



Greater Houston Freight Committee



October 17, 2024

Agenda

- **Opening and welcome**

Bruce Mann, Port Houston, and Richard Zientek, Union Pacific

- **HCTRA Truck Route Study & Freight Corridors Plan**

Josie Ortiz AICP, Project Manager, Harris County Toll Road Authority

- **H-GAC ITS Architecture and Website Update**

Thomas Fowler, Kimley-Horn

- **Passenger Rail Impacts on Freight Movement in the Houston Region**

Peter LeCody, President, Texas Rail Advocates

- **Panel Discussing the TxDOT Rail Legislative Appropriation Request (LAR)**

Dennis Kearns BNSF, Richard Zientek UP, Katherine Parker GCRD

- **Announcements**

- **Adjourn**

Presentations



HCTRA Truck Route Study & Freight Corridors Plan

Greater Houston Freight Committee

October 17, 2024



Agenda

1. Study Overview
2. Methodology
3. Stakeholder List
4. Land Use & Demographics
5. Truck Safety & Mobility Trends
6. Next Steps



Project Schedule

	2024								2025				
	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY
Project Management	[Active]												
Steering Committee Coordination		★		★		★		★		★	★	★	★
Stakeholder Input				[Active]									
Freight Profile and Supply Chain Analysis	[Active]												
Existing Freight Mobility Analysis	[Active]												
Key Issues, Needs and Projects						[Active]							
Freight Plan Recommendations								[Active]					
Public Outreach				[Active]									



Study Overview



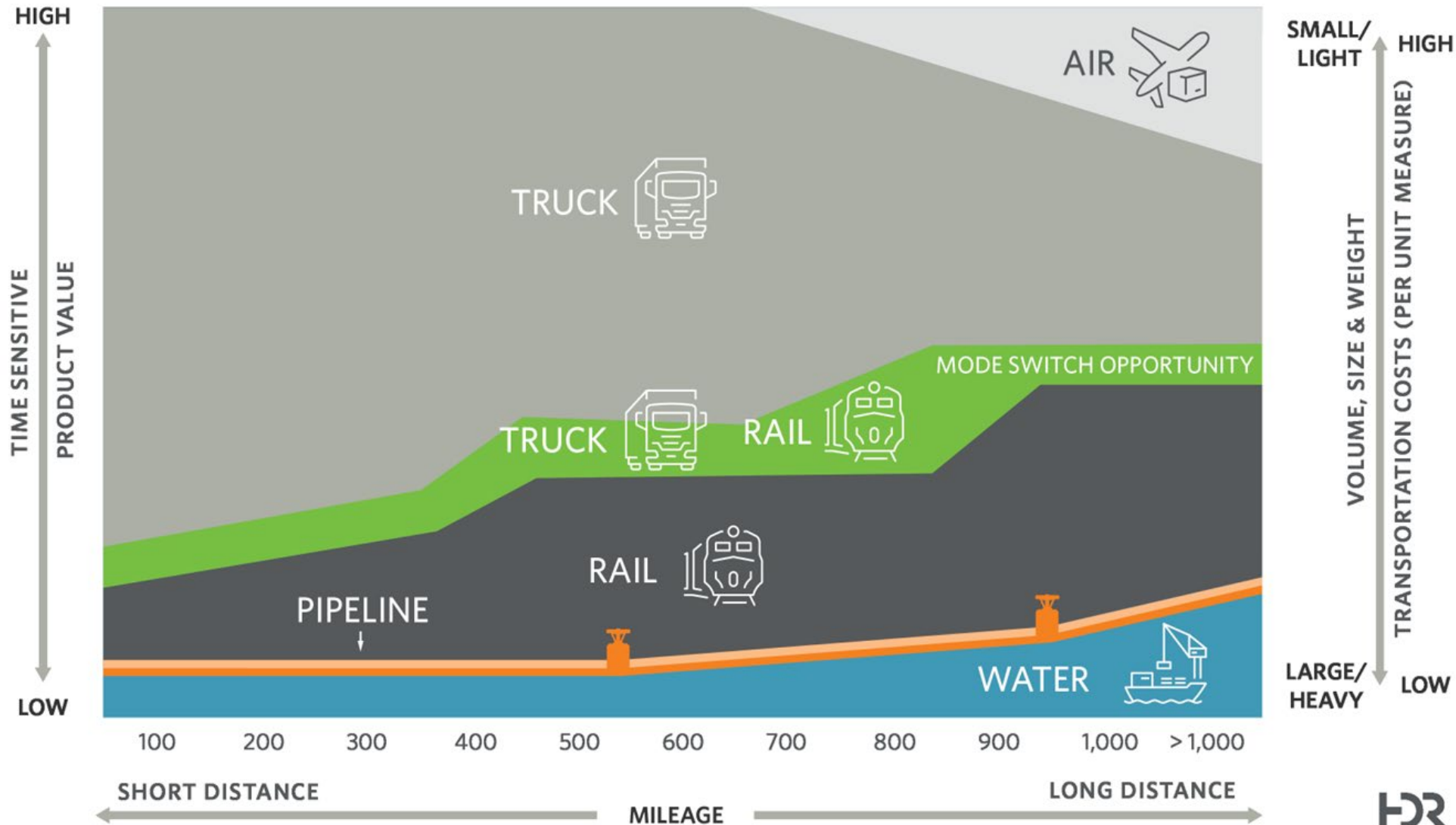
Project Goals

- **Improve freight mobility, efficiency, and resiliency to make the network more reliable and dependable**
- **Strengthen economic vitality and competitiveness**
- **Improve safety**
- **Reduce environmental and social impacts**
- **Enhance equity**



Multimodal Freight Movement Overview

DOMESTIC FREIGHT MODAL SELECTION



Source: K.J. Bucklew - October 2021



Methodology

1. Steering Committee Coordination

- a. Provide feedback on the study
- b. Receive and review update and findings
- c. Long term support for delivery of projects

2. Stakeholder Input

- a. Interview up to 30 stakeholders (agencies and industry groups)
- b. Freight movement patterns, issues & concerns, growth trends and supply chains

3. Freight Profile and Supply Chain Analysis

- a. Freight profile of transportation infrastructure and facilities
- b. Datasets used – Freight Analysis Framework (FAF), Transearch, Bureau of Labor Statistics (BLS)
- c. Deep dive of five primary supply chains



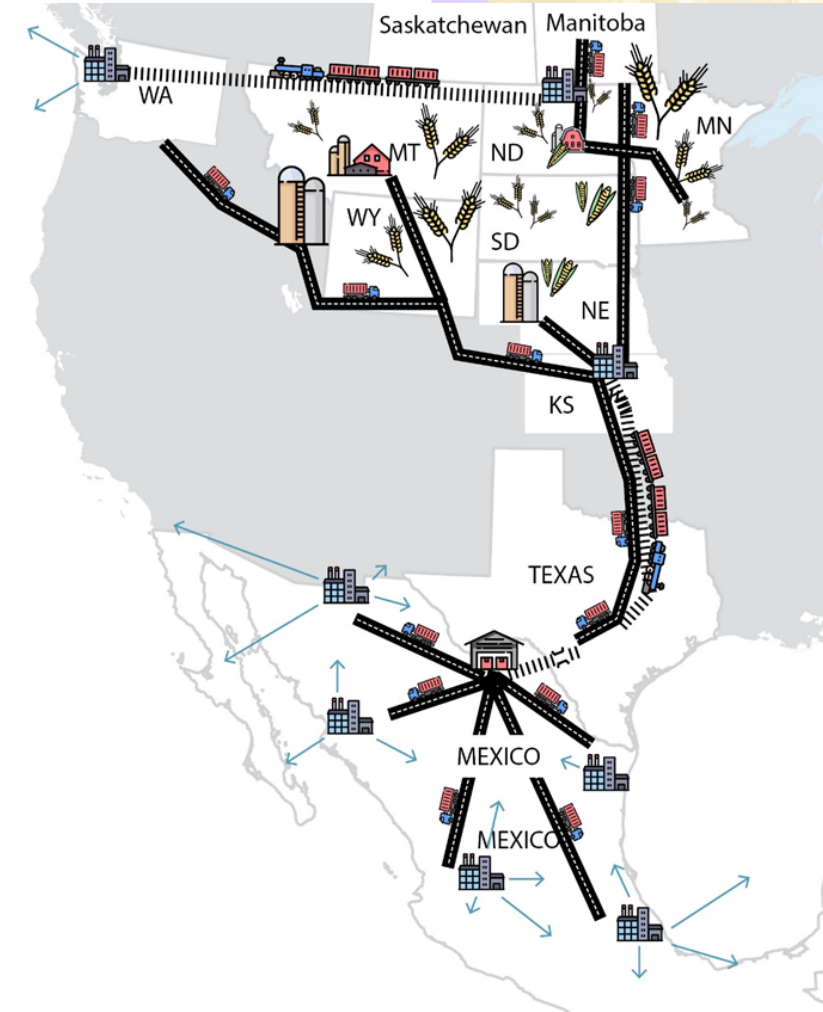
Methodology

4. Existing Freight Mobility

- a. Review previous plans
- b. Analyze mobility, land use, traffic and crash data
- c. Economic analysis
- d. Datasets used – StreetLight or INRIX, H-GAC and TxDOT data

5. Key Issues, Needs, and Projects

- a. Infrastructure, congestion, community impacts, safety, funding and growth
- b. Performance metrics for each corridor
- c. Identify key issues and needs and define projects
 - short (1-5 years)
 - mid (5-10 years)
 - long (10+ years)
- d. High level cost estimates and ranking for the projects
- e. Prioritize projects along with projects in County CIP, H-GAC RTP and TxDOT Freight Plan



Methodology

6. Recommendations

- a. Identify non-infrastructure related strategies, processes and policies cohesive with other regional agencies to address key issues
- b. Funding and grant recommendations

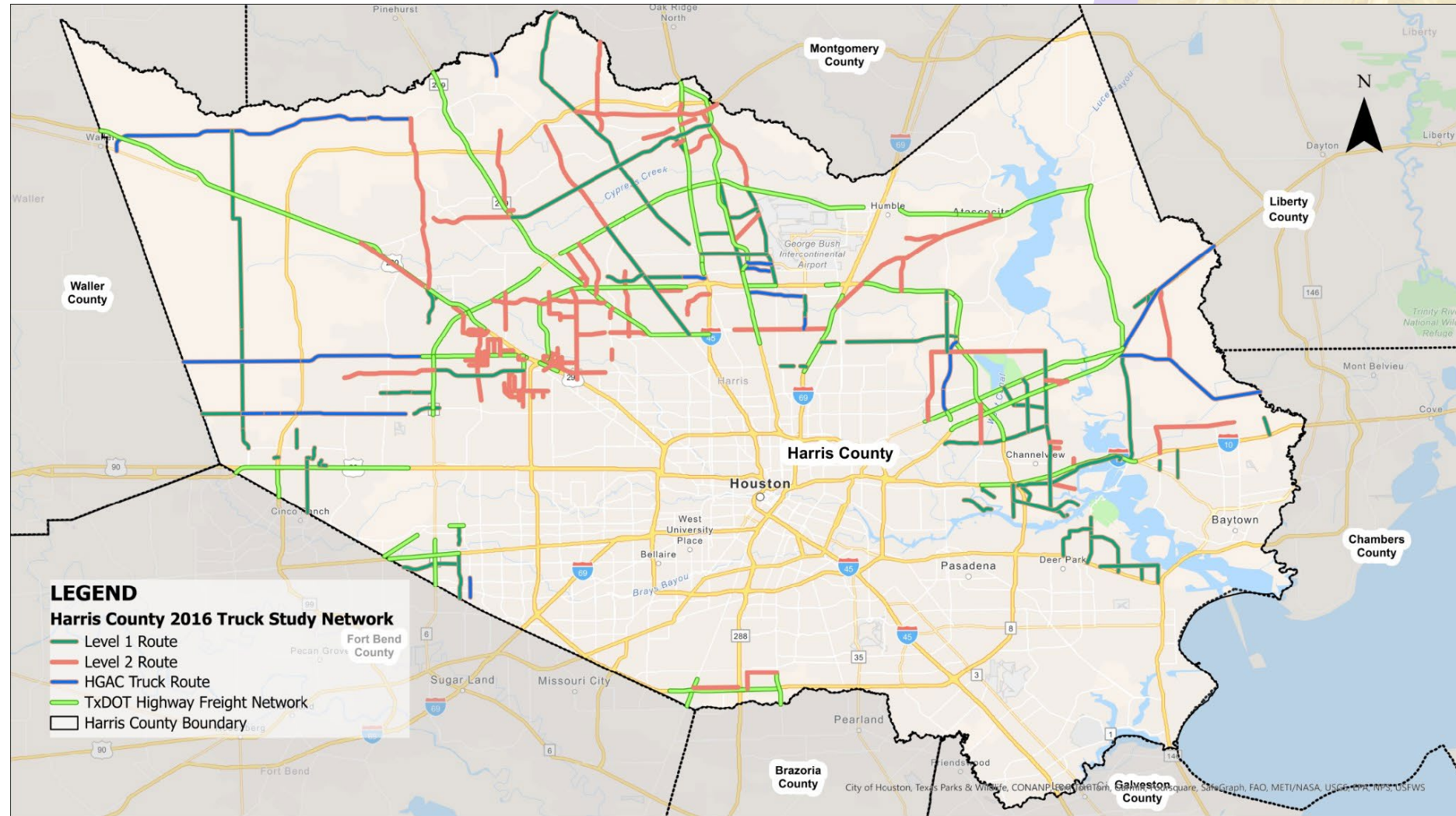
7. Public Outreach

- a. Up to eight public meetings (two per precinct) to seek community feedback
- b. Interactive website and social media campaign (Optional)



Harris County 2016 Truck Route Study Outcomes

- **Level 1 Roads** - Routes on which both legal and oversized/overweight (OS/OW) trucks are encouraged to travel.
- **Level 2 Roads** - Routes on which truck travel is accepted.



