



TEXAS DEPARTMENT OF TRANSPORTATION



WELCOME

I-10E PEL STUDY FROM I-69 TO SH 99





TEXAS DEPARTMENT OF TRANSPORTATION



THANK YOU!

Contact:

Chance Norman, EIT

Chance.Norman@TxDOT.gov

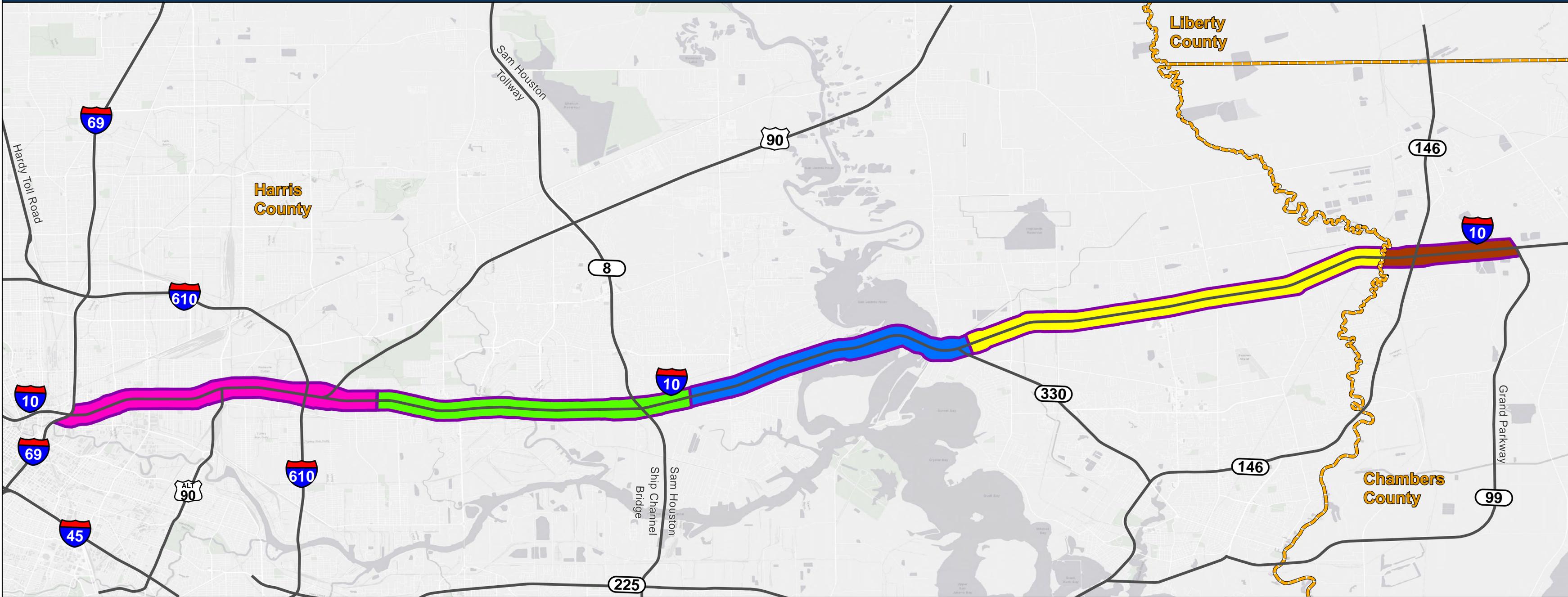
(713) 802-5251

Or Visit:

<https://www.txdot.gov/inside-txdot/projects/studies/houston/houston-pel-i-10.html>



CORRIDOR SEGMENTS

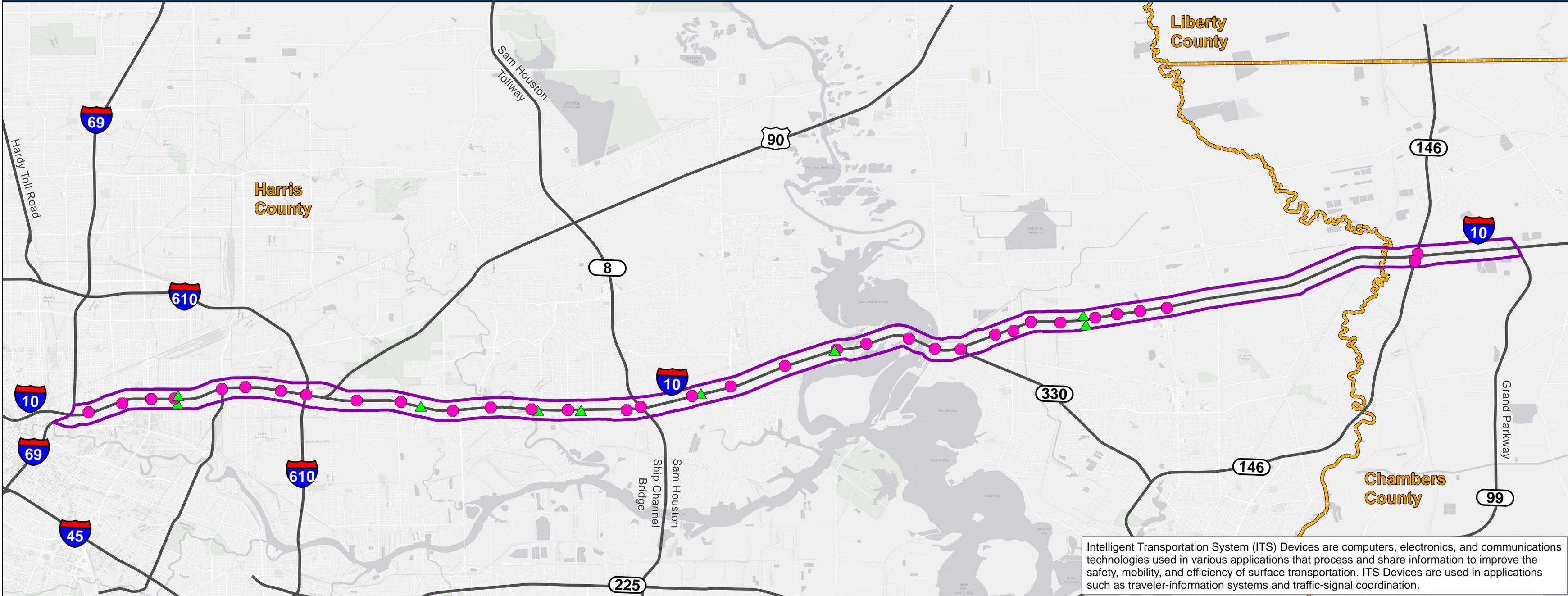


I-10E PEL STUDY
FROM I-69 TO SH 99
HARRIS AND CHAMBERS COUNTIES, TX

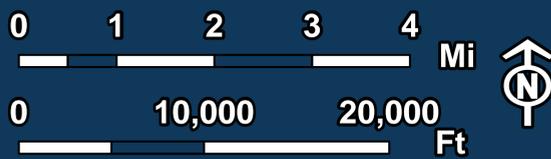
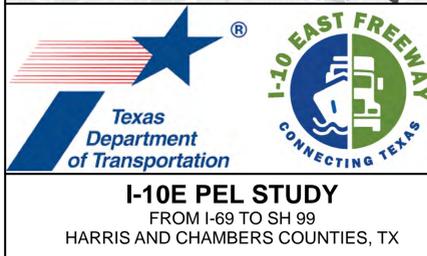


