I-45 NHHIP Segment 2
Overview

For additional information about the Project, visit us online at: www.txdot.gov/nhhip

To view this exhibit in other languages, please scan the QR code here:

Para ver esta presentación en otros idiomas, por favor escanee el código QR aquí:

SEGMENT 2 OVERVIEW

Segment 2 encompasses the stretch of I-45 from I-10 to Airline Drive. Planned improvements include upgrades to the mainlanes, frontage roads, drainage systems, and reconstruction of the I-45/I-610 interchange.



Due to pending funding, the final design for Segment 2 of the I-45 Project has not yet commenced. However, the basic improvements for this segment were approved with the Record of Decision (ROD) in 2021.

The anticipated timeline to begin Segment 2 construction is 2035, though TxDOT may expedite the schedule as funding becomes available.

Construction Phasing

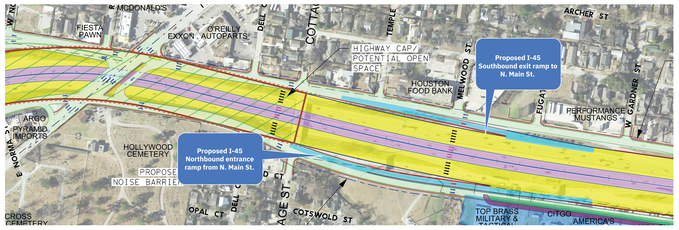


Project Funding

INDEPENDENT PROJECTS	ESTIMATED CONSTRUCTION COST	CURRENT FUNDING
2A	$682,800,000	$100,000,000
2B	$1,015,400,000	-

I-45 Exit and Entrance to and from North Main St.

In alignment with its commitment to collaborate with the City of Houston on the I-45 NHHIP, TxDOT has engaged in discussions regarding potential design changes based on the City's requests.



The City of Houston requested that TxDOT include an I-45 southbound exit ramp to N. Main St., as shown in light blue at the top of the image above. Additionally, a design change is being considered to provide an I-45 northbound entrance ramp from N. Main St., indicated in light blue at the bottom of the image. To accommodate this proposed change, Cottage Street will need to be closed for safety reasons due to its close proximity to the exit ramp.

Proposed Design Change: Pedestrian Bridge at North Street



The City of Houston also requested that TxDOT consider constructing a pedestrian bridge at North Street. This bridge would offer pedestrians a safe and convenient way to cross from one side of I-45 to the other. The green line on the image to the left indicates the proposed location of the pedestrian bridge.



A typical pedestrian bridge is shown to the left. The North Street pedestrian bridge is designed to maintain access for pedestrians traveling to and from either side of I-45, especially considering that the current bridge will be removed as part of this project. This option has been developed in response to public feedback, as the elimination of the North Street bridge is necessary due to the mainlane geometry, which does not permit North Street to seamlessly connect to the existing conditions on either side of I-45.

Segment 2 ROW Assessment.

In May 2025, TxDOT provided an updated presentation to the City of Houston and Harris County which included recommendations for the potential footprint reduction assessment in Segment 2.

The Record of Decision (ROD) design already implemented multiple design features to minimize the ROW within the limits of Segment 2:

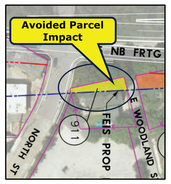
- Minimal ramp envelope (Cottage Street to I-610)
- Frontage roads overhang mainlanes, N. Main Street to Cottage Street
- I-45 design speed reduced from 60 mph to 50 mph for Segment 2A and Segment 3

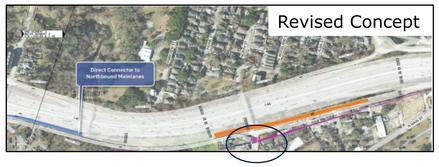


Footprint Reduction:

- Proposed revised concept realigns the I-10 Eastbound to I-45 Northbound direct connector to enter the mainlanes instead of the frontage road, reducing ROW needs.
- The proposed footprint reduction strategy resulted in a potential decrease of approximately 19,946 square feet (0.5 acres), and avoidance of four parcels impact.
- **RECOMMENDATION IS TO ENGAGE WITH IMPACTED PROPERTY OWNERS TO DISCUSS POTENTIAL PARCEL SPECIFIC IMPLEMENTATION OF THE REVISED DESIGN CONCEPT.**







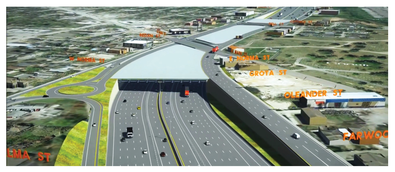


I-45 NHHIP Segment 2 Key Features



1 I-45 Widening

Expand I-45 to incorporate four Managed Express (MaX) lanes, designed to encourage transit opportunities and improve overall traffic efficiency.



2 Potential Roadway Cap

Lower the I-45 mainlanes below grade between Cottage and N. Main streets, creating the possibility for a structural cap. This cap could be developed with community-focused amenities, funded and built through partnerships with third parties.



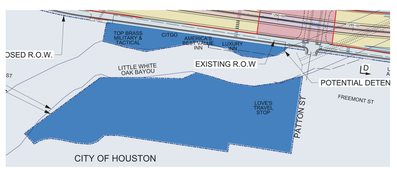
3 Continuous Frontage Roads and New Ramp Configuration

Construct continuous I-45 northbound and southbound frontage roads, as well as continuous I-610 eastbound and westbound frontage roads at the I-45/I-610 interchange, as indicated in green. Additionally, revise the I-610 ramp configuration, shown in blue, to enhance mobility and improve safety for drivers.



4 Reduced Right of Way

Construct the I-45 northbound frontage road partially over the northbound mainlanes to conserve right of way and prevent impacts to the adjacent Hollywood Cemetery.



5 Improving Drainage & Detention Ponds

Upgrade existing culverts to bridges, enhancing drainage by creating a larger capacity for stormwater flow, improving overall flood management and resilience.

Introduce new detention ponds and expand existing ponds to improve stormwater management and enhance flood mitigation.