Source: Harris County Engineering Department, Harris County Truck Route Study, 2016
<https://www.h-gac.com/uploads/transportation-improvement-program-call-for-projects/1029201854407PM.pdf>



0 1 2 4 6 8 Miles

Harris County Truck Route Study / Freight Corridors Plan
Harris County 2016 Truck Study Network

Stakeholder List

AGENCIES AND ORGANIZATIONS

City of Houston, TxDOT, H-GAC, Port Houston, Houston Airport System, Railroads, and Texas Trucking Association (TTA)

INDUSTRY SECTOR GROUPS

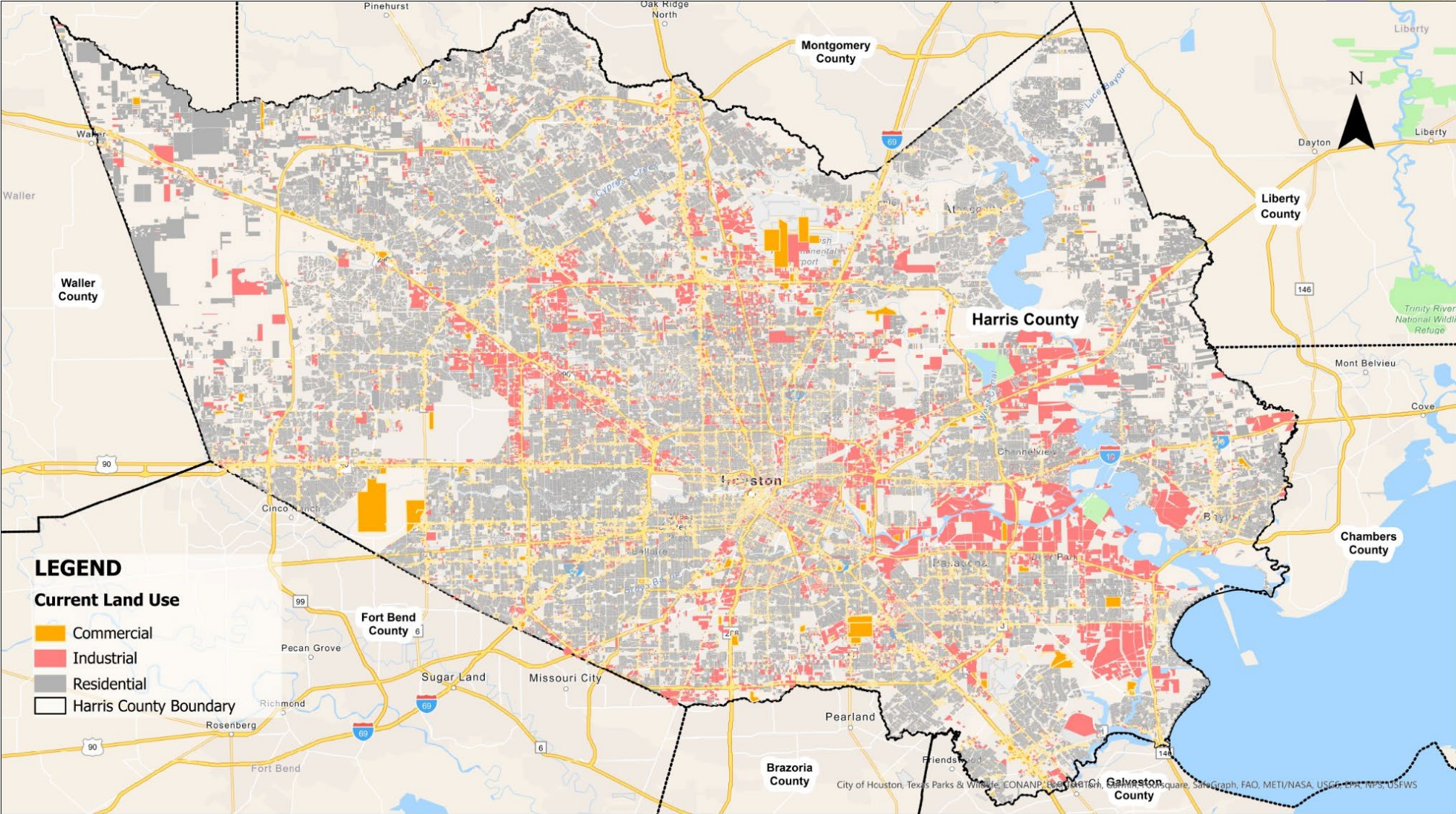
Petro-chemical	ExxonMobil, Chevron Phillips, Lyondell Basell, Air Products, INEOS
Food & Beverage Distribution	HEB, Sysco, Houston Food Bank, Kroger, Tyson Foods, Anheuser-Busch
Transport & Logistics	XPO, Saia, Estes, Genox Transportation, Gulf Winds International, Frontier Logistics, Amazon
Construction	Martin Marietta, American Materials, Heidelberg, Rinker Materials, Oldcastle
Infrastructure Owners & Operators	UP, BNSF, PTRA, Port Houston, Houston Airport System
Commercial & Industrial Real Estate	CBRE, Prologis, Colliers, NAOIP (Commercial Real Estate Development Association)



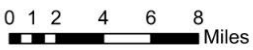
Land Use & Demographics



Residential, Commercial & Industrial Land Use in Harris County



Source: City of Houston, COH Land Use, <https://cohgis-mycity.opendata.arcgis.com/data-sets/MyCity::coh-land-use/explore?location=29.399308%2C-95.991532%2C7.88>
Data Download Date - July 2024

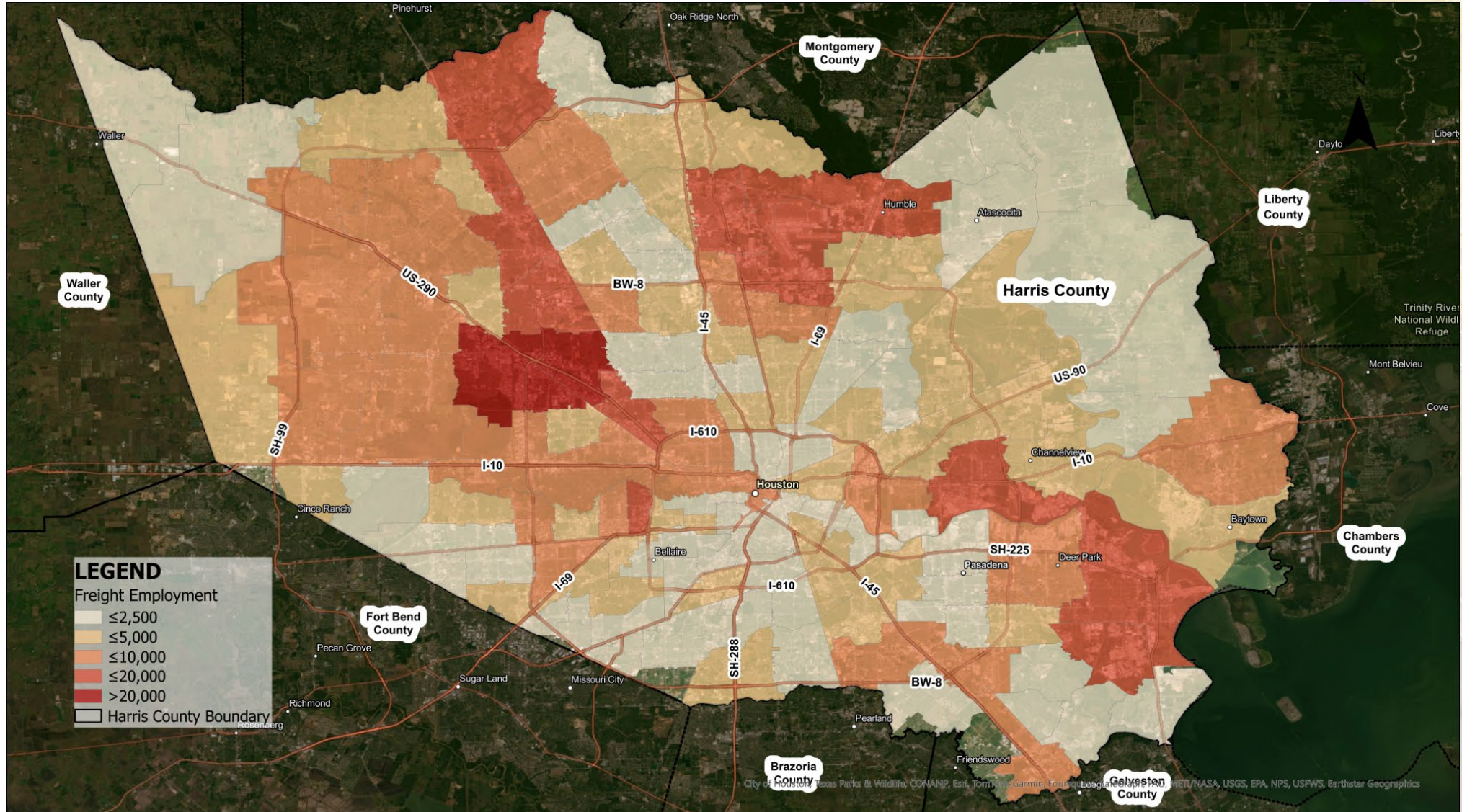


Harris County Truck Route Study / Freight Corridors Plan
Residential, Commercial and Industrial Land Use in Harris County

Source: City of Houston (COH)



Freight Employment in Harris County



Source: HDR analysis of County Business Patterns zip code level data for year 2022, <https://www.census.gov/data/datasets/2022/econ/cbp/2022-cbp.html>
Data Download Date: August 2024

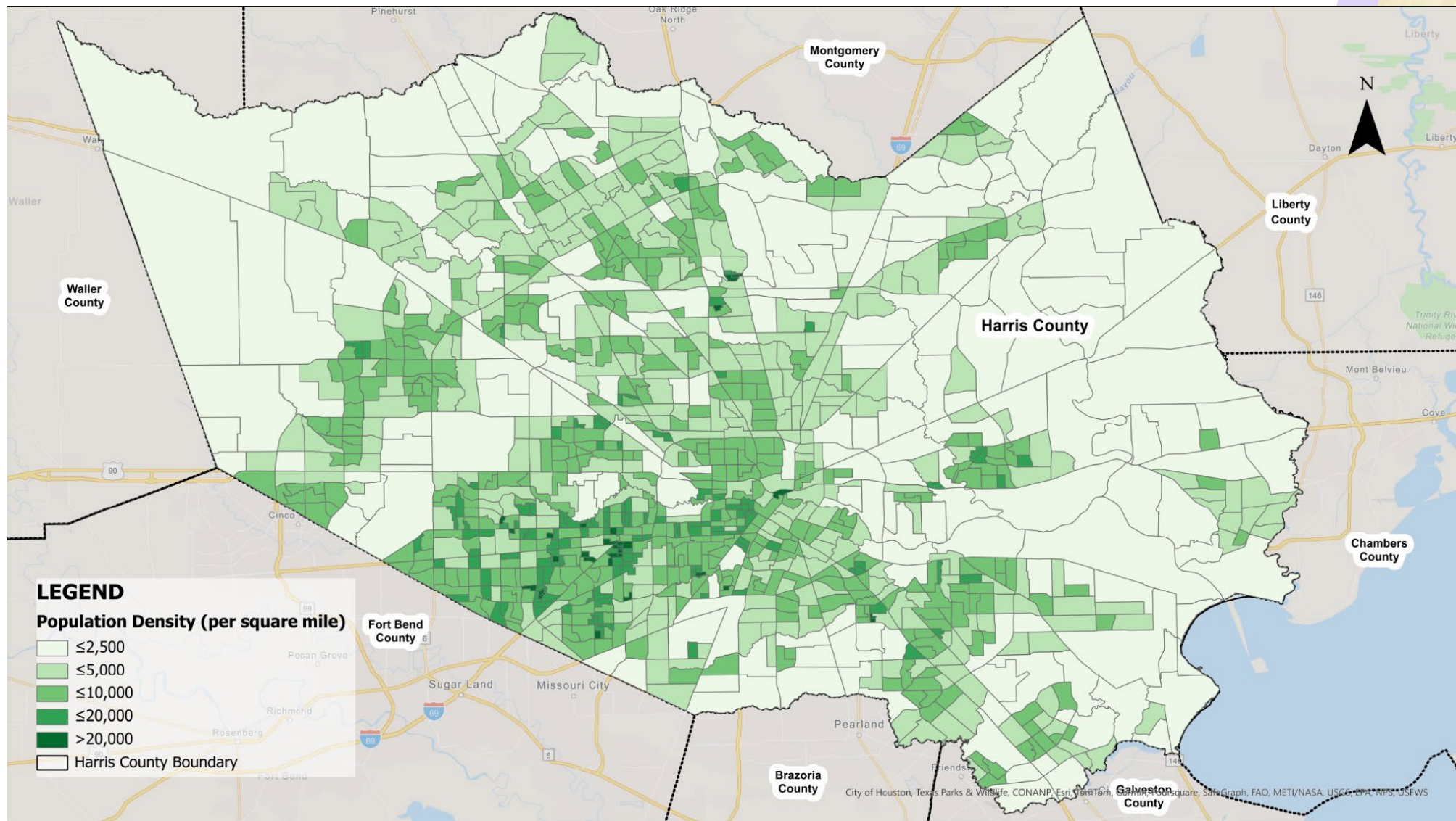


Harris County Truck Route Study / Freight Corridors Plan

Freight Employment



Population Density in Harris County
















Source: Census Tract Population Data, 2020
[https://data.census.gov/table/DECENNIALDP2020_DP1?q=population%20by%20census%20tract&t=Population%20Total&g=050XX00US48201\\$1400000](https://data.census.gov/table/DECENNIALDP2020_DP1?q=population%20by%20census%20tract&t=Population%20Total&g=050XX00US48201$1400000)
Data Download Date: August 2024



Truck Safety & Mobility Trends



What Trucks are considered in this Study?

