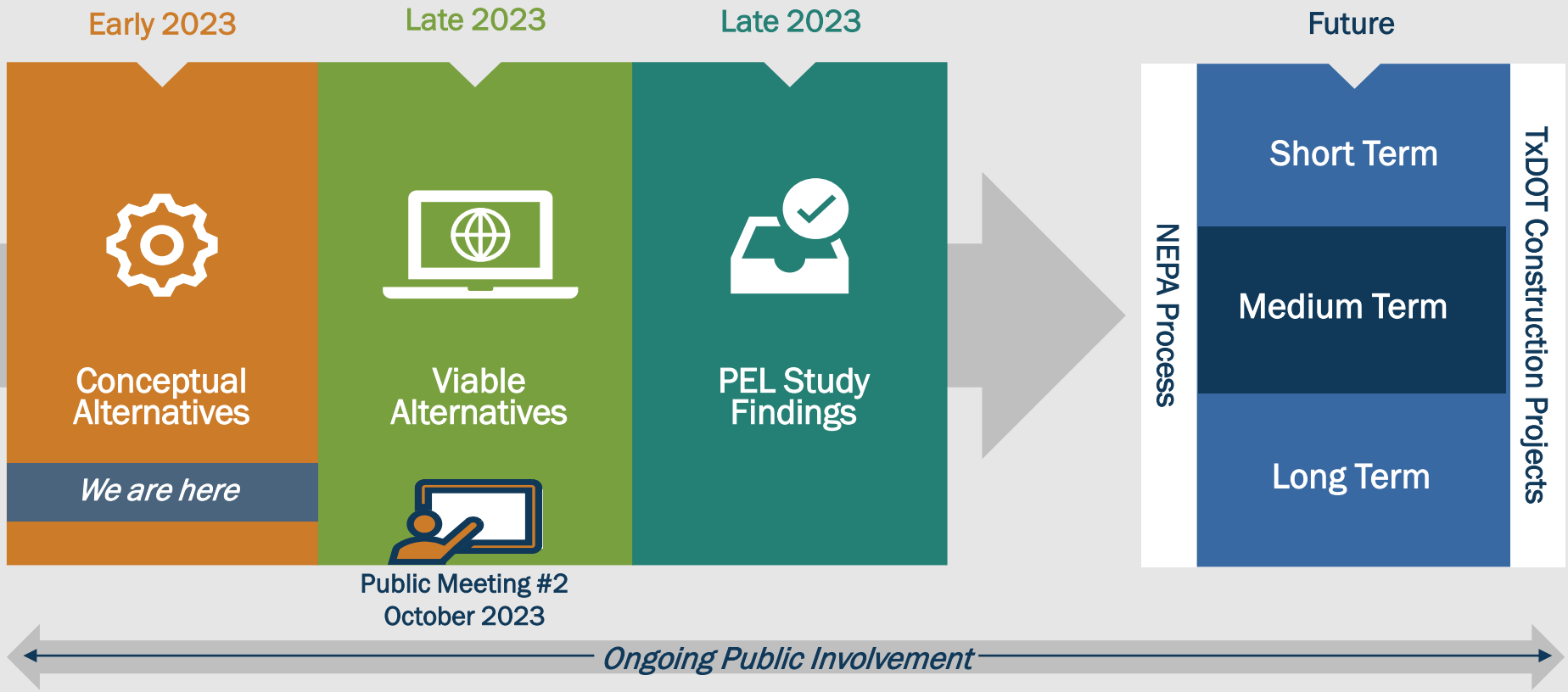
SH 225 was built across 40 years

SH 225 mainlanes are in poor distress and I-610 frontage roads are in poor condition.