- Project Limits
- Segment 1
- Segment 2
- Segment 3
- Segment 4
- Segment 5

INTELLIGENT TRANSPORTATION SYSTEM (ITS) DEVICES



Intelligent Transportation System (ITS) Devices are computers, electronics, and communications technologies used in various applications that process and share information to improve the safety, mobility, and efficiency of surface transportation. ITS Devices are used in applications such as traveler-information systems and traffic-signal coordination.



Project Limits

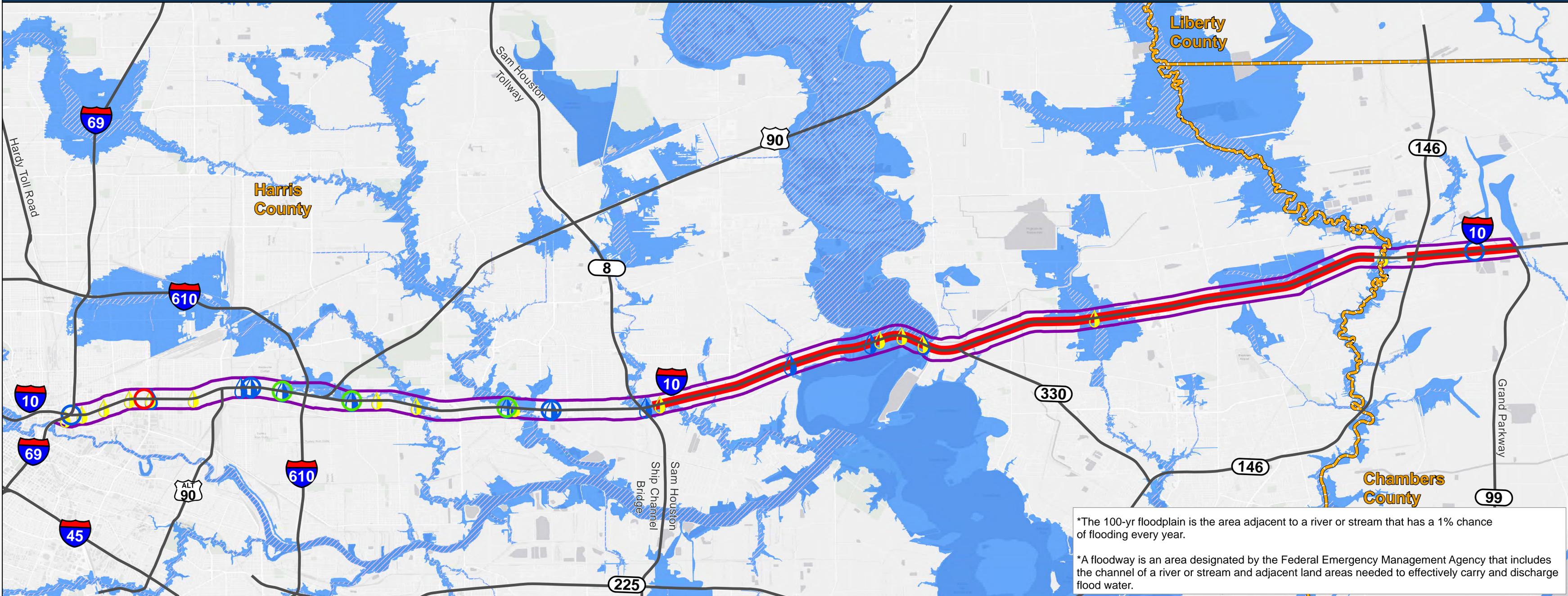
Dynamic Message Signs



ITS Cameras



FLOODPLAINS AND HISTORICAL FLOODING



*The 100-yr floodplain is the area adjacent to a river or stream that has a 1% chance of flooding every year.

*A floodway is an area designated by the Federal Emergency Management Agency that includes the channel of a river or stream and adjacent land areas needed to effectively carry and discharge flood water.