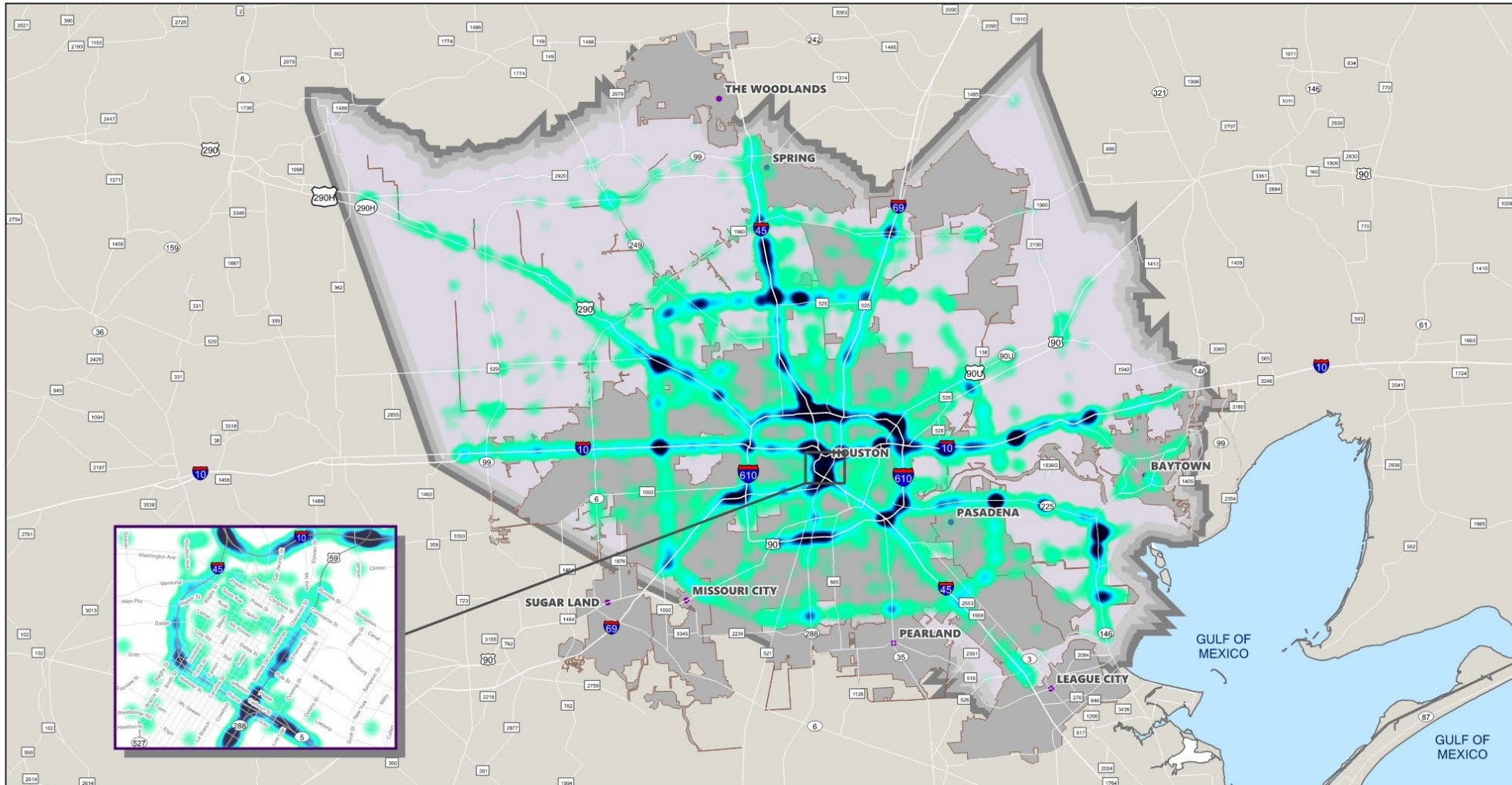
FHWA Vehicle Classifications				
<p>1. Motorcycles 2 axles, 2 or 3 tires</p> 	<p>2. Passenger Cars 2 axles, can have 1- or 2-axle trailers</p> 	<p>3. Pickups, Panels, Vans 2 axles, 4-tire single units Can have 1 or 2 axle trailers</p> 	<p>4. Buses 2 or 3 axles, full length</p> 	
<p>5. Single Unit 2-Axle Trucks 2 axles, 6 tires (dual rear tires), single-unit</p> 		<p>6. Single Unit 3-Axle Trucks 3 axles, single unit</p> 	<p>7. Single Unit 4 or More-Axle Trucks 4 or more axles, single unit</p> 	<p>8. Single Trailer 3- or 4-Axle Trucks 3 or 4 axles, single trailer</p> 
<p>9. Single Trailer 5-Axle Trucks 5 axles, single trailer</p> 		<p>10. Single Trailer 6 or More-Axle Trucks 6 or more axles, single trailer</p> 		
<p>11. Multi-Trailer 5 or Less-Axle Trucks 5 or less axles, multiple trailers</p> 		<p>12. Multi-Trailer 6-Axle Trucks 6 axles, multiple trailers</p> 		
<p>13. Multi-Trailer 7 or More-Axle Trucks 7 or more axles, multiple trailers</p> 				

FHWA Classes 5 - 13



Source: FHWA, FHWA Vehicle Class with Definitions, <https://www.fhwa.dot.gov/policyinformation/vehclass.cfm>
Last Modified - November 7, 2014

Truck Crashes Density Map (2021 - 2023)



LEGEND

- Truck Crash Density
- More Dense
- Less Dense
- City Boundaries

Analysis Years: 2021 through 2023

Source: TxDOT CRIS Crash Data



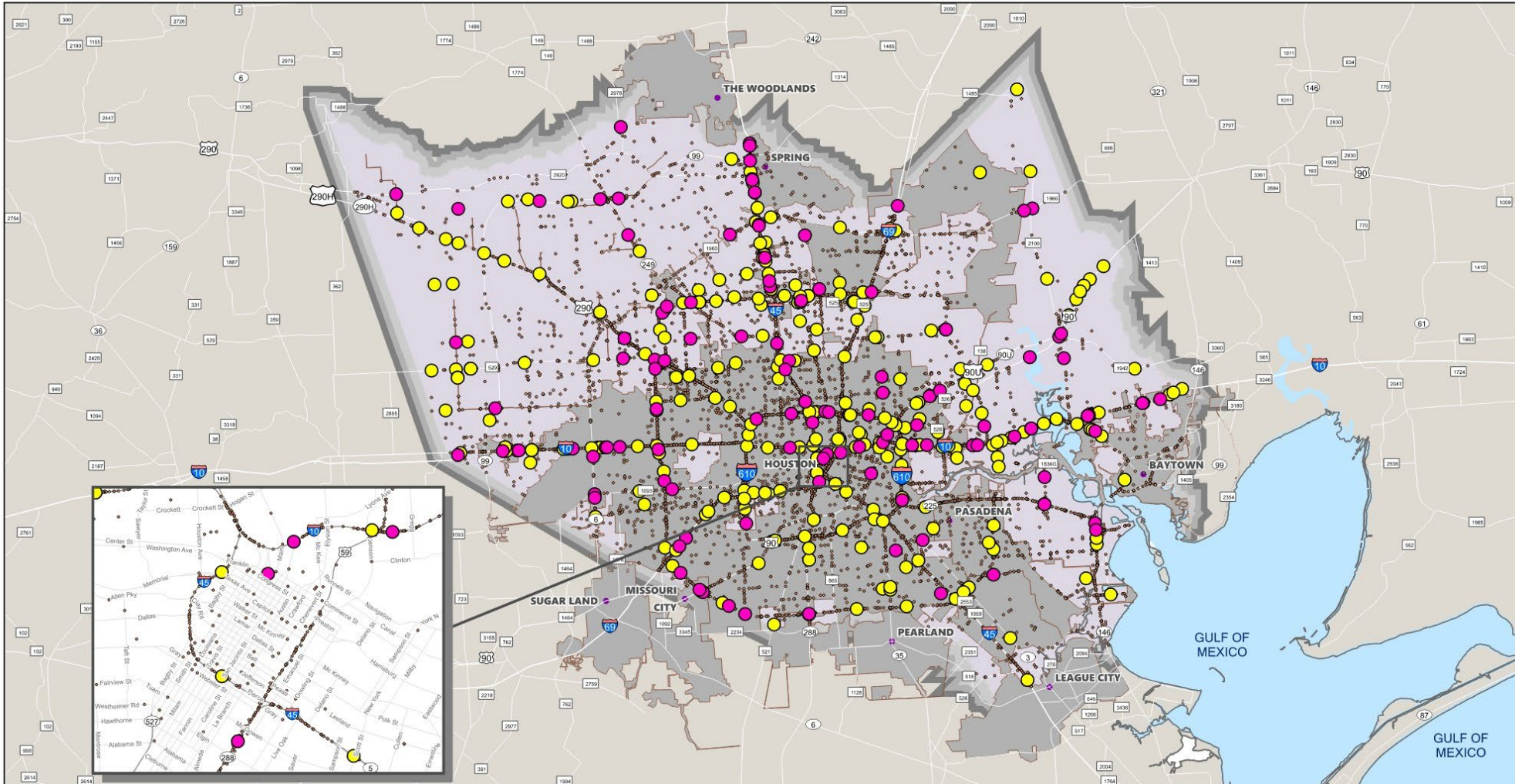
0 5 10 15 Miles

**HCTRA Truck Route Study
2021 to 2023 Truck Crash
Density Map
Harris County** *DRAFT*

August 2024



Truck Crashes Severity Map (2021 - 2023)



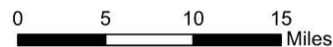
LEGEND

- Truck Crash Severity
- Fatal Crashes (109)
- Suspected Serious Injury Crashes (272)
- Other Severity Crashes (13,526)
- City Boundaries

Analysis Years: 2021 through 2023

Total Crashes: 357,987
 Truck Crashes (Classes 5 to 13): 13,907
 Freight Units (Classes 5 to 13): 14,805

Source: TxDOT CRIS Crash Data

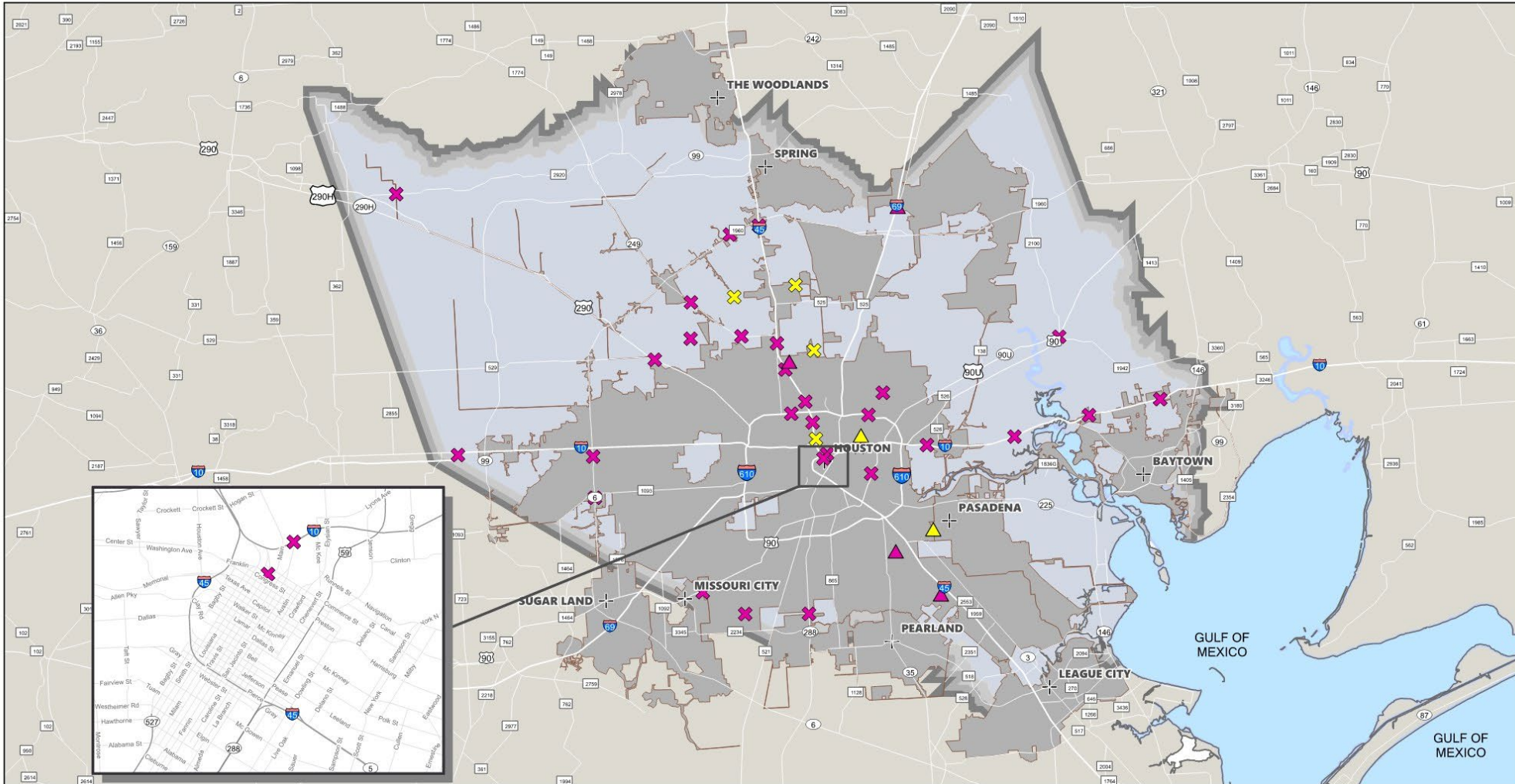


HCTRA Truck Route Study
2021 to 2023 Truck Crash
Severity Map
Harris County *DRAFT*

August 2024



Truck Crashes involving Pedestrians & Bikes (2021 - 2023)



LEGEND

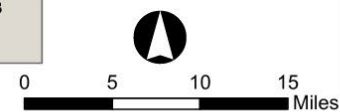
Severe Pedestrian/Bicycle & Truck Crashes

- ✕ Pedestrian & Truck Fatal Crash (29)
- ✕ Pedestrian & Truck Severe Crash (4)
- ▲ Bicycle & Truck Fatal Crash (4)
- ▲ Bicycle & Truck Severe Crash (2)
- City Boundaries

Analysis Years: 2021 through 2023

Pedestrian & Truck Crashes - All Severities: 48
Bicycle & Truck Crashes - All Severities: 13