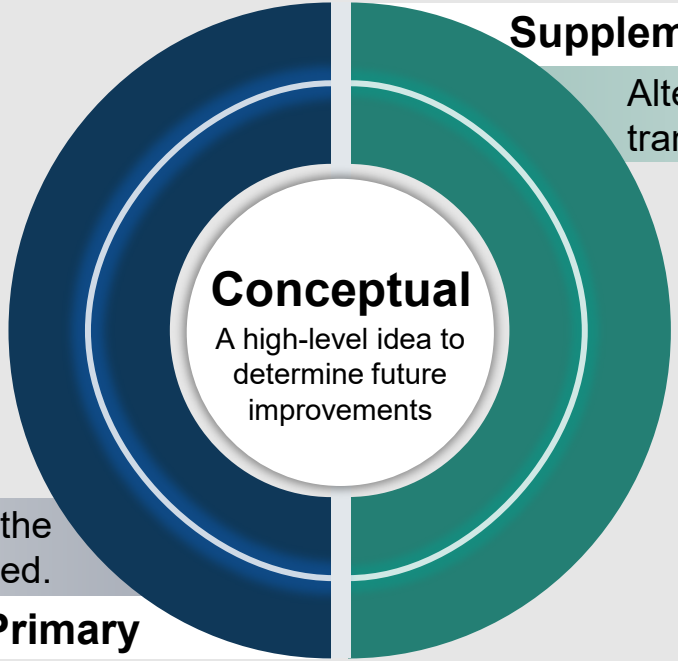
Half of the bridges do not meet today's vertical clearance requirements

**Indicates source*

SH 225 and I-610 East PEL Study Progress



What is a Conceptual Alternative?



Supplemental

Alternatives that meet localized transportation needs.

Alternatives that can serve the corridor-wide purpose and need.