I-10E EAST FREEMWAY
CONNECTING TEXAS

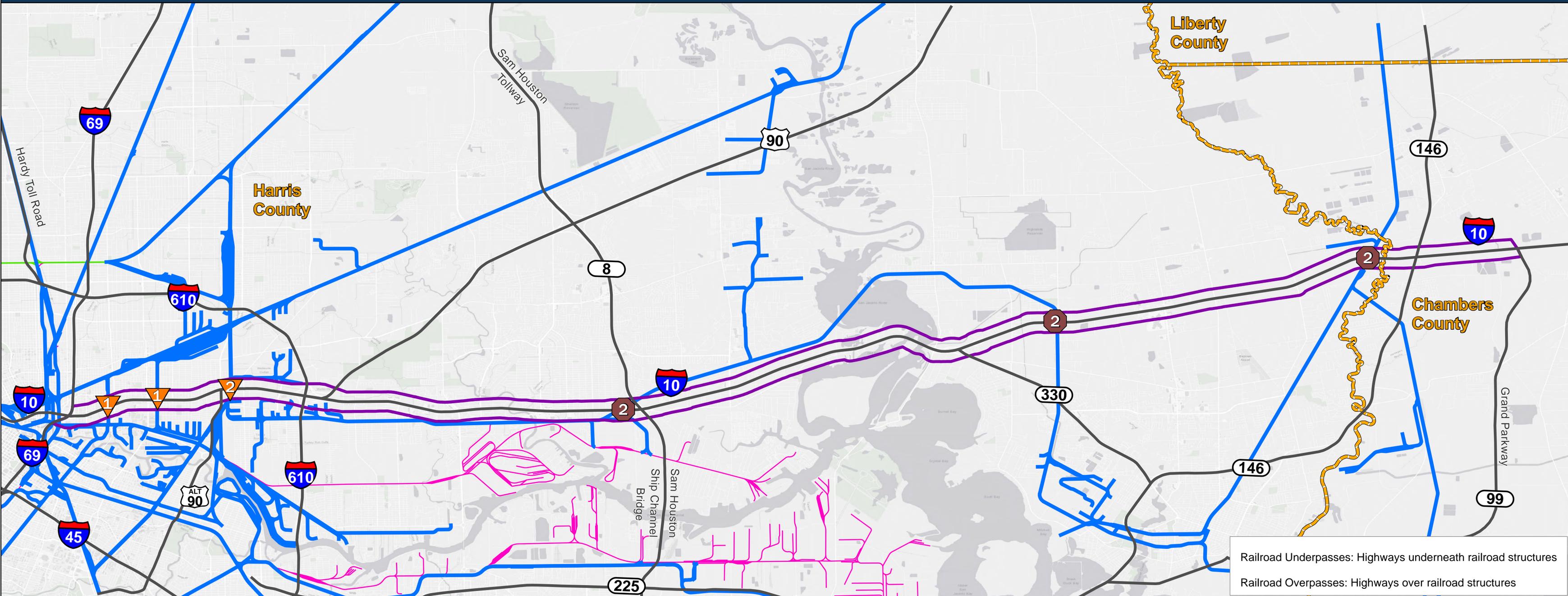
I-10E PEL STUDY
FROM I-69 TO SH 99
HARRIS AND CHAMBERS COUNTIES, TX



- Project Limits
- Full Road Closure*
- Mainlane Partial Closure*
- Other Partial Closure*
- 💧 Flooding*
- 💧 Historical Flooding (1961 - 2015)
- 100-yr Floodplain
- Floodway

*Closures and flooding related to Hurricane Harvey

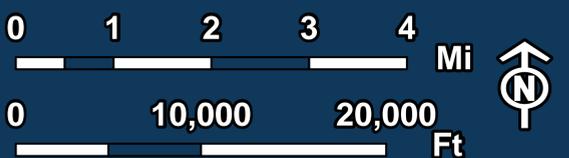
RAILROAD LINES



Railroad Underpasses: Highways underneath railroad structures
 Railroad Overpasses: Highways over railroad structures

I-10E EAST FREEMWAY
 CONNECTING TEXAS

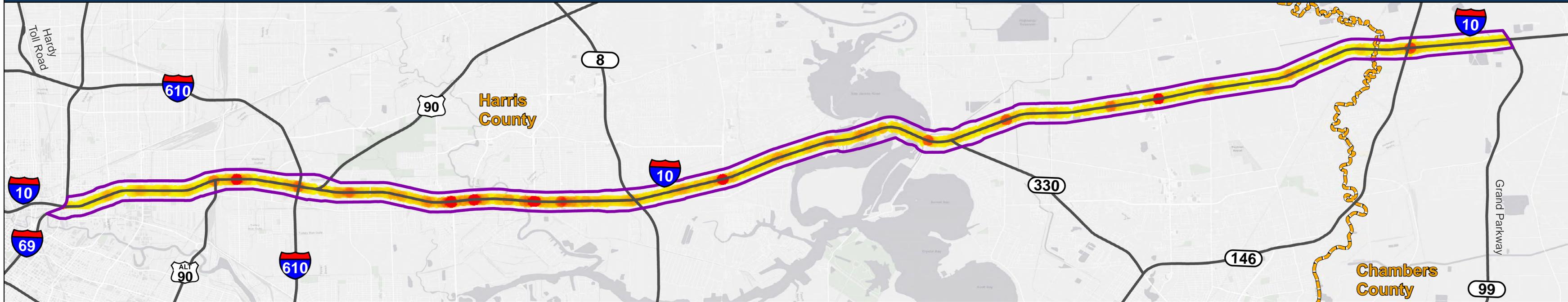
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 HARRIS AND CHAMBERS COUNTIES, TX



- Project Limits
- Union Pacific
- BNSF Railways
- Other
- 2 Railroad Overpass (Double Track)
- 1 Railroad Underpass* (Single Track)
- 2 Railroad Underpass* (Double Track)

*No railroad underpasses in the corridor meet current minimum design requirements for vertical clearance

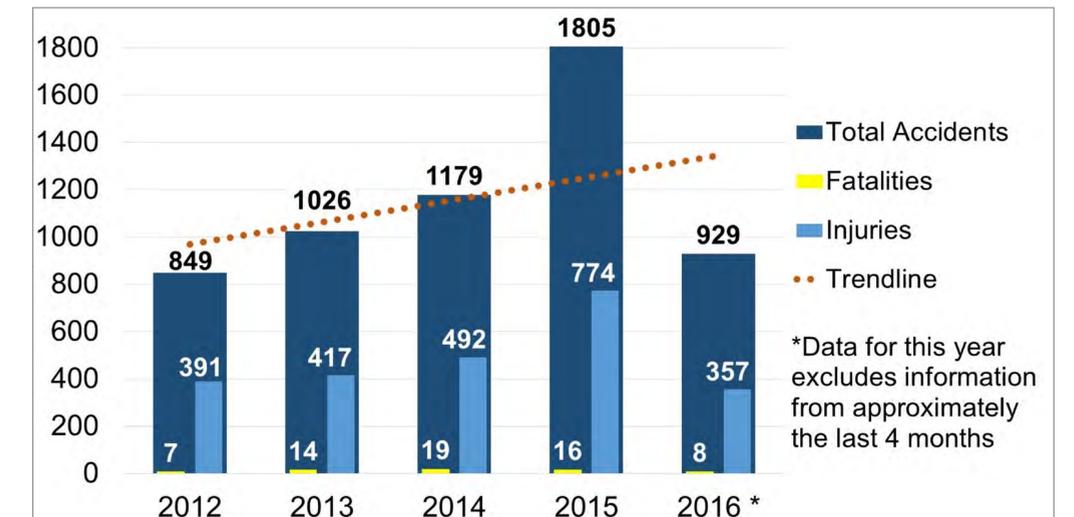
CRASH DATA 2012 - 2016



CRASHES BY SURFACE CONDITION AND SEVERITY

ANNUAL CRASHES BY SEVERITY

| Road Conditions/ Severity | Fatality Crashes | Major Injury Crashes | Minor/Possible Injury Crashes | No Injury/ Unknown Crashes | Total Crashes |
|------------------------------|---------------------|-------------------------|----------------------------------|-------------------------------|------------------|
| Dry | 56 | 92 | 1246 | 3230 | 4624 |
| Wet | 5 | 13 | 247 | 755 | 1020 |
| Standing Water | - | 1 | 22 | 92 | 115 |
| Ice | - | - | 6 | 8 | 14 |
| Unknown/Other | - | 1 | 2 | 12 | 15 |
| Total | 61 | 107 | 1523 | 4097 | 5788 |