Source: TxDOT CRIS Crash Data



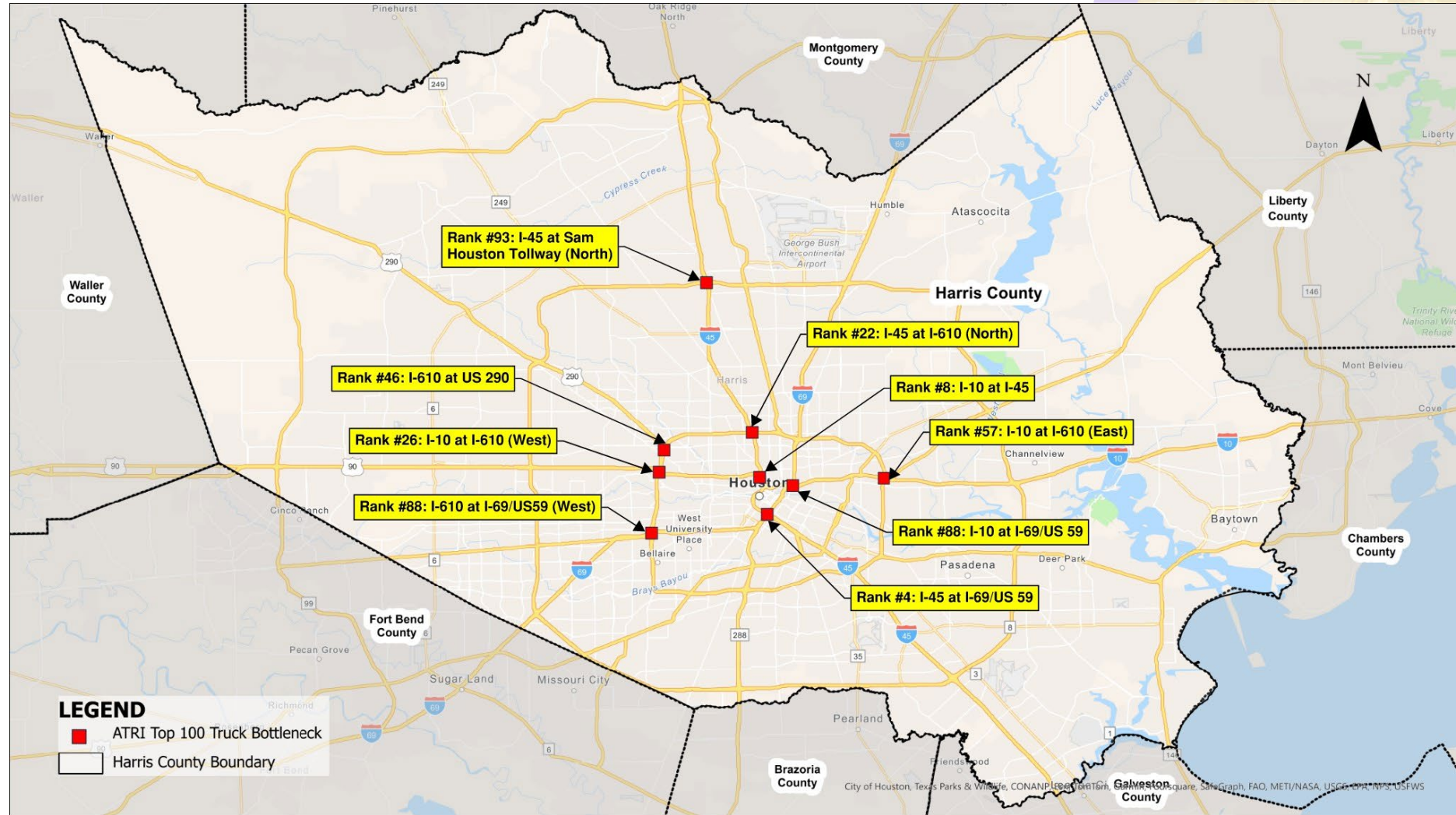
HCTRA Truck Route Study
2021 to 2023 Ped/Bicycle
Crashes Involving Trucks
Harris County *DRAFT*

August 2024



ATRI Top 100 Truck Bottlenecks in US (2024)

- American Transportation Research Institute (ATRI) develops annual Top 100 Truck Bottlenecks in US.
- The 2024 list released in February analyzed the data collected in 2023.
- **Harris County has almost 10% (9 out of 100) of the Top 100 bottlenecks in the US including two in the Top 10 –**
 - #4: I-45 at I-69/US 59
 - #8: I-10 at I-45



Source: ATRI, Top 100 Truck Bottlenecks - 2024
<https://truckingresearch.org/2024/02/top-100-truck-bottlenecks-2024/>

Website Access Date - August 2024



0 1 2 4 6 8 Miles

Harris County Truck Route Study / Freight Corridors Plan
ATRI Top 100 Truck Bottlenecks in US

Houston – The Woodlands – Sugar Land

Start Here

All Vehicles or Trucks?
 All Vehicles
 Trucks Only

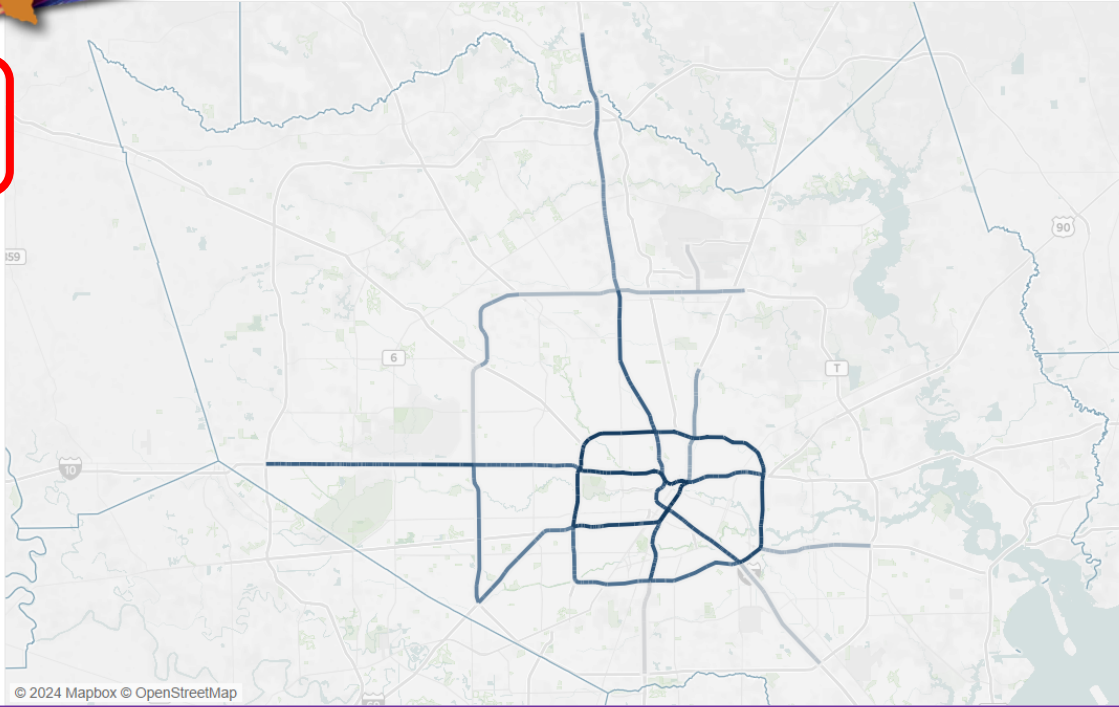
Top or Other Roads?
 None

Year: 2022

Back to Home

Instructions:
 Select a Road on the map or table to examine detailed information about that roadway segment.

To clear a selection, click anywhere else on the map.



Distance

Miles Covered 2,276 Miles

Segments 377 Segments

Traffic Delay

Annual Delay 137,342,837 Hours

Wasted Fuel 47,227,311 Gallons

Congestion Cost \$3,616,238,781

Truck Delay

Truck Delay 8,555,827 Hours

Truck Wasted Fuel 12,446,143 Gallons

Truck Cong. Cost \$530,861,484

Truck Impact

6.2% of Total Delay

26.4% of Wasted Fuel

14.7% of Congestion Costs

31 out of Top 100 Congested Truck Segments in Texas are located in Houston

Congested Truck Roadways in Houston MSA (Rankings within Texas between 1 to 40)

The Most **Truck**-Congested Roadways in Houston – The Woodlands – Sugar Land

Truck Rank	Road	From	To	Truck Delay/Mile	Truck TCI	Truck PTI (95%)	Annual Truck Congestion Cost
1	Eastex Fwy / IH 69 / US 59	SH 288	IH 10	77,308	2.82	4.42	\$14,743,806
4	N Loop W Fwy / IH 610	North Fwy / IH 45	Katy Fwy / IH 10 / US 90	64,582	2.29	3.50	\$25,189,817
5	IH 10 / US 90	North Fwy / IH 45	Eastex Fwy / US 59	63,340	2.12	2.95	\$6,402,784
7	Katy Fwy / IH 10 / US 90	W Loop N Fwy / IH 610	North Fwy / IH 45	50,515	1.99	2.97	\$17,909,228
9	W Loop Fwy / IH 610	Katy Fwy / IH 10 / US 90	Southwest Fwy / US 59 / IH 69	48,108	2.49	3.74	\$10,936,830
13	Southwest Fwy / IH 69 / US 59	W Loop Fwy / IH 610	South Fwy / SH 288	38,646	2.12	3.54	\$13,110,017
15	E Loop Fwy / IH 610	East Fwy / IH 10	Gulf Fwy / IH 45	35,700	1.51	1.99	\$13,594,153
16	N Loop E Fwy / IH 610	North Fwy / IH 45	East Fwy / IH 10	34,289	1.51	1.98	\$17,361,520
20	Katy Fwy / IH 10 / US 90	N Eldridge Pkwy	Sam Houston Tollway W / SL 8	30,658	1.51	2.23	\$6,153,242
24	East Fwy / IH 10 / US 90	Eastex Fwy / US 59	E Loop Fwy / IH 610	27,966	1.55	2.35	\$8,249,397
25	Gulf Fwy / IH 45	IH 10 / US 90	S Loop E Fwy / IH 610	27,388	1.89	2.79	\$13,551,309
26	South Fwy / SH 288	Gulf Fwy / IH 45	S Loop W Fwy / IH 610	27,366	1.57	2.40	\$8,182,351
31	North Fwy / IH 45	Sam Houston Tollway N	N Loop Fwy / IH 610	25,465	1.50	2.01	\$14,522,657
33	Katy Fwy / IH 10 / US 90	Grand Pkwy / SH 99	N Eldridge Pkwy	24,341	1.54	2.57	\$14,299,196
38	Katy Fwy / IH 10 / US 90	Sam Houston Tollway W / SL 8	W Loop N Fwy / IH 610	22,057	1.42	1.84	\$8,861,528
39	North Fwy / IH 45	N Loop Fwy / IH 610	IH 10 / US 90	22,005	1.70	2.61	\$4,328,664
40	S Loop E Fwy / IH 610	South Fwy / SH 288	Gulf Fwy / IH 45	21,492	1.54	1.88	\$7,563,149



TEXAS' 100 MOST CONGESTED ROAD SECTIONS 2023



<https://mobility.tamu.edu/texas-most-congested-roadways/>

Houston – The Woodlands – Sugar Land

Start Here

All Vehicles or Trucks?
 All Vehicles
 Trucks Only

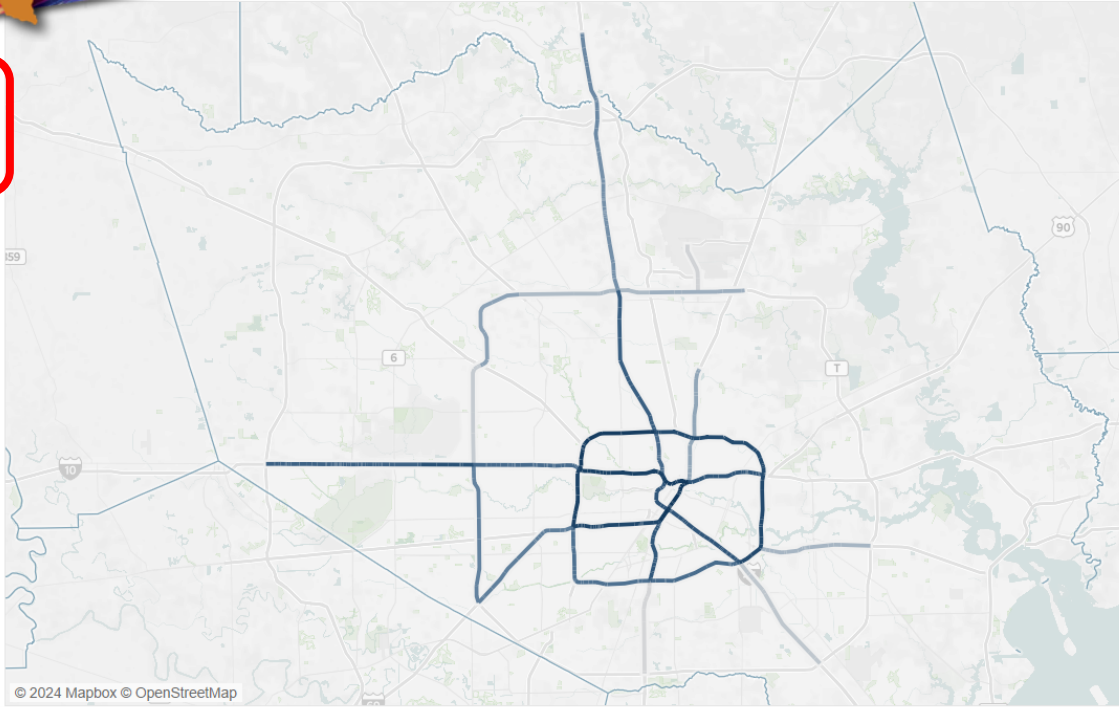
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Congested Truck Roadways in Houston MSA (Rankings within Texas between 40 to 100)