Primary

Supplemental Alternative

Can be combined with any Primary Alternative

Connectivity

Improve Existing Alternative Routes

New Alternative Routes

New Road Extension

Multimodal

Movement of Cargo Through Ship Channel

Bike & Pedestrian

Transit

Frontage Roads

Connect Discontinuous Frontage Roads

Improve Frontages Roads

Improve Intersections

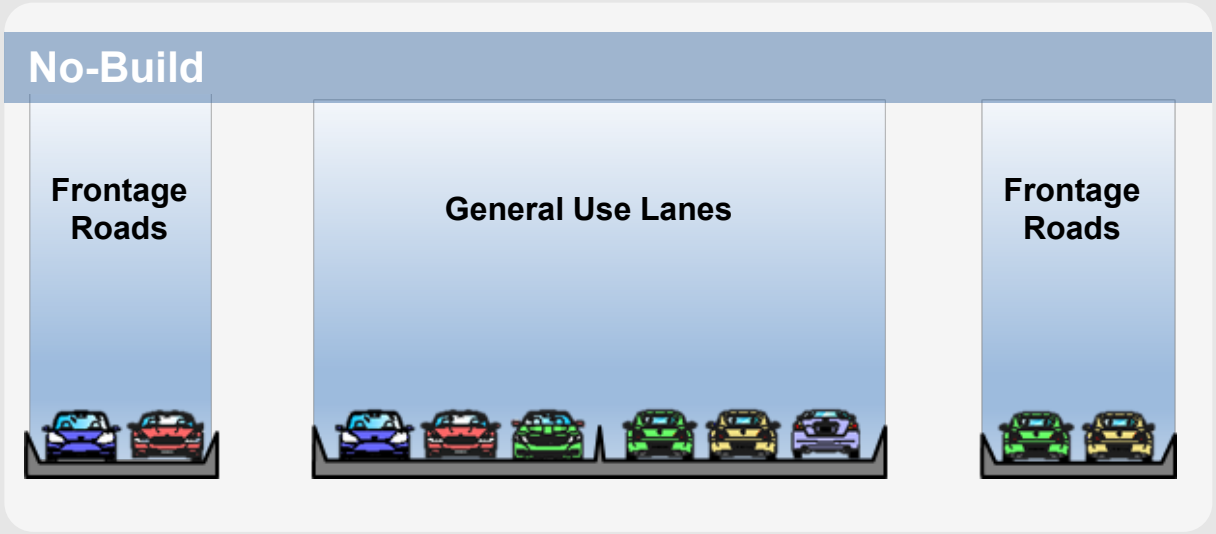
Mainlanes

Improve Ramp Configurations

Improve Interchanges

Incorporate Technology

Primary Alternative 0



Meets 0 of the 5 needs

Safety *Multimodal* *Freight/Cargo* *Evacuation* *Infrastructure*

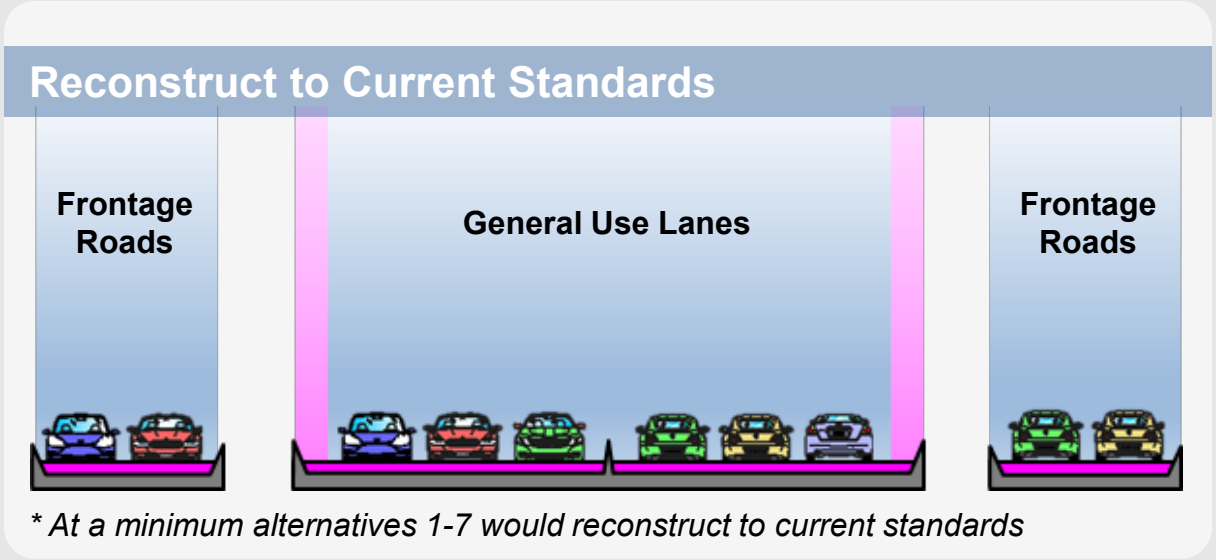
Pros

- No additional ROW

Cons

- No improvements to
  - Safety
  - Projected congestion
  - Projected increase in movement of people, goods, and cargo
  - Emergency evacuation
  - Aging infrastructure

Primary Alternative 1



** At a minimum alternatives 1-7 would reconstruct to current standards*

Meets 3 of the 5 needs

Safety *Multimodal* *Freight/Cargo* *Evacuation* *Infrastructure*

Pros

- Replaces aging infrastructure
- Provides wider shoulders to improve safety and emergency evacuation

Cons

- May require minimal additional ROW
- Would not separate freight trucks
- Would not provide opportunities for express transit
- No improvements for:
  - Projected congestion
  - Projected increases in movement of people, goods, and cargo

Primary Alternative 2

Add General Use Lanes

Meets 3 of the 5 needs

Safety *Multimodal* *Freight/Cargo* *Evacuation* *Infrastructure*

Pros

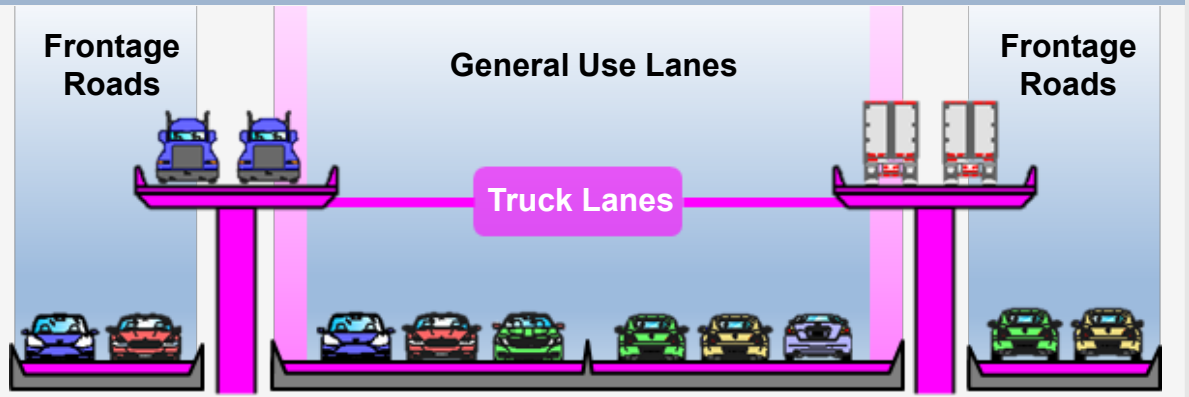
- Replaces aging infrastructure
- Provides wider shoulders to improve safety and emergency evacuation
- Increases capacity