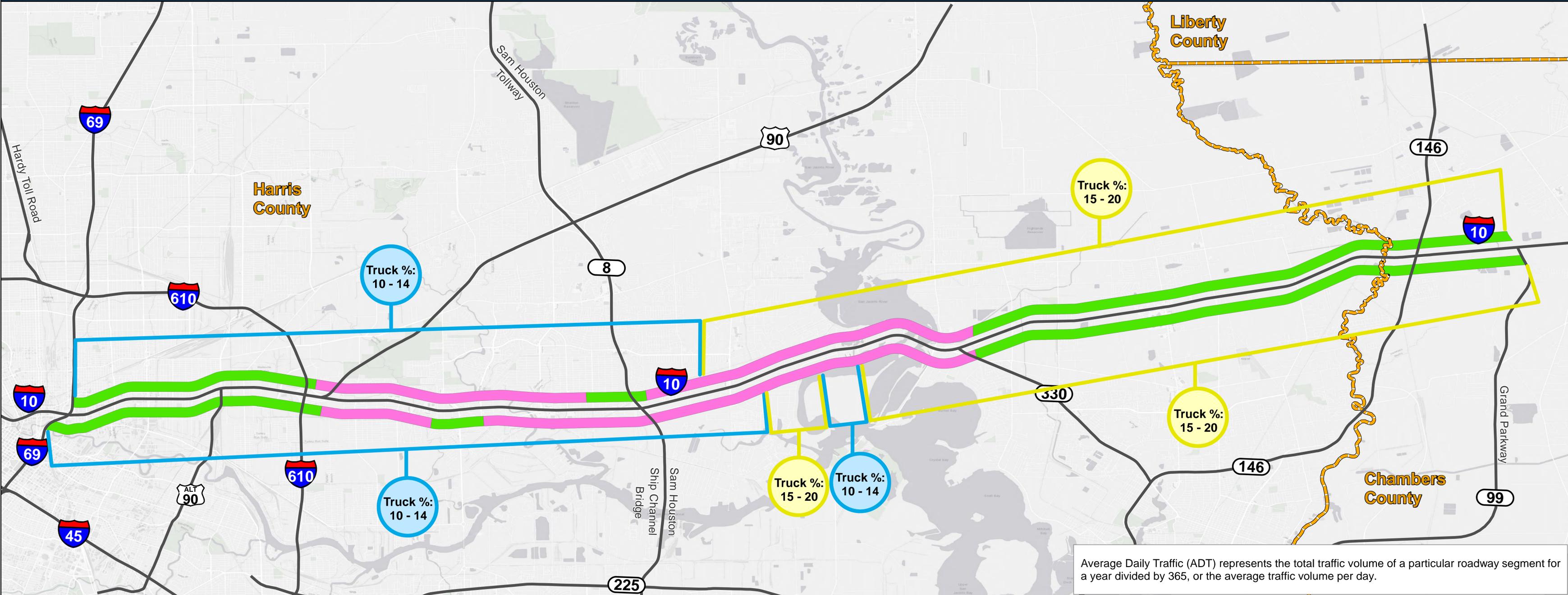


Project Limits



Crash Frequency (Hotspots)

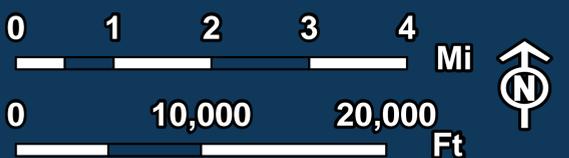
AVERAGE DAILY TRAFFIC (ADT) TRUCK VOLUME AND PERCENTAGE



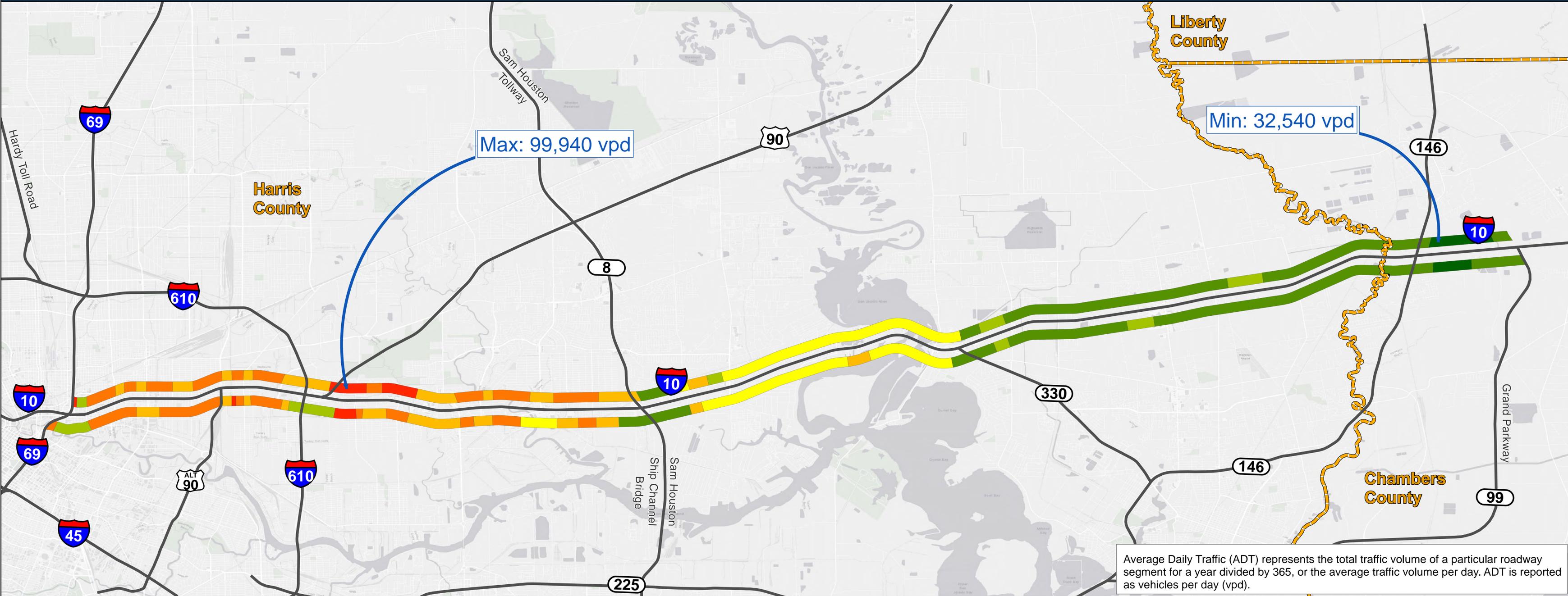
Average Daily Traffic (ADT) represents the total traffic volume of a particular roadway segment for a year divided by 365, or the average traffic volume per day.