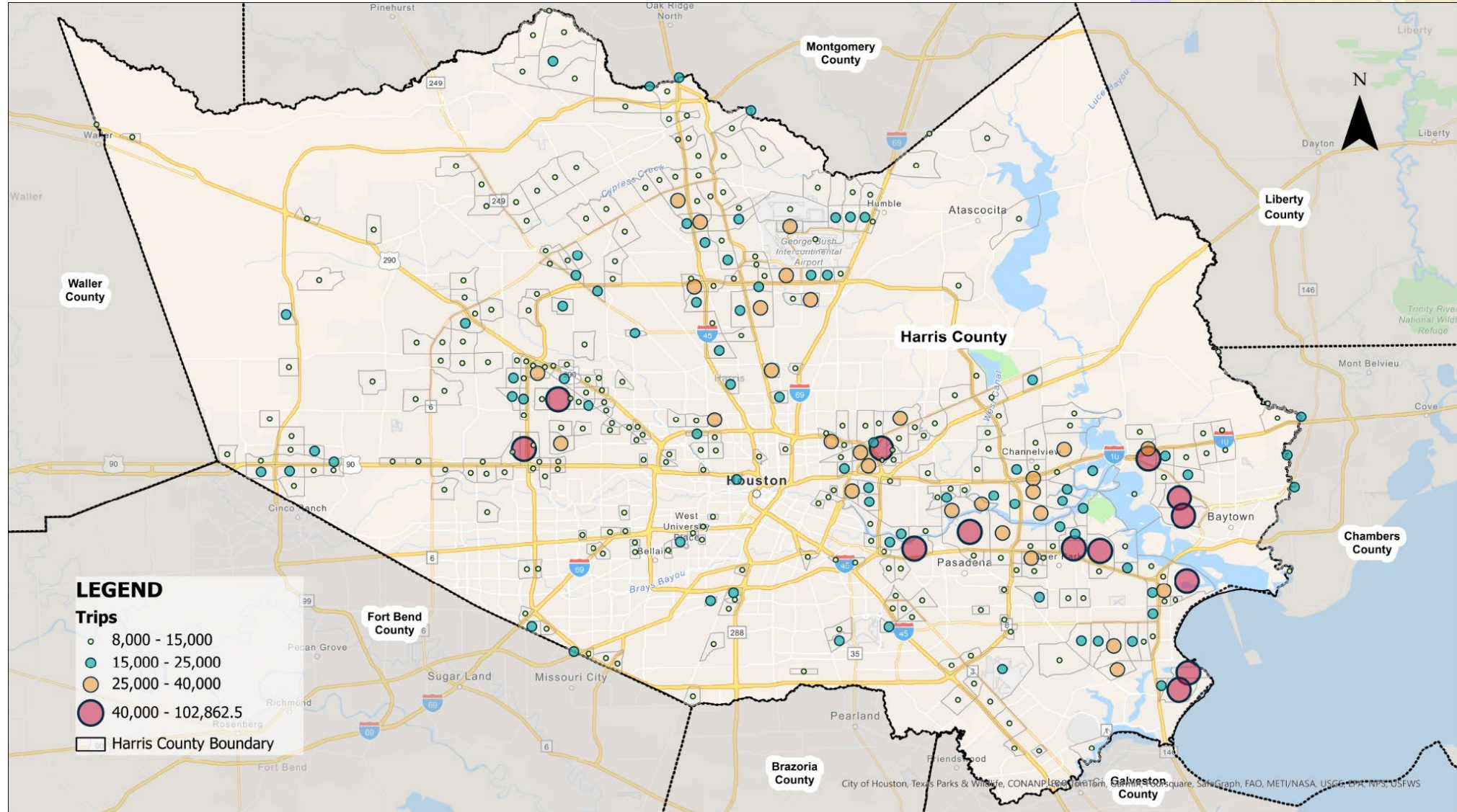
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Truck Rank	Road	From	To	Truck Delay/Mile	Truck TCI	Truck PTI (95%)	Annual Truck Congestion Cost
43	W Loop S Fwy / IH 610	Southwest Fwy / US 59 / IH 69	South Fwy / SH 288	19,653	1.68	2.26	\$9,743,184
52	Southwest Fwy / IH 69 / US 59	W Sam Houston Pkwy S / SL 8	IH 610	15,249	1.47	2.18	\$7,329,013
54	Sam Houston Tollway W / SL 8	Southwest Fwy / IH 69	IH 10	15,118	1.56	2.28	\$8,018,550
58	North Fwy / IH 45	Lake Front Cir	Spring Cypress Rd / FM 2920	14,343	1.28	1.71	\$5,798,008
62	North Fwy / IH 45	Spring Cypress Rd / FM 2920	Sam Houston Tollway N / SL 8	13,771	1.22	1.48	\$7,665,617
72	Sam Houston Tollway NW / SL 8	Northwest Fwy / US 290	Tomball Pkwy / SH 249	11,967	1.44	2.28	\$4,661,354
74	Eastex Fwy / IH 69 / US 59	IH 10	Little York Rd	11,569	1.31	1.75	\$4,929,232
79	North Sam Houston Pkwy E / SL 8	Hardy Toll Rd	Old Humble Rd	11,425	1.46	1.73	\$4,101,536
82	Pasadena Fwy / SS 225	E Loop Fwy / IH 610	Sam Houston Tollway SE / SL 8	10,824	1.17	1.33	\$4,395,766
85	North Sam Houston Pkwy / SL 8	Tomball Pkwy / SH 249	Hardy Toll Rd	10,331	1.30	1.64	\$5,066,220
91	Gulf Fwy / IH 45	S Loop E Fwy / IH 610	Sam Houston Tollway SE / SL 8	9,894	1.37	1.68	\$4,885,912
93	Sam Houston Tollway W / SL 8	Katy Fwy / IH 10	Northwest Fwy / US 290	9,816	1.30	1.80	\$3,799,937
97	JFK Blvd	Will Clayton Pkwy	N Sam Houston Pkwy E / SL 8	9,608	1.14	1.26	\$1,882,463
98	South Fwy / SH 288	S Loop W Fwy / IH 610	Sam Houston Tollway S / SL 8	9,606	1.36	2.03	\$3,439,772

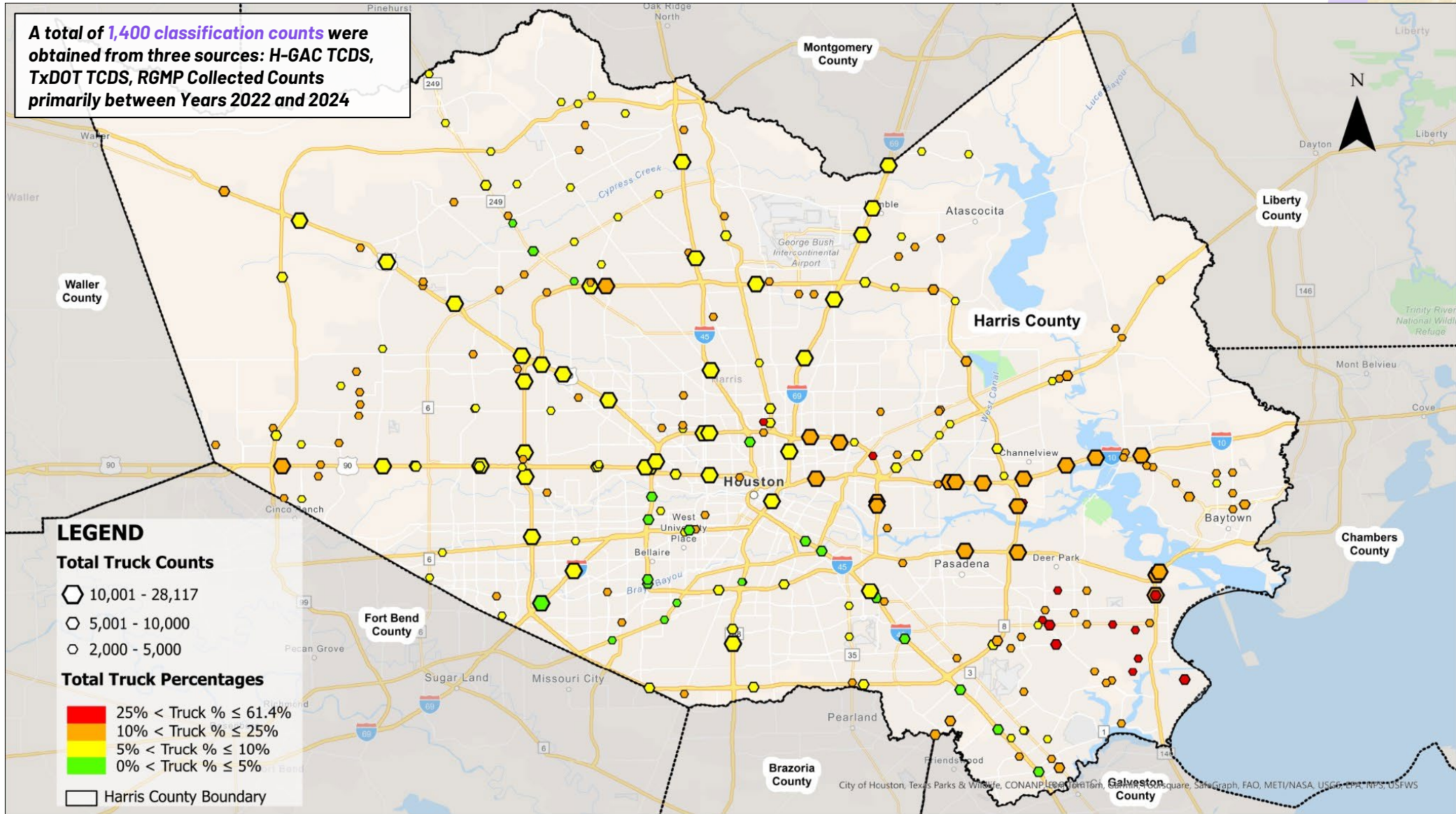


Major Freight Generating TAZs in Harris County

- INRIX data was analyzed in the Regional Goods Movement Plan to analyze Truck OD.
- INRIX data was analyzed for 3 months each of Spring and Fall data in Years 2019, 2020.
- The data was aggregated for Traffic Analysis Zones (TAZs) as defined by H-GAC.
- The number of trips is based on a sample of data from INRIX and doesn't indicate the actual magnitude of trucks.



Total Truck Volumes & Percentages in Harris County (Total Truck > 2,000)

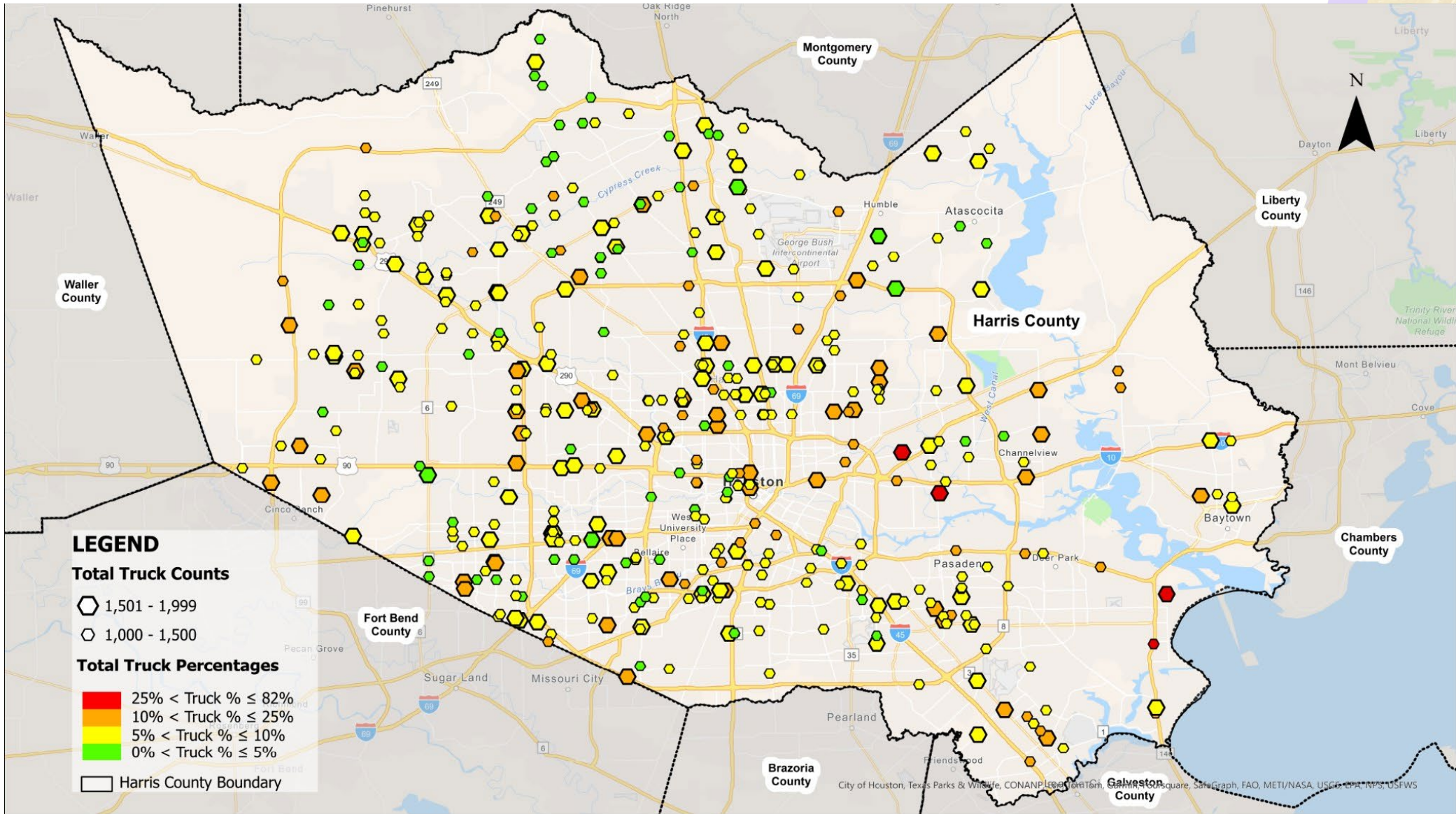


Harris County Truck Route Study / Freight Corridors Plan

Total Truck Volumes & Percentages in Harris County
(Total Truck > 2,000)



Total Truck Volumes & Percentages in Harris County (Total Truck between 1,000 to 2,000)

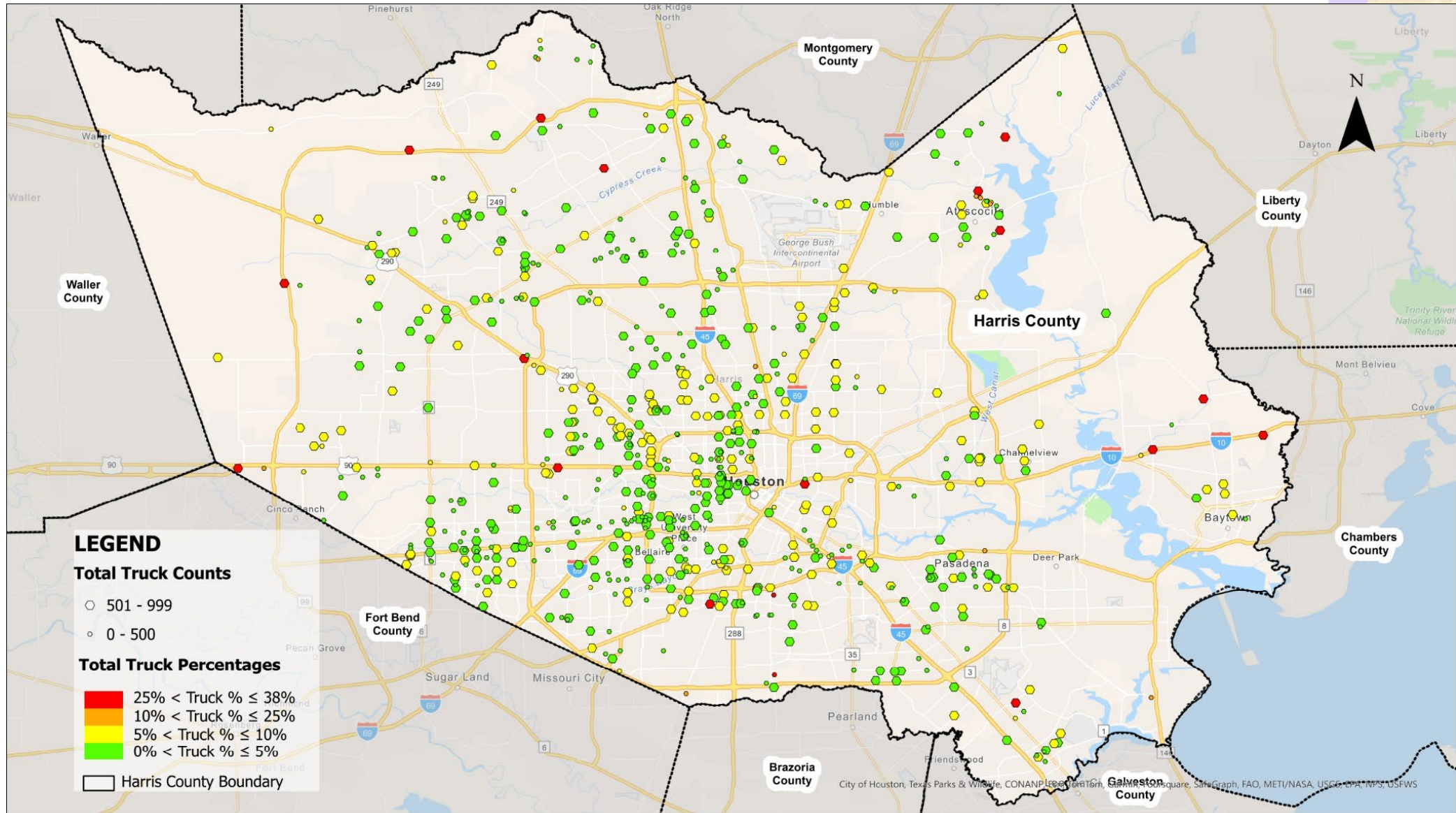


Harris County Truck Route Study / Freight Corridors Plan

Total Truck Volumes & Percentages in Harris County
(Total Truck Between 1,000 to 2,000)



Total Truck Volumes & Percentages in Harris County (Total Truck < 1,000)



Harris County Truck Route Study / Freight Corridors Plan

Total Truck Volumes & Percentages in Harris County
(Total Truck < 1,000)



Truck Origin-Destination (OD) Analysis

NHTS – National Household Travel Survey



NHTS Truck OD Data for **2020-2022** was used for the analysis.