Cons

- May require additional ROW
- Would not provide opportunities for express transit
- Would not separate freight trucks

Primary Alternative 3

Add Elevated Freight Truck Lanes



**Elevated truck lanes could be in the center or between the frontage road and general use lanes.*

Meets 4 of the 5 needs

Safety *Multimodal* *Freight/Cargo* *Evacuation* *Infrastructure*

Pros

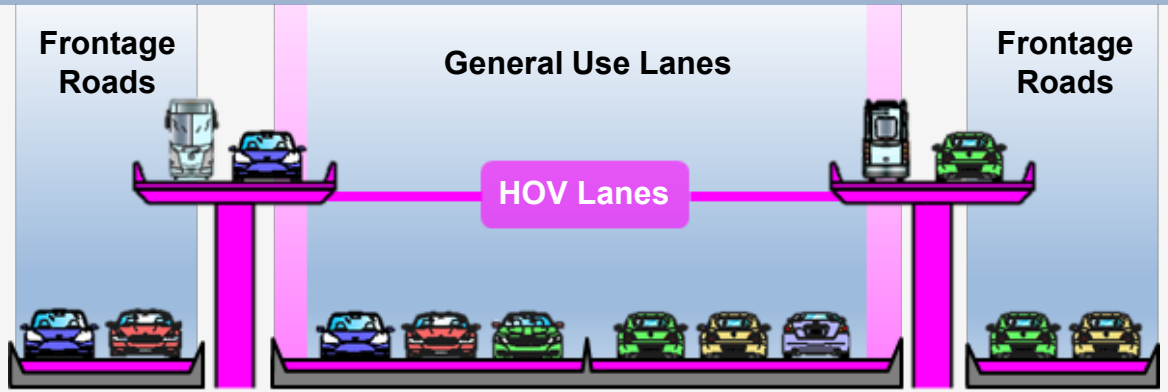
- Replaces aging infrastructure
- Provides wider shoulders to improve safety and emergency evacuation
- Reduces traffic congestion
- Separates freight trucks from cars
- Supports express travel for freight trucks going longer distances

Cons

- May require some additional ROW
- Would not provide opportunities for express transit

Primary Alternative 4

Add Elevated HOV Lanes



**Elevated HOV lanes could be in the center or between the frontage road and general use lanes.*

Meets 4 of the 5 needs

Pros

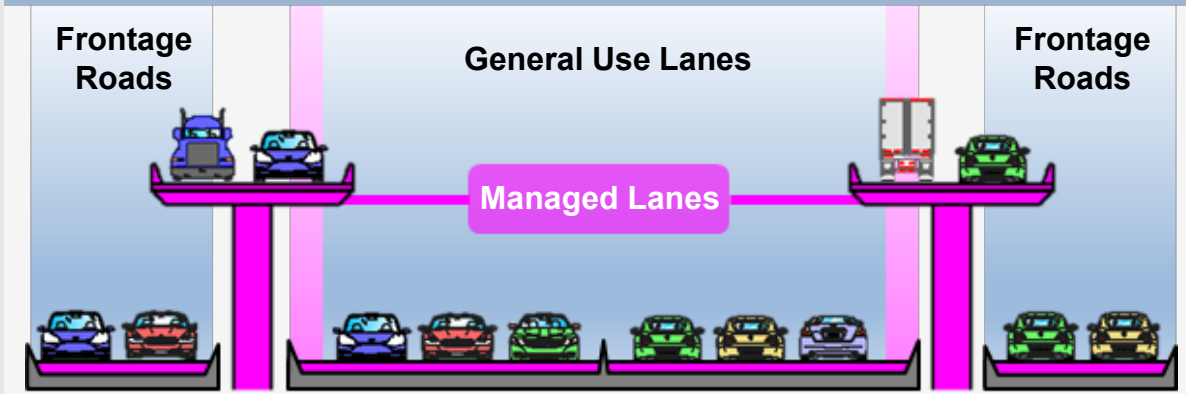
- Opportunities for express transit service
- Replaces aging infrastructure
- Provides wider shoulders to improve safety and emergency evacuation
- Reduces traffic congestion