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I-10 EAST FREEWAY
 CONNECTING TEXAS

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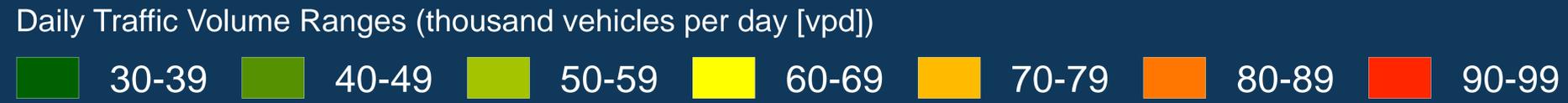
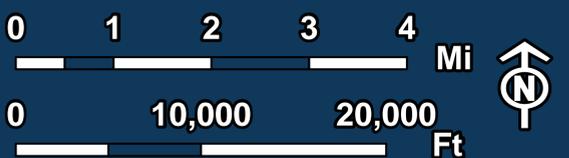


AVERAGE DAILY TRAFFIC (ADT) VOLUME

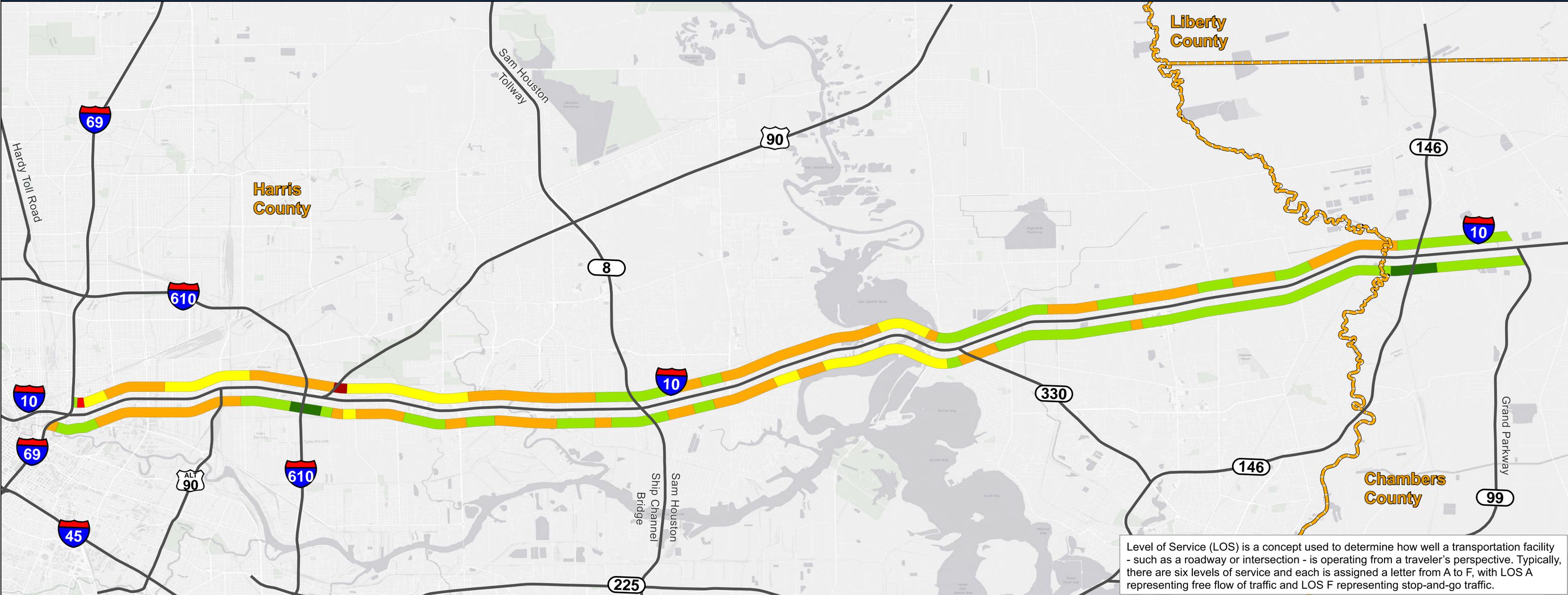


Average Daily Traffic (ADT) represents the total traffic volume of a particular roadway segment for a year divided by 365, or the average traffic volume per day. ADT is reported as vehicles per day (vpd).

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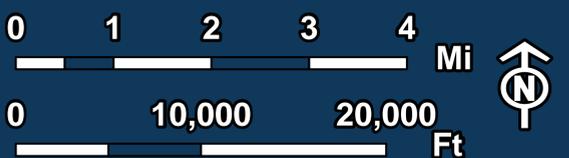


LEVEL OF SERVICE (LOS) - AM



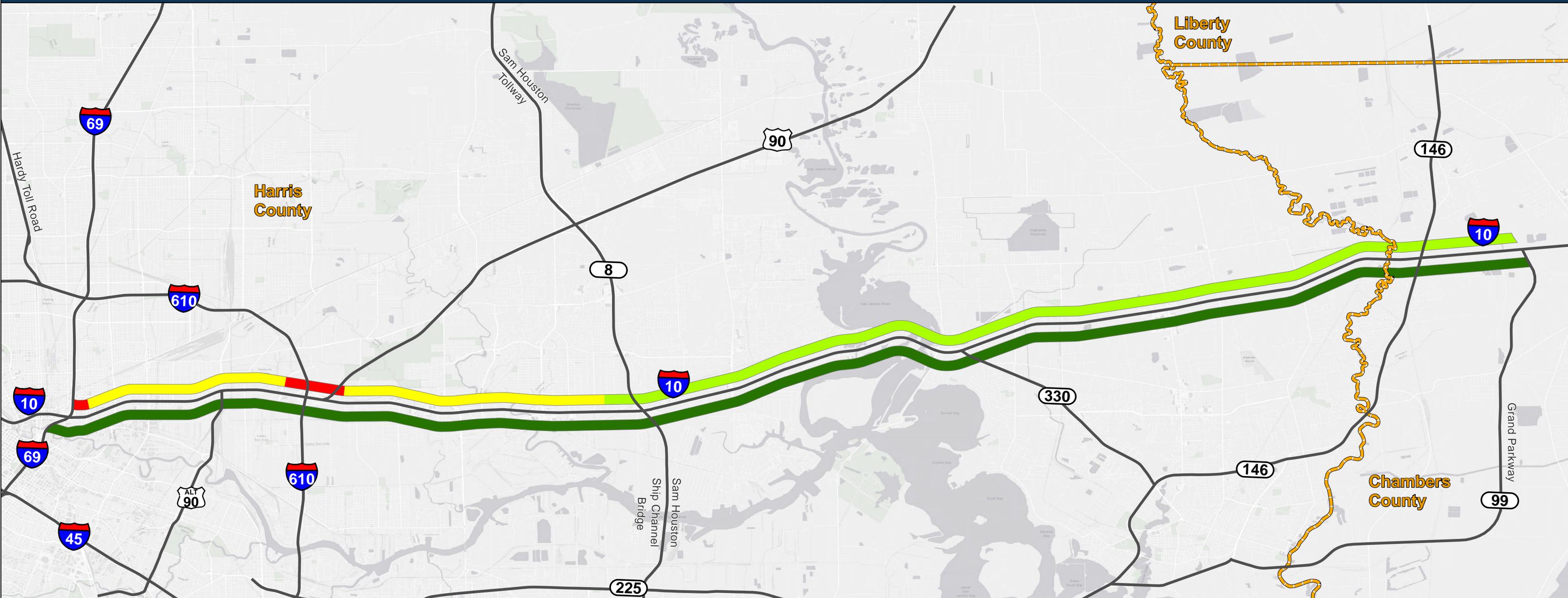
Level of Service (LOS) is a concept used to determine how well a transportation facility - such as a roadway or intersection - is operating from a traveler's perspective. Typically, there are six levels of service and each is assigned a letter from A to F, with LOS A representing free flow of traffic and LOS F representing stop-and-go traffic.