The OD analysis consists of total **583 zones** across US: 447 state-specific Metropolitan Statistical Areas (MSAs) and 136 new zones created from the remaining non-MSA areas within each state.

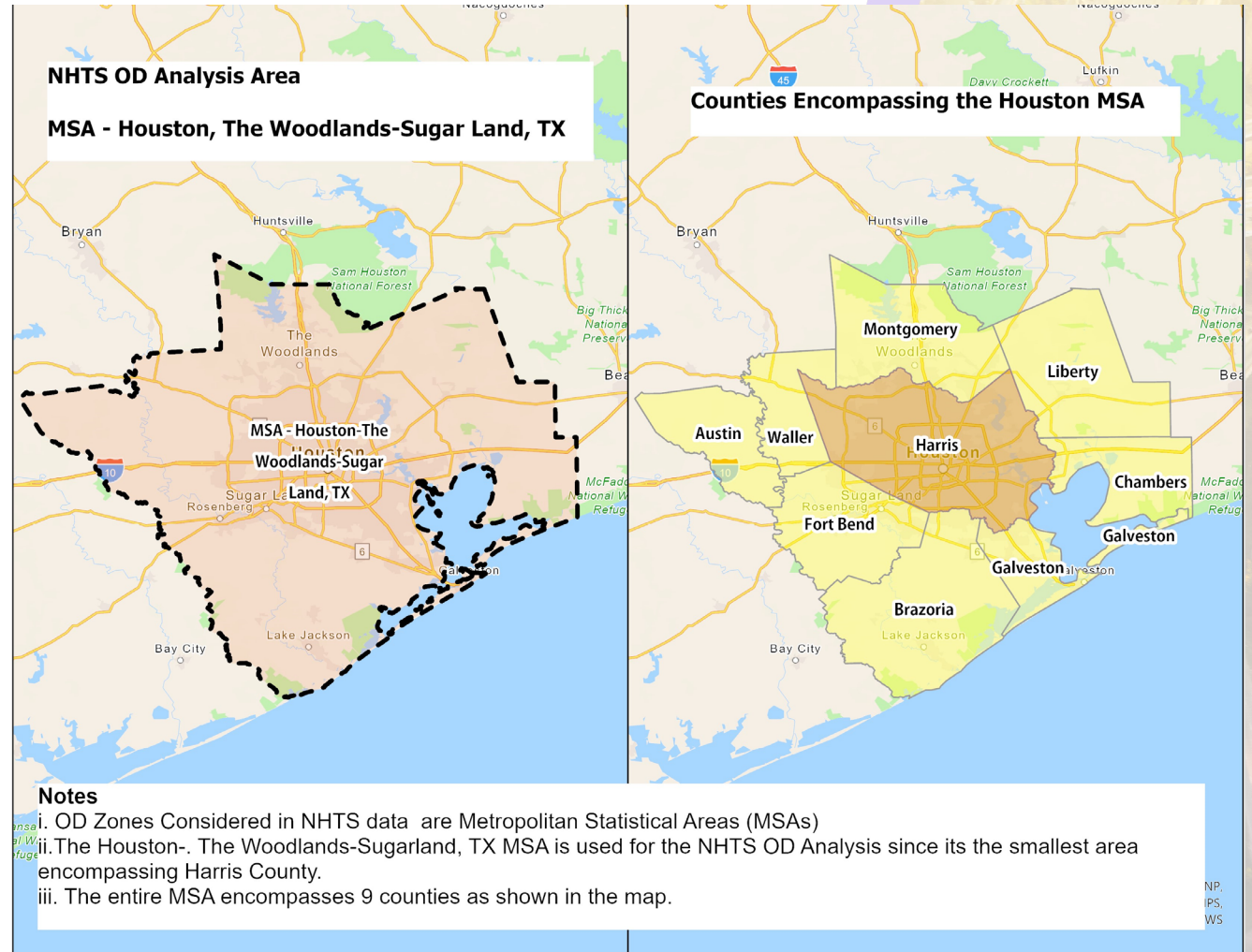


The truck OD data includes vehicle **classes 5 through 13** (i.e., urban delivery trucks, long-haul trucks).

Source: FHWA, National Household Travel Survey, Truck OD Data

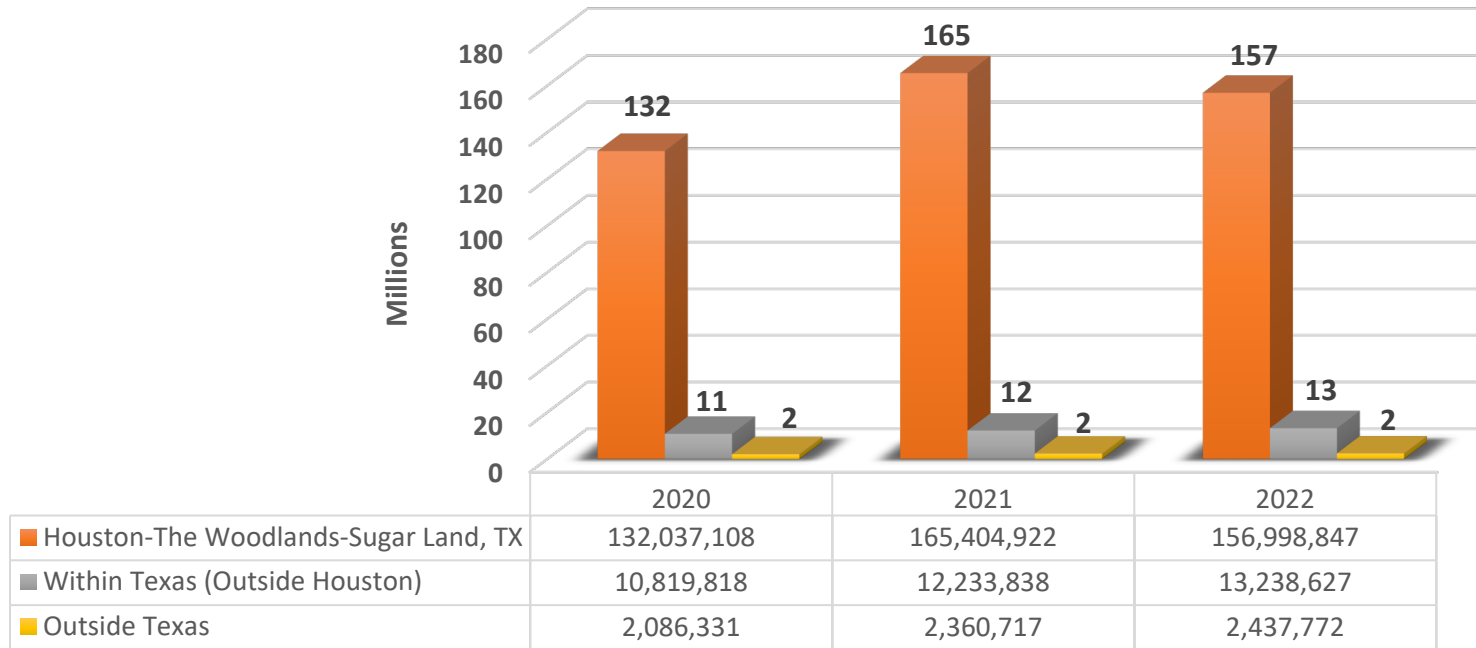
<https://nhts.ornl.gov/od/downloads>

Data Download Date – June 2024



Truck Trip Destinations for Trips Originating in Houston (2020-2022)

Truck Trip Destinations for Trips Originating in Houston (2020 - 2022)

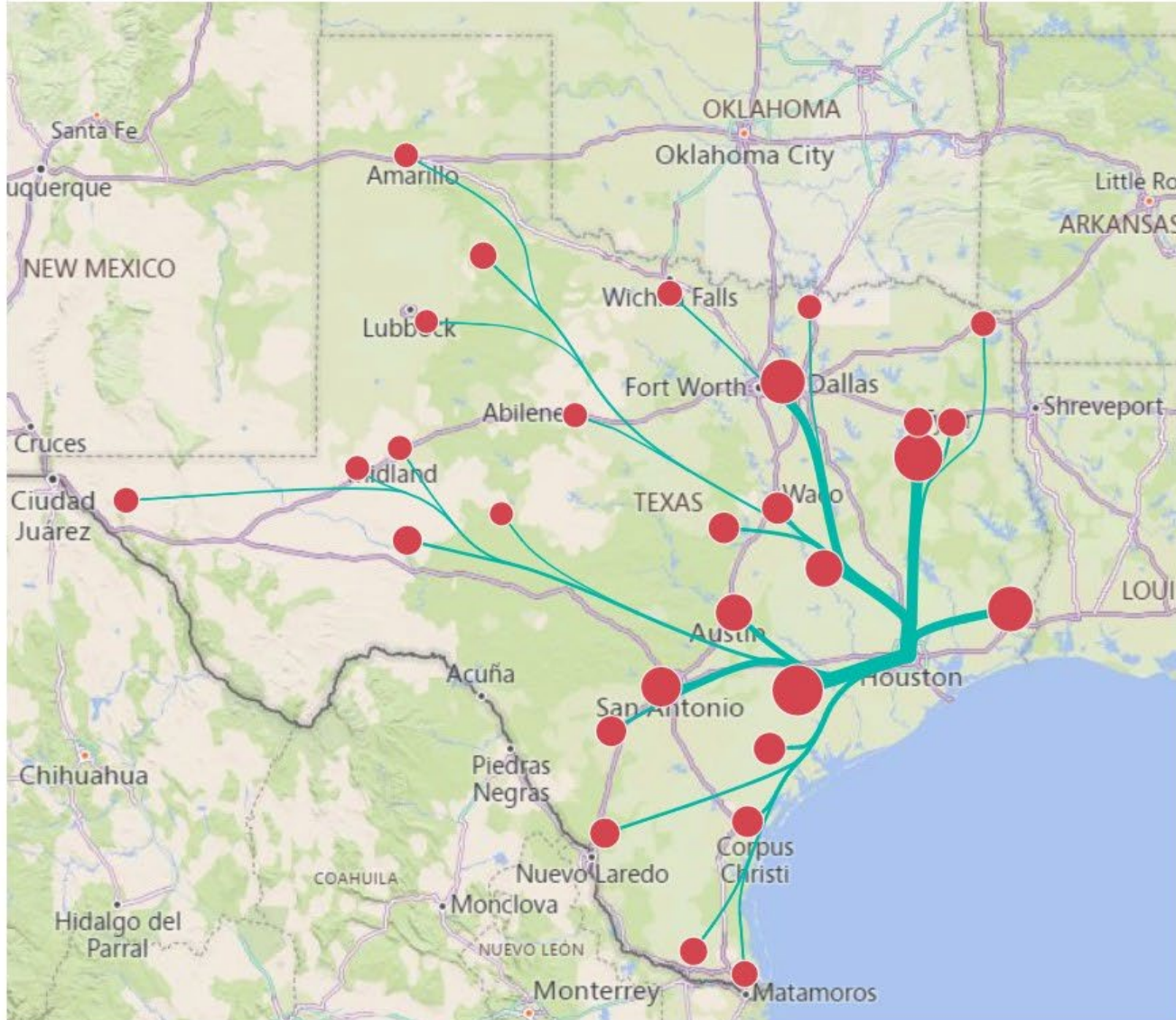


- **Over 90% of trips originating in Houston also have their destination in Houston**
- Around 7.5% of trips have their destination within Texas (outside Houston) and about 1.5% trips are made to outside of Texas