Cons

- May require some additional ROW
- Would not separate freight trucks

Primary Alternative 5

Add Elevated Managed Lanes



**Elevated managed lanes could be in the center or between the frontage road and general use lanes.*

Meets 5 of the 5 needs

Safety *Multimodal* *Freight/Cargo* *Evacuation* *Infrastructure*

Pros

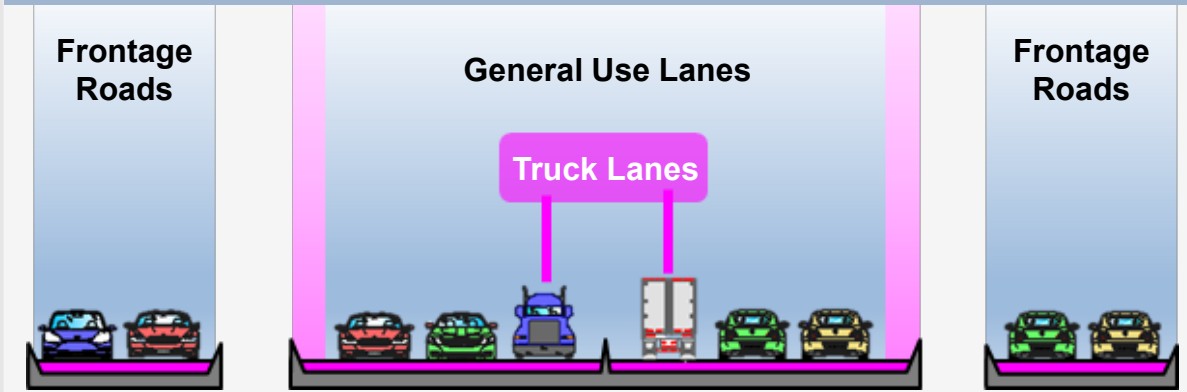
- Opportunities for express transit service
- Flexibility to separate travel modes by time of day
- Replaces aging infrastructure
- Provides wider shoulders to improve safety and emergency evacuation
- Reduces traffic congestion

Cons

- May require some additional ROW

Primary Alternative 6

Convert General Use Lane to Truck Lane



**Trucks lanes could replace one of the inside or outside general use lanes*

Meets 3 of the 5 needs

Pros

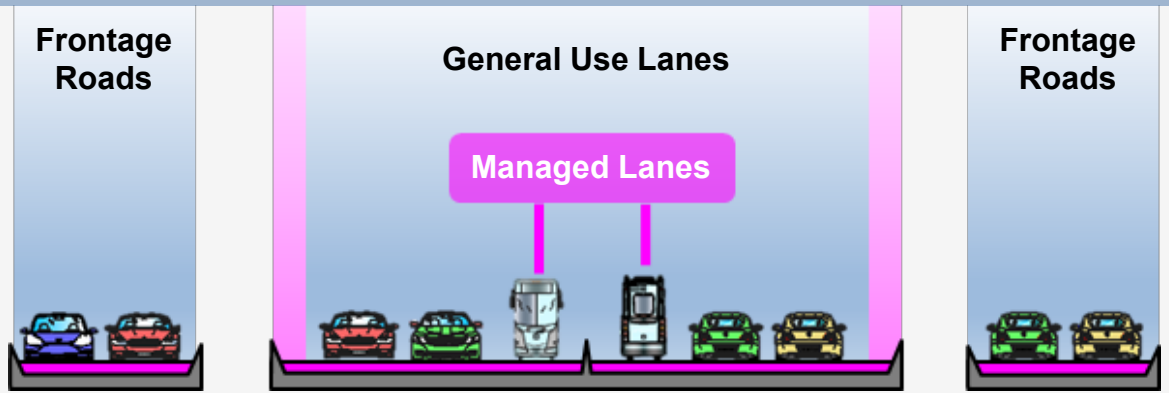
- Replaces aging infrastructure
- Provides wider shoulders to improve safety and emergency evacuation
- Provides a freight truck lane