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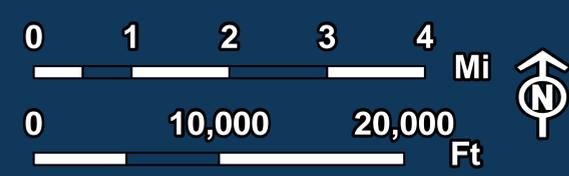


AM Peak Hours: 6:00 - 8:15 AM

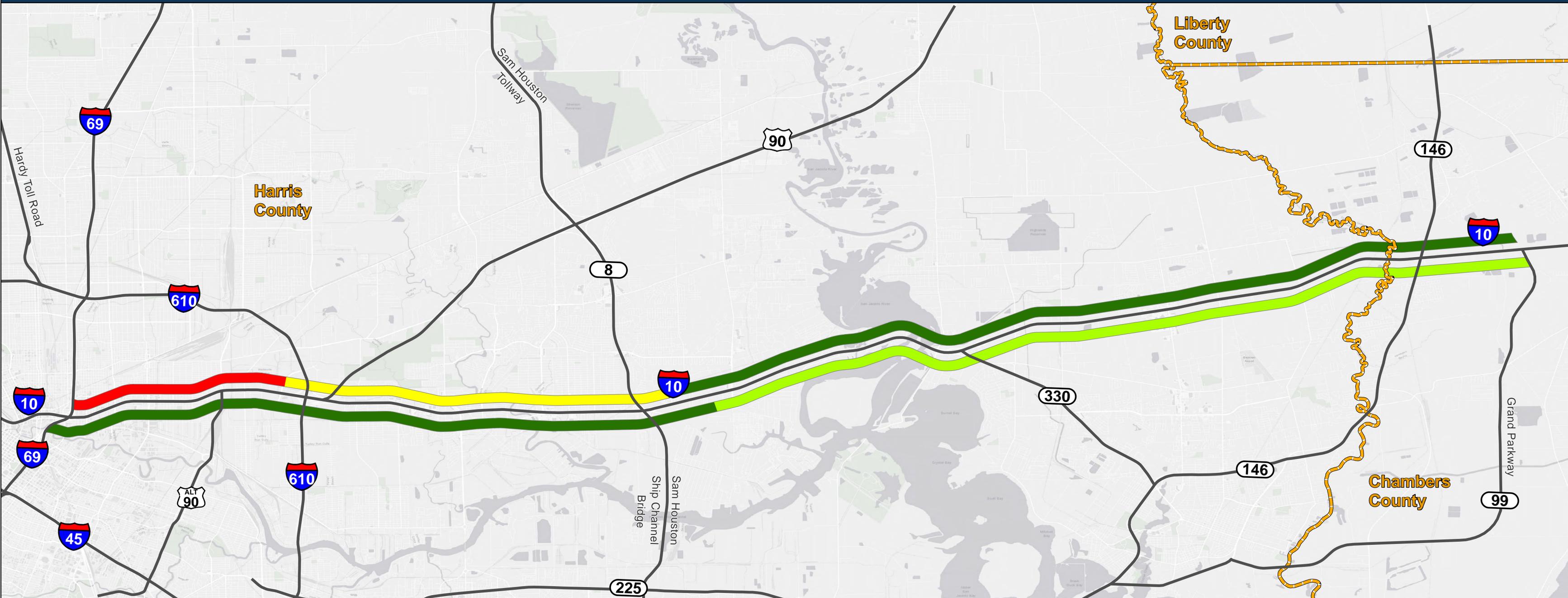
AVERAGE TRAFFIC SPEEDS - 7:00 AM to 9:00 AM



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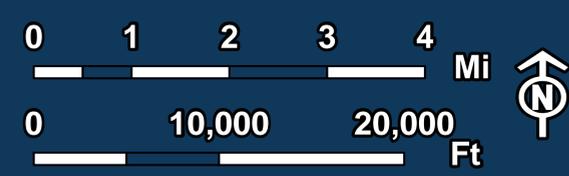