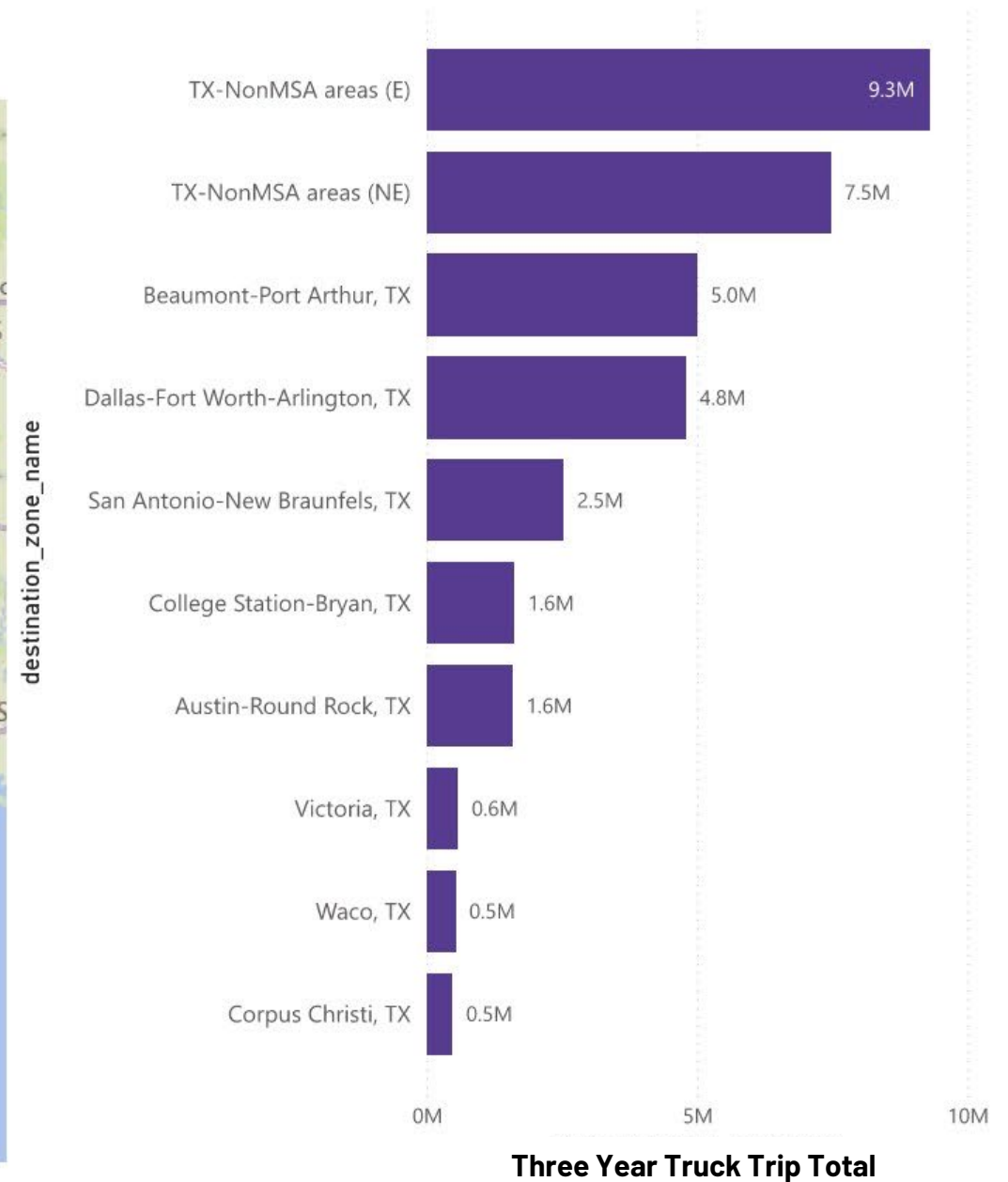


Truck Trips (2020-2022)

Origin - Houston / Destination - Within Texas

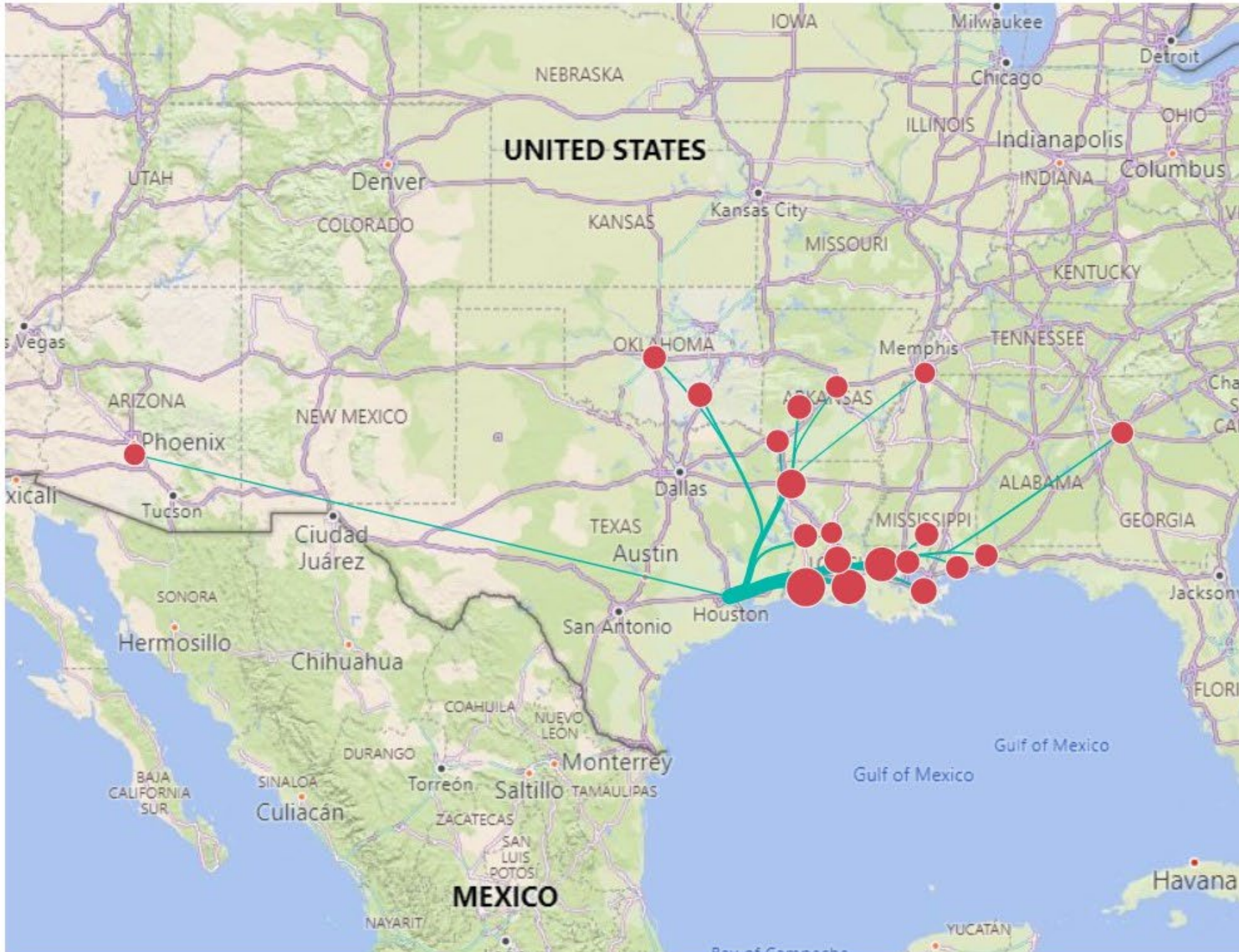


Top - 10 Destinations Within Texas

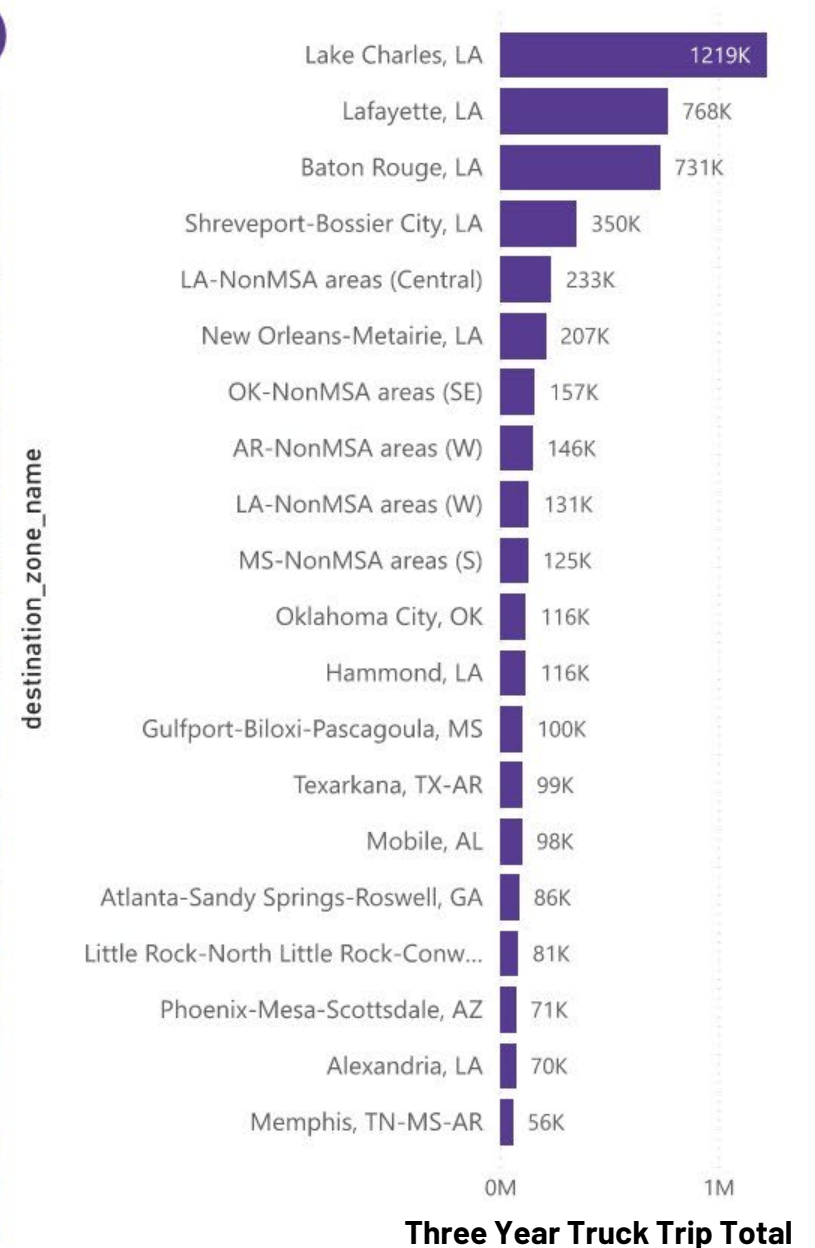


Truck Trips (2020-2022)

Origin - Houston / Destination - Outside Texas (Top - 20)

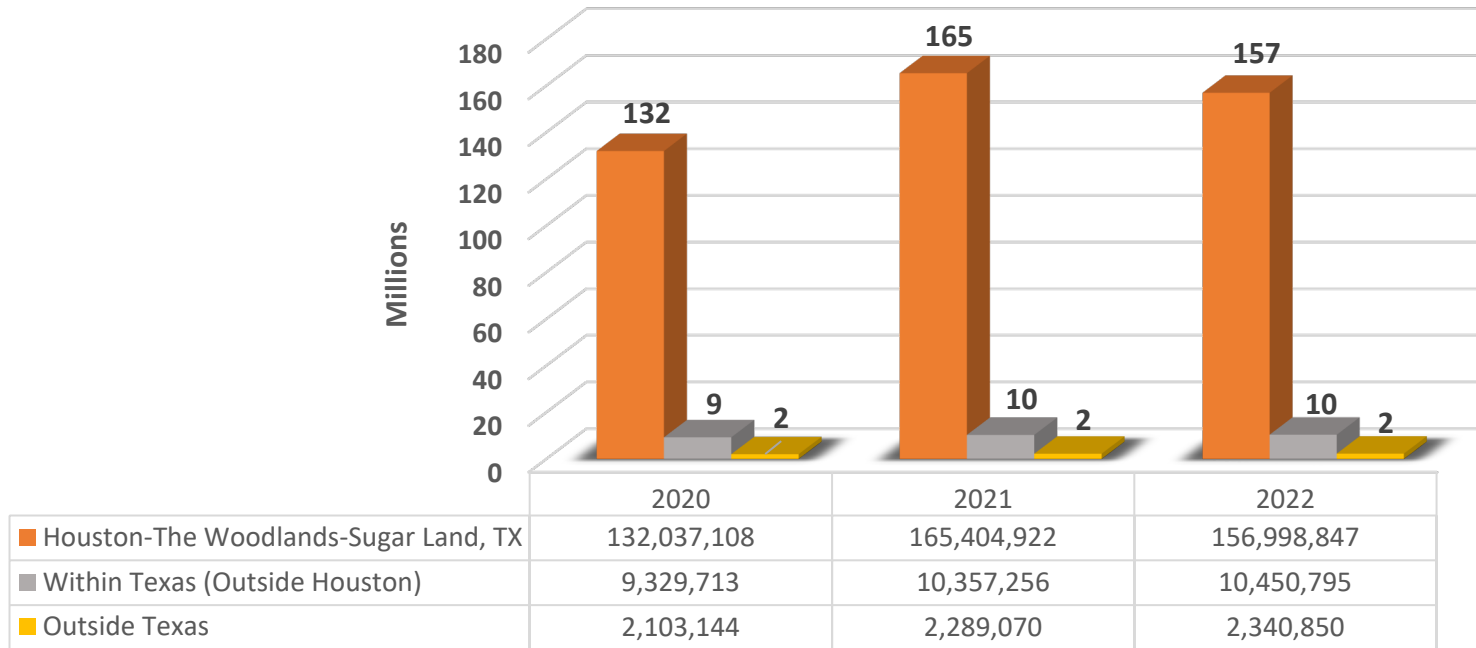


Top - 20 Destinations Outside Texas



Truck Trip Origins for Trips Destination in Houston (2020-2022)

Truck Trips Origins for Trip Destination in Houston (2020 - 2022)

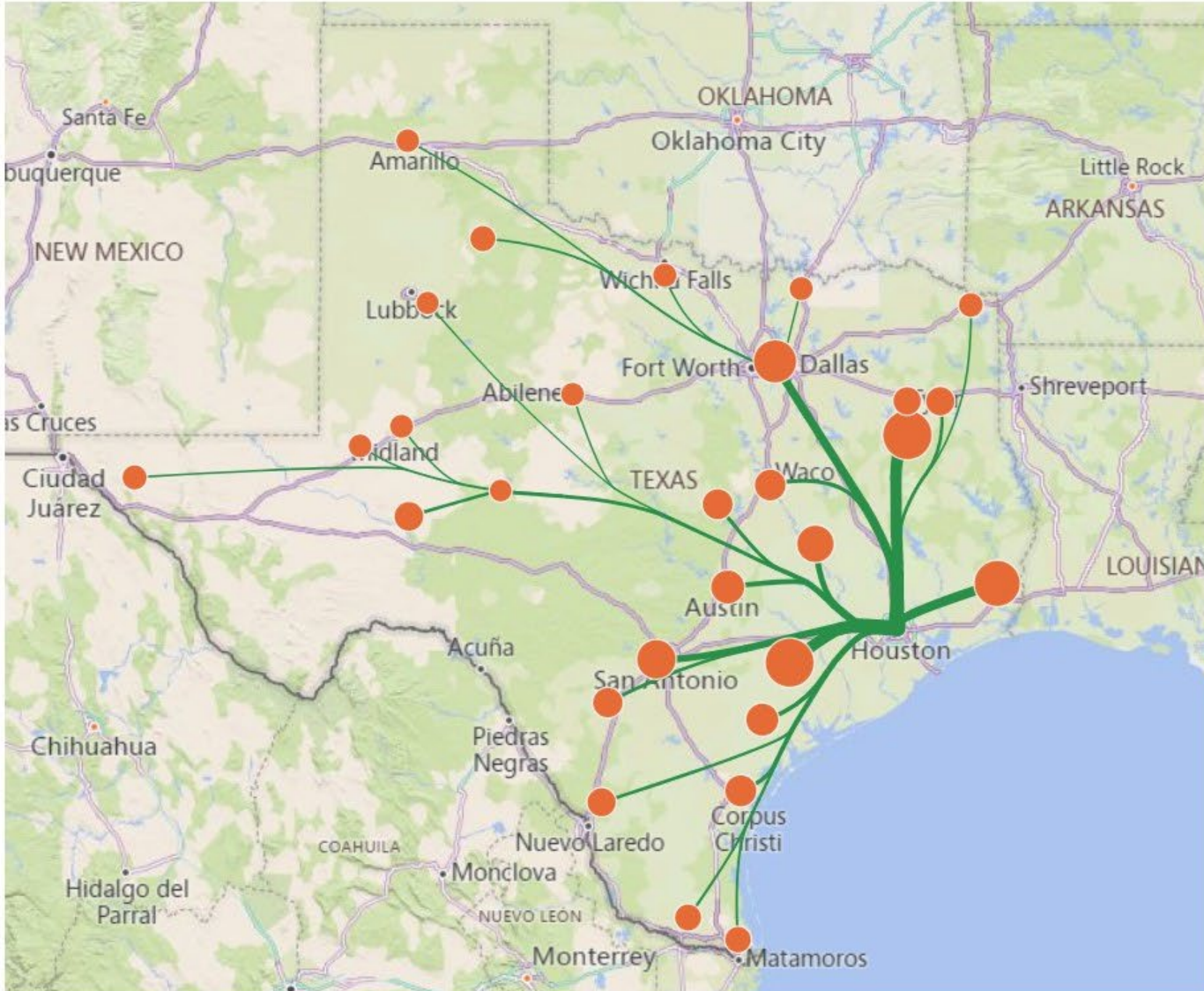


- Over 90% of trips ending in Houston also originate in Houston.
- Around 6% of trips originate within Texas (outside Houston), and about 1.5% of trips originate outside of Texas