Cons

- May require minimal additional ROW
- Reduces capacity in general use lanes
- Would not have separate structure for freight truck lanes

Primary Alternative 7

Convert General Purpose Lane to Managed Lane



**Managed lanes could replace one of the inside or outside general use lanes*

Meets 3 of the 5 needs

Safety *Multimodal* *Freight/Cargo* *Evacuation* *Infrastructure*

Pros

- Opportunities for express transit service
- Flexibility to assign specific travel modes by time of day for the managed lanes
- Replaces aging infrastructure
- Provides wider shoulders to improve safety and emergency evacuation

Cons

- May require minimal additional ROW
- Reduces capacity in general use lanes
- Would not have separate structure for freight truck lanes

Primary Alternative Summary

	Alternatives	0	1	2	3	4	5	6	7
Needs	Safety	X	✓	✓	✓	✓	✓	✓	✓
	Multimodal	X	X	X	X	✓	✓	X	✓
	Freight/Cargo	X	X	X	✓	X	✓	✓	X
	Evacuation	X	✓	✓	✓	✓	✓	X	X
	Infrastructure	X	✓	✓	✓	✓	✓	✓	✓

Please Participate in the Poll!

1. Scan the QR Code to the left using your smart phone camera

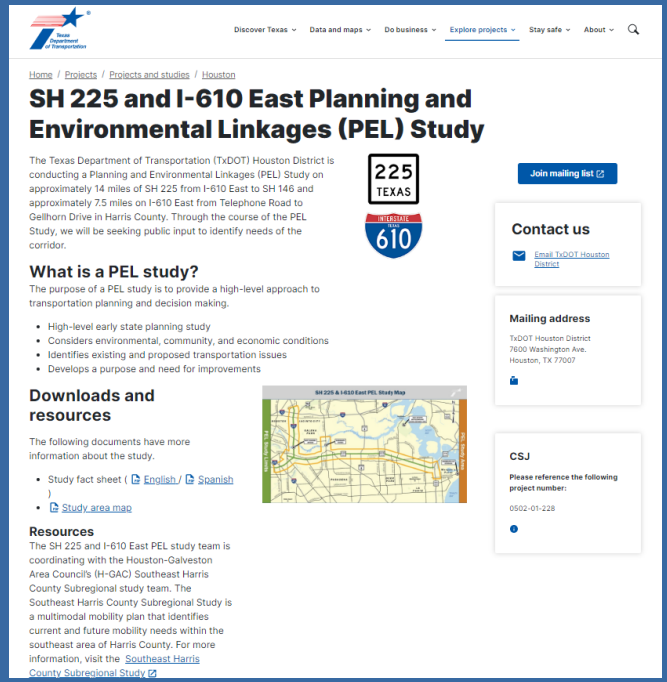
2. The survey link will appear on your phone screen

3. Answer poll

Thank You!

How to Stay Engaged

- Mailing List
- Study Materials
- Meeting Summaries
- Fact Sheet
- What is a PEL Video



https://www.txdot.gov/projects/projects-studies/houston/sh225-i610-east-study.html

Need More Information?