AVERAGE TRAFFIC SPEEDS - 11:00 AM to 1:00 PM

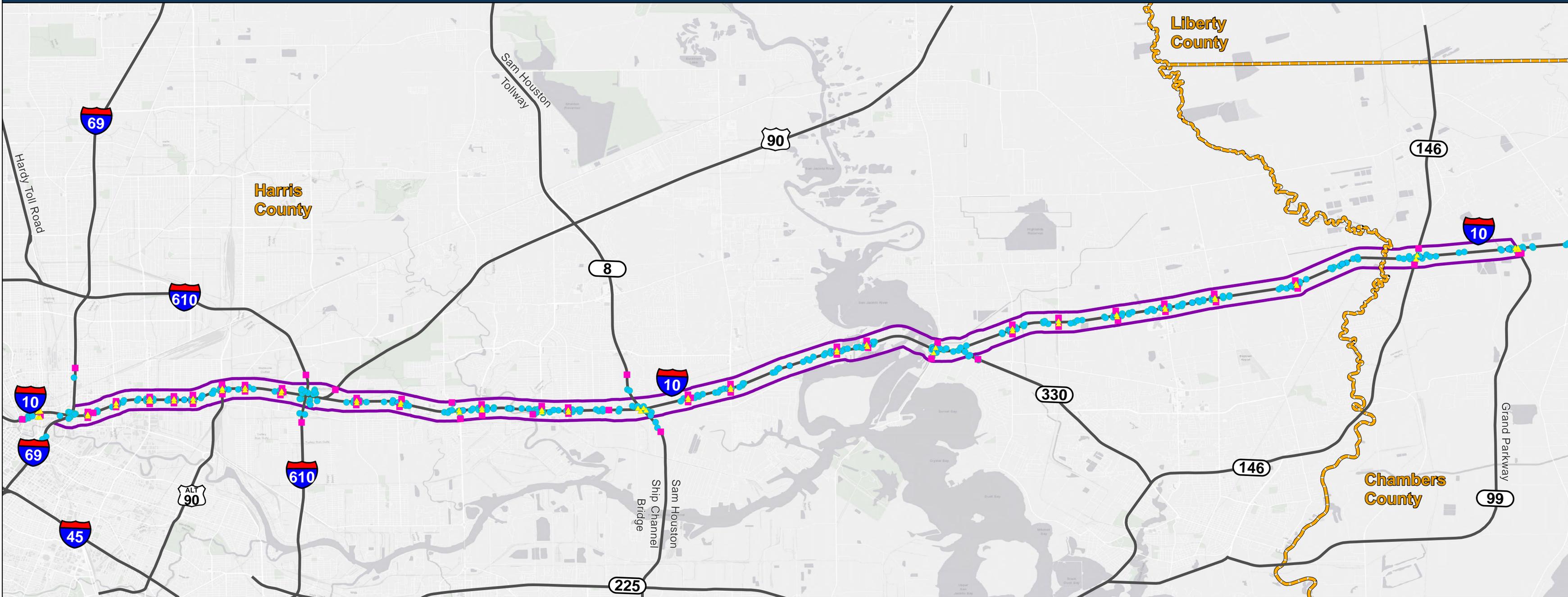



Texas Department of Transportation

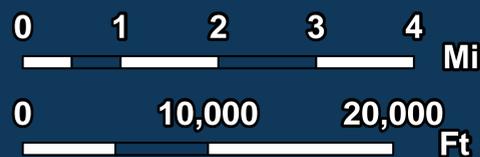
I-10 EAST FREEWAY
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TRAFFIC DATA COLLECTION LOCATIONS

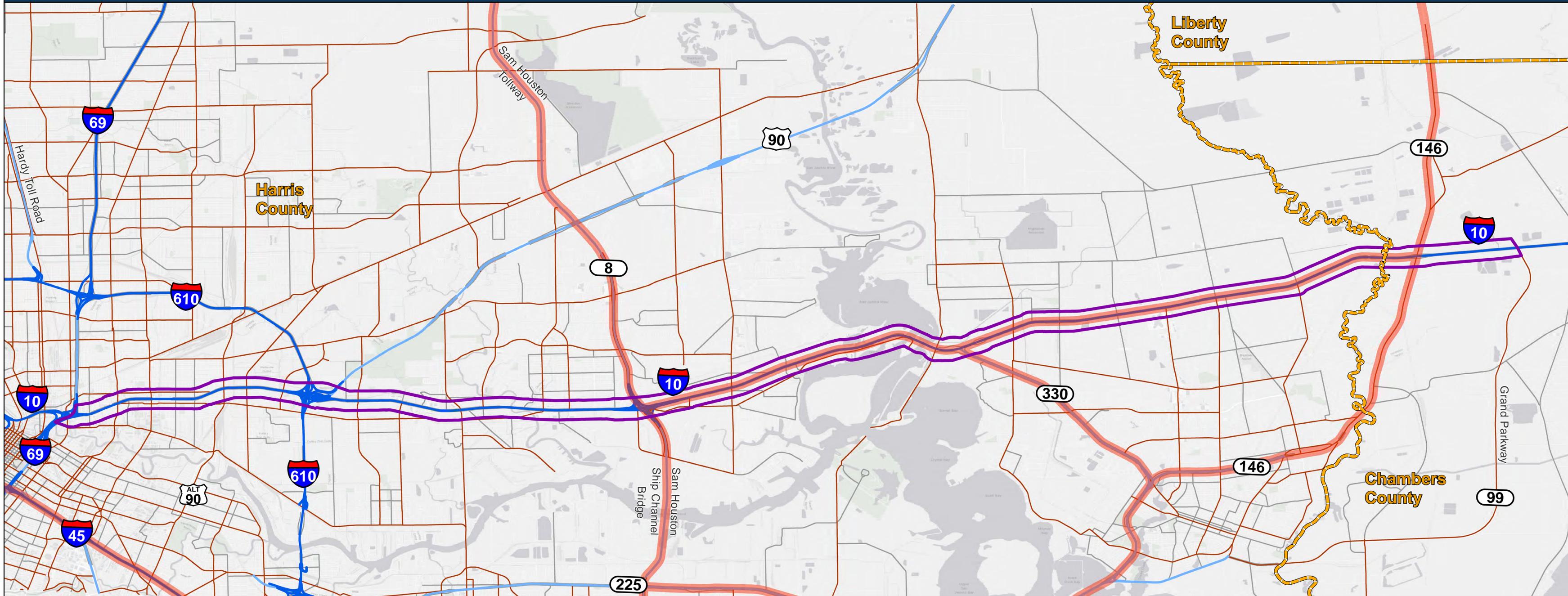


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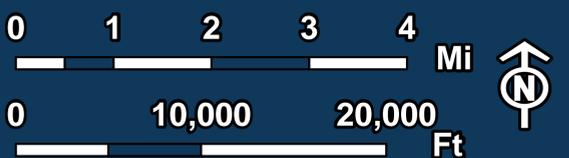


- Project Limits
- 24-hr Volume Counts (404 locations)
- Turning Movement Counts (66 locations)
- Bluetooth Counts (73 locations)

ROADWAY NETWORK AND FUNCTIONAL CLASSIFICATION

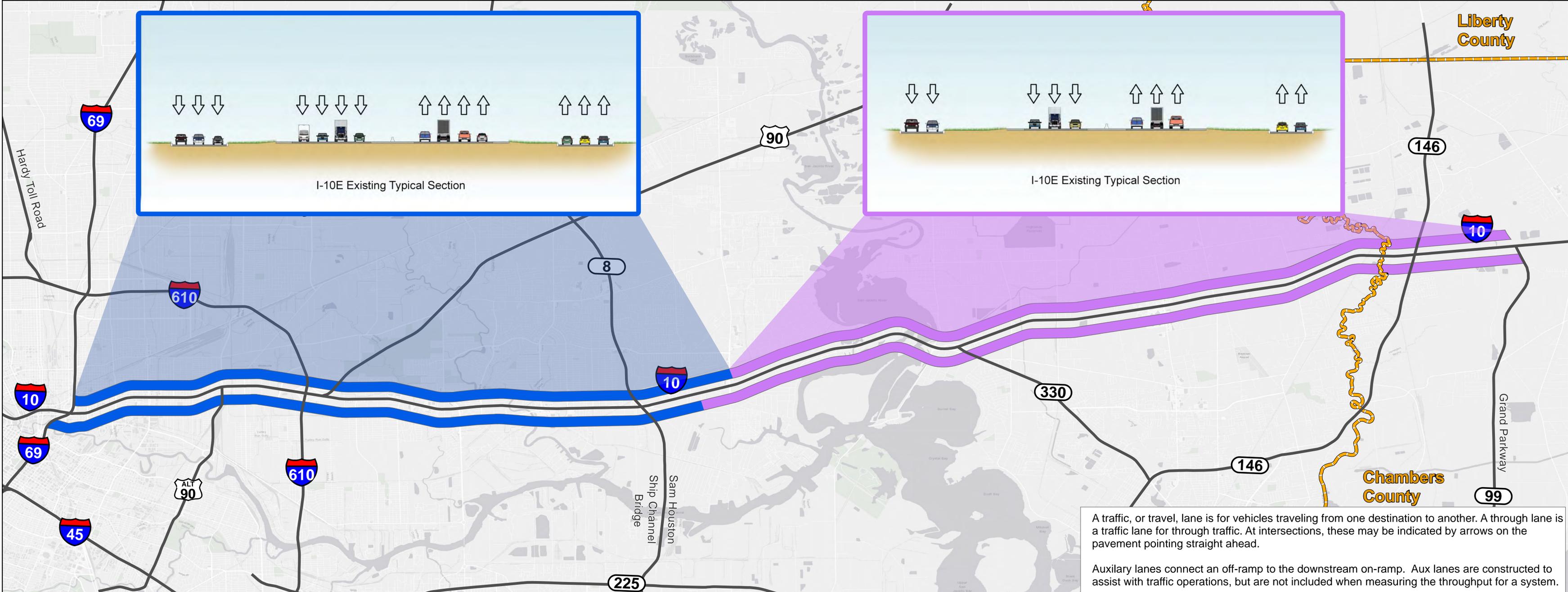
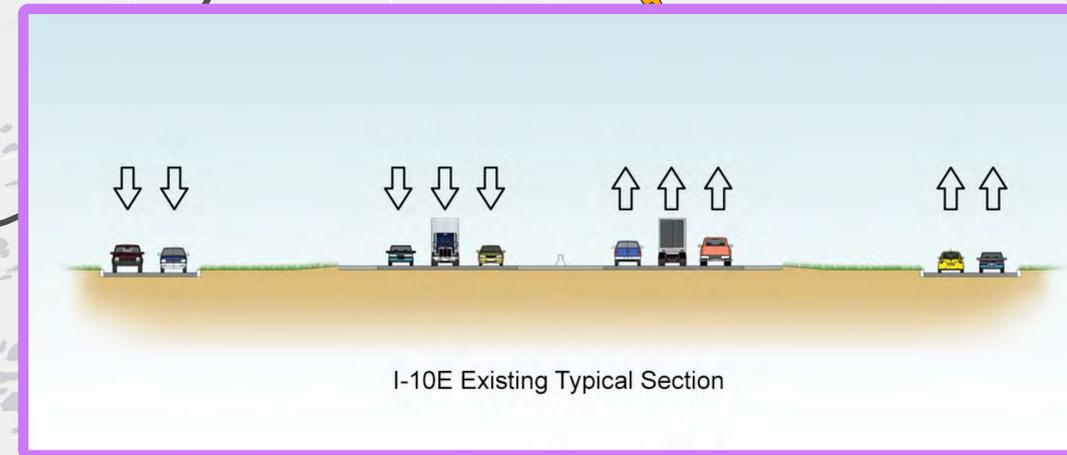
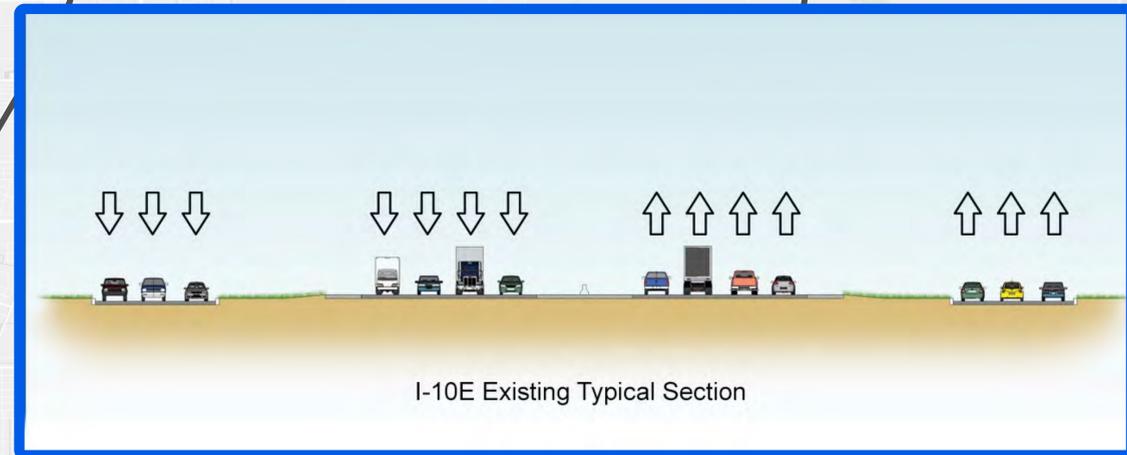


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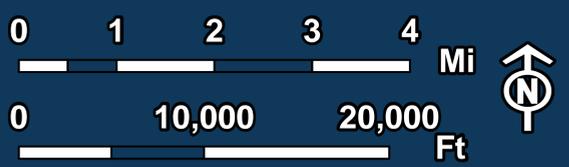
- Project Limits
- Hurricane Evacuation Routes
- Interstates
- Other Freeways / Expressways
- Arterials
- Collectors

ROADWAY TYPICAL SECTIONS



A traffic, or travel, lane is for vehicles traveling from one destination to another. A through lane is a traffic lane for through traffic. At intersections, these may be indicated by arrows on the pavement pointing straight ahead.

Auxiliary lanes connect an off-ramp to the downstream on-ramp. Aux lanes are constructed to assist with traffic operations, but are not included when measuring the throughput for a system.



3 Lanes 4 Lanes

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Stick post-it notes with your comments to the exhibit board in the locations you want to identify.

- Be as specific and detailed as possible.
- Inform the closest I-10E PEL Study Team Member of your comments so we fully understand the context and intent.

WE WANT TO HEAR FROM YOU!