Robel Sintayehu, PE
Texas Department of Transportation
Advanced Project Development
Houston District
713-802-5374
Robel.Sintayehu@txdot.gov

SH 225 & I-610 East PEL Study Page

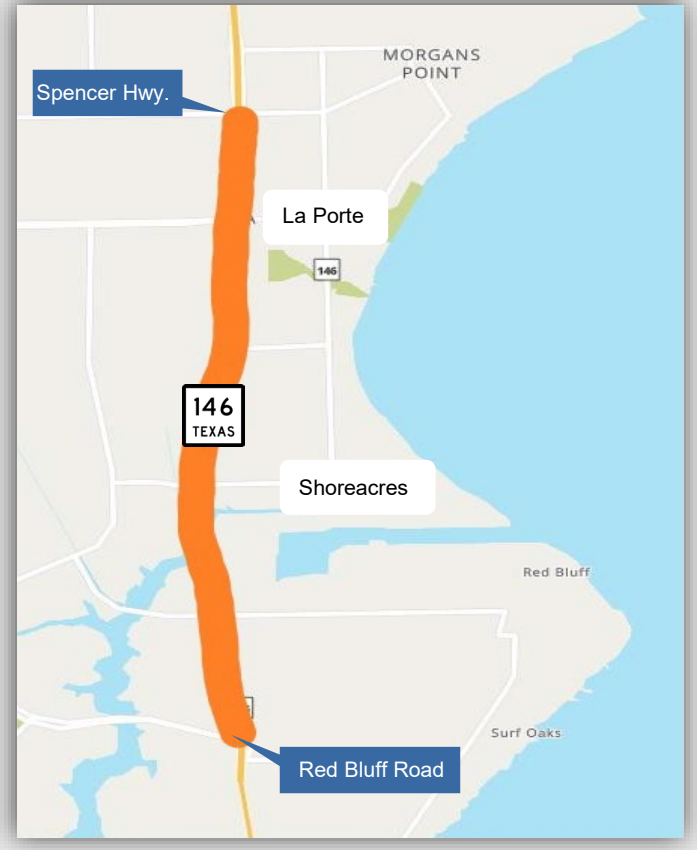
SH 146 Projects

- SH 146: Spencer Highway to Red Bluff Road
- SH 146: South of Red Bluff Road to North of SH 96
- SH 146: FM 518 to Dickinson Bayou

SH 146: Spencer Highway to Red Bluff Road

Reconstruct and Widen from 4 to 6 Lanes
2-Lane Frontage Roads
Install New ITS and Infrastructure

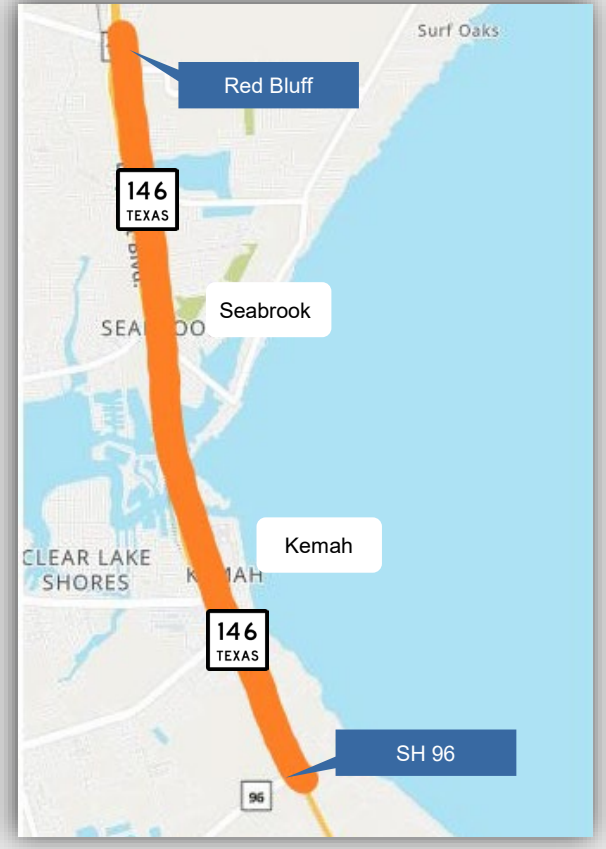
- **Length:** 5.8 miles
- **Estimated Construction Cost:** $111M
- **Estimated Completion:** End of 2025
- **Project Description:**
  - Widen roadway from 4 to 6 lanes
  - Widen three overpasses: (1) Red Bluff Rd., (2) Shoreacres Blvd., (3) Wharton Weems Blvd.
  - Construct new frontage roads:
    - Red Bluff Rd. to Port Rd. (Northbound)
    - McCabe Rd. to Shoreacres Blvd. (Northbound and Southbound)



SH 146: South of Red Bluff Rd. to North of SH 96

Roadway Widening with Express Lanes

- **Length:** 6.9 miles
- **Estimated Construction Cost:** $202M
- **Estimated Completion:** End of 2023
- **Project Description:**
  - Widen roadway from 4 to 6 lanes
  - Grade separation at major intersections
  - New 2-lane frontage roads both north- and southbound
  - 2.5 mile-long express bridge from N. of NASA 1 to N. of SH 96 (bypass)



SH 146: Kemah Bridge

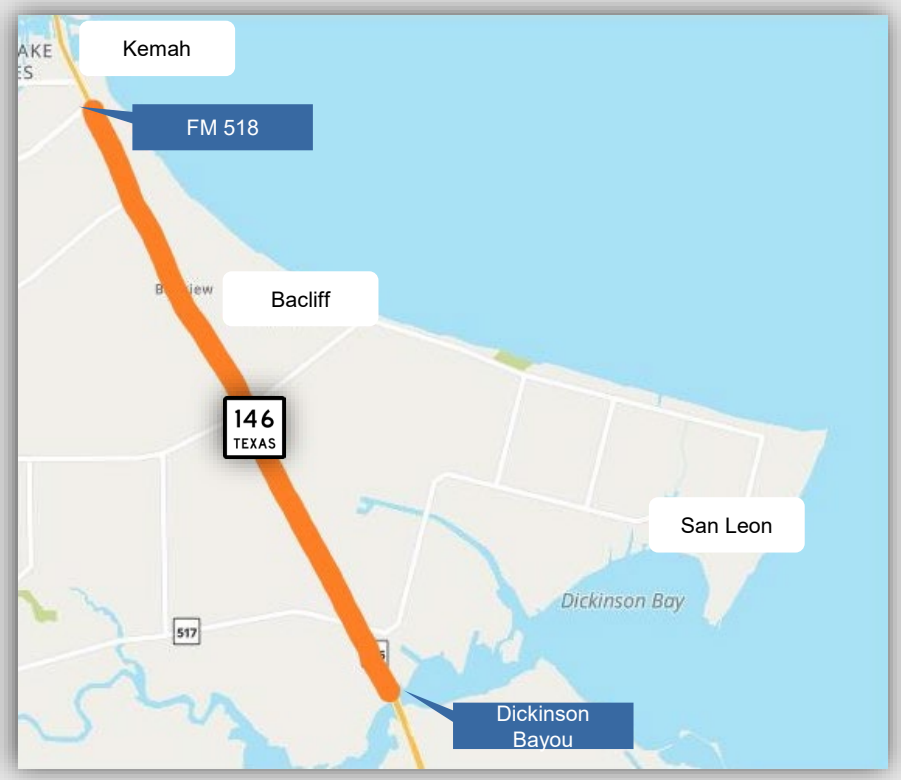
Reconstruct and Widen Existing Bridge from 2 to 3 Lanes
Construct New 3-Lane Express Bridge

- Express bridge will reduce travel times through Seabrook and Kemah from Red Bluff Rd. to SH 96.

SH 146: FM 518 to Dickinson Bayou

Reconstruct and Widen from 4 to 6 Lanes Grade Separation at SH 96

- **Length:** 5.8 miles
- **Letting Date:** May 2023
- **Construction Cost:** $198M
- **Estimated to Begin:** August 2023
- **Estimated Completion:** End of 2026
- **Project Description:**
  - Widen roadway from 4 to 6 lanes
  - Includes sidewalk and bridges



Need More SH 146 Information?

Bambi Hall, MLS, MPIO
Public Information Officer
Southeast/Montgomery/North Harris County
TxDOT Houston District
832-297-3504
Bambi.Hall@txdot.gov

Question and Answer Session