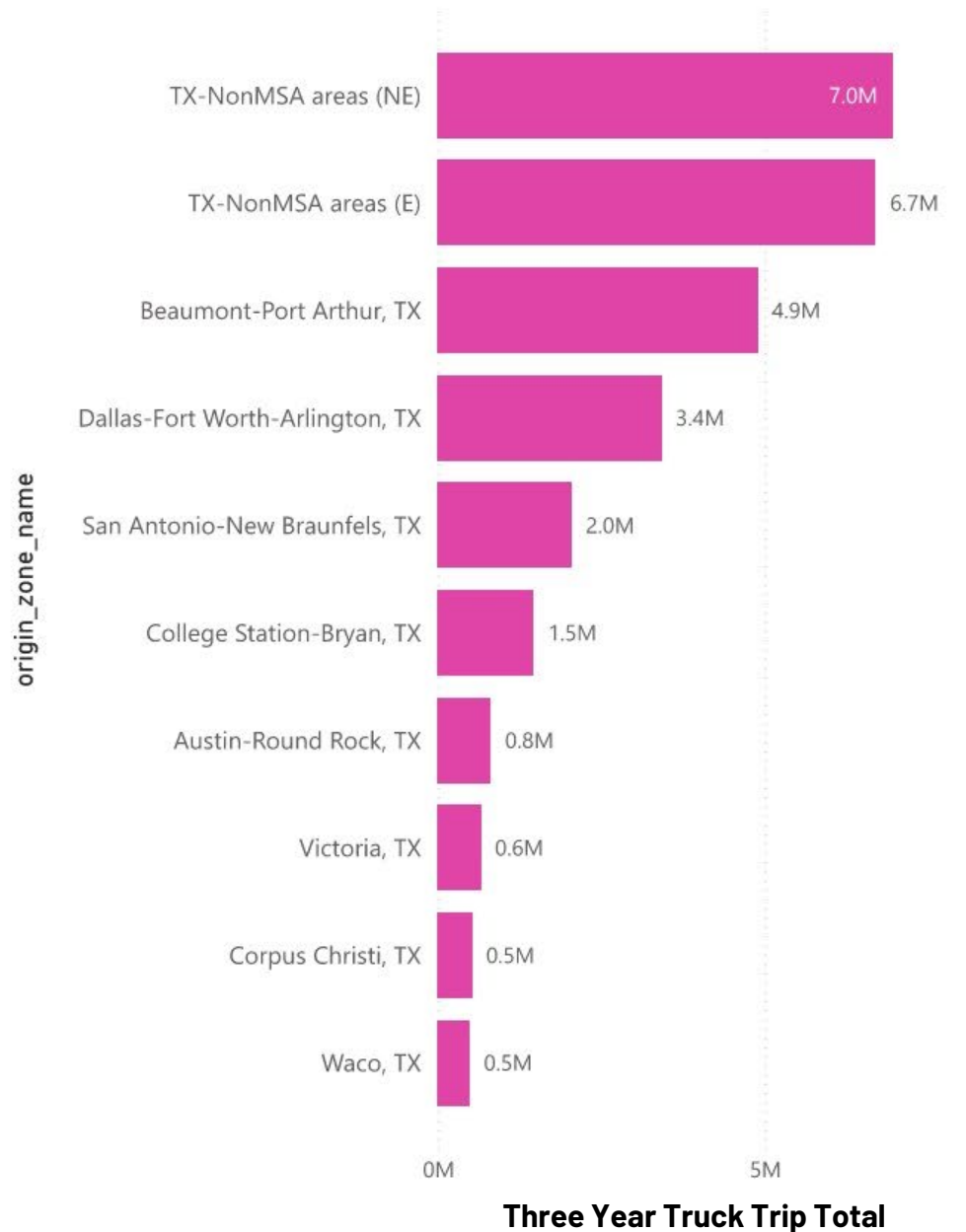


Truck Trips (2020-2022)

Origin - Within Texas / Destination - Houston Texas

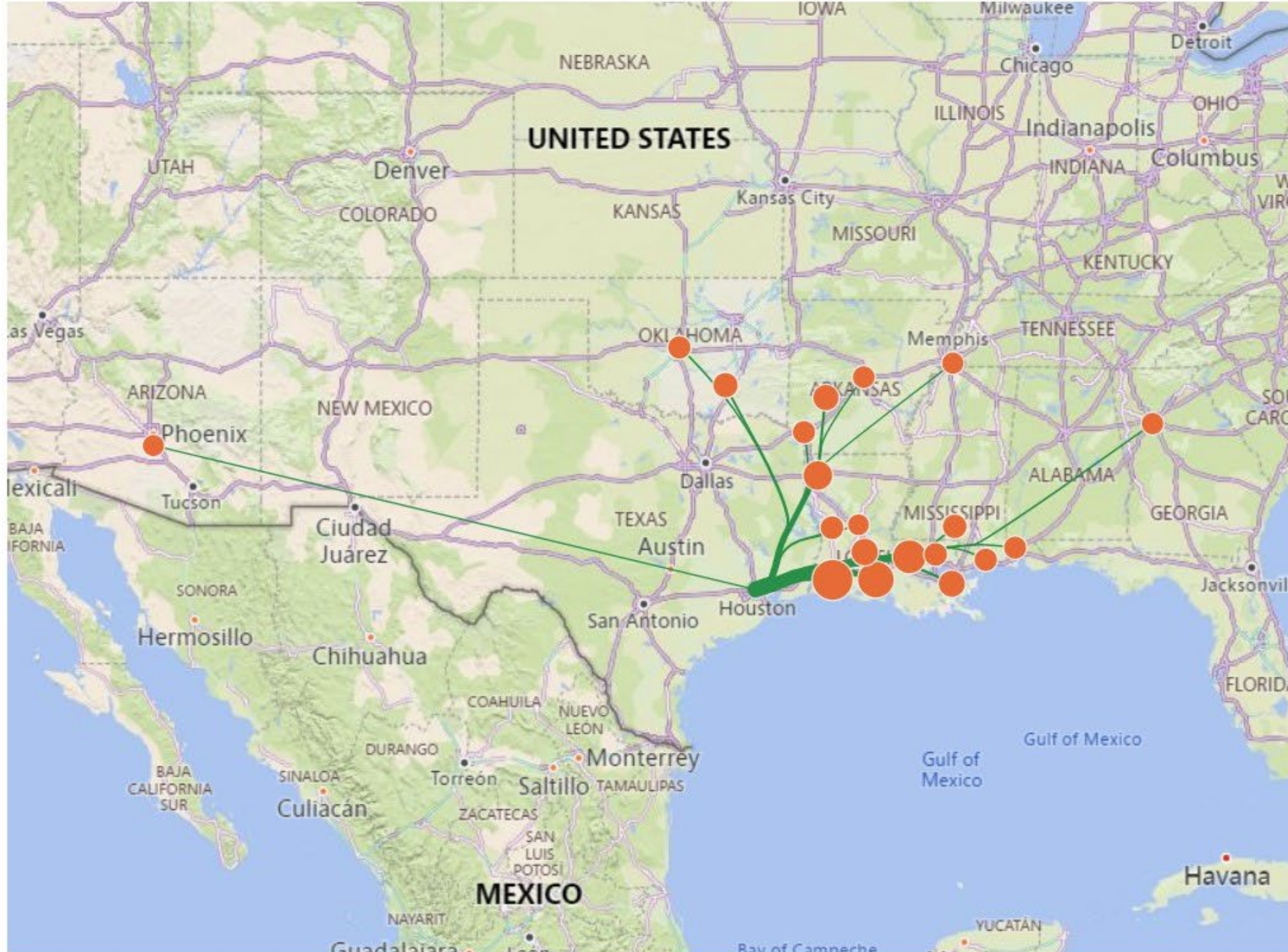


Top - 10 Origins Within Texas

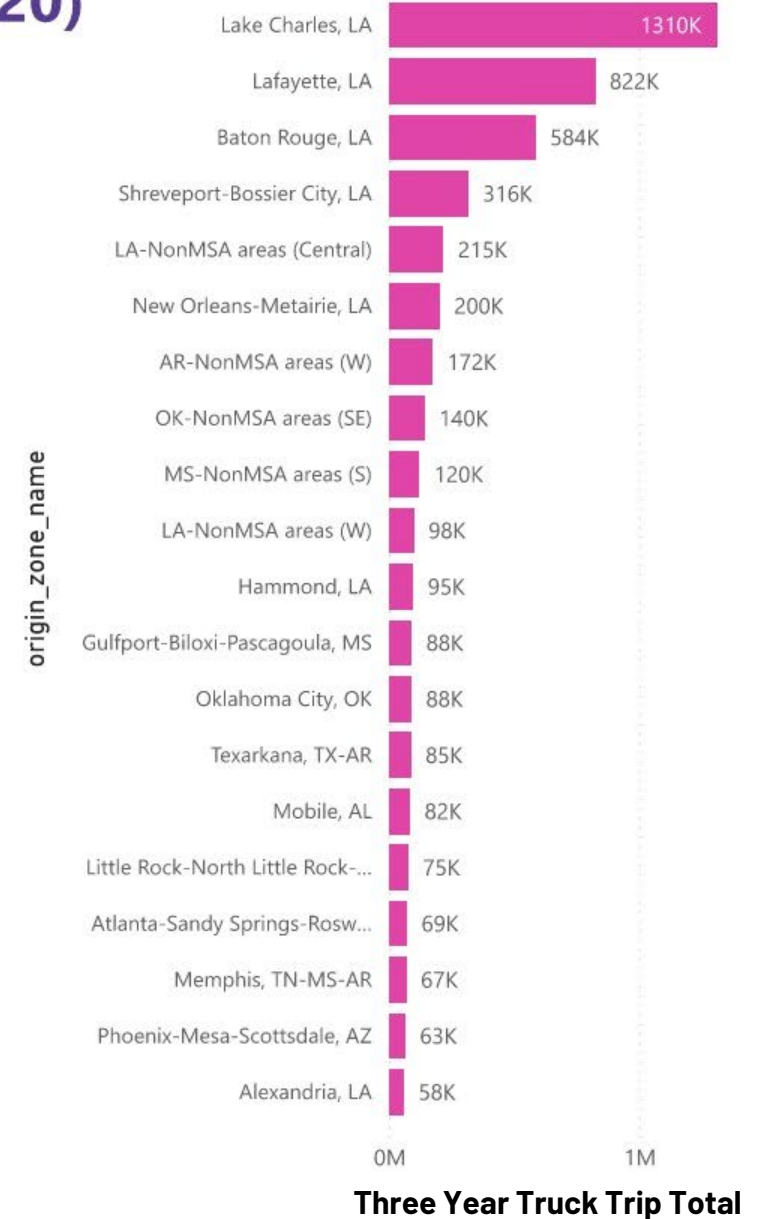


Truck Trips (2020-2022)

Origin - Outside Texas / Destination - Houston Texas (Top-20)



Top - 20 Origins Outside Texas



Next Steps

- **ATRI Data**
 - O-D, speed/congestion, truck freight generator identification
- **StreetLight Data**
 - O-D, speed/congestion/reliability, relative volume
- **Supply Chain and Commodity Flow Analysis – using Transearch dataset**
 - Harris County position in regional and international freight markets
 - Freight modal split
 - Major commodities origins and destinations
 - Freight forecasts by mode, commodity, and trade type
- **Stakeholder Engagement**
 - Database of public and private stakeholders
 - Schedule 30 interviews
 - Freight movement patterns, issues and concerns, and growth trends
 - Interactive GIS mapping database for public input



Stay connected with us!

 /HCTRA

 @HCTRA

 @HCTRA_EZTAG



EZ TAG
(281) 875-3279

Harris County Toll Road Authority

HCTR98675309



Get an EZ TAG and SAVE

**10% on HCTRA Toll Roads
just by using your EZ TAG.**

(Applies to 2-axle vehicles.)

October 17, 2024

H-GAC ITS Architecture and Website Update

Greater Houston Freight Committee Briefing



What is an ITS Architecture

A plan for the **deployment**, **integration**, and **operation** of Intelligent Transportation Systems in a state or region

The plan includes **traffic**, **transit**, **tolling**, **public safety**, and **emergency management** agencies

The plan should be developed in **coordination** with other **regional planning efforts** including the TxDOT Houston TSMO Program Plan, local ITS plans, and the H-GAC Regional Transportation Plan



Why an ITS Architecture is Important?

All transportation projects that incorporate ITS elements and are funded through the Highway Trust Fund must conform with an ITS Architecture

An ITS Architecture can also...

- Help scope projects appropriately
- Ensure regional interoperability
- Support long-range planning
- Improve chances for future grant funding in the Region



Project Goals

H-GAC ITS ARCHITECTURE AND WEBSITE UPDATE

1. Update the **existing H-GAC Regional ITS Architecture** to the current National ITS Architecture (Version 9.2)
2. Develop an ITS inventory software analysis tool that will **assist in transportation project prioritization**, benefit cost analysis, and economic impact analysis
3. Update and advance the existing Transportation Systems Management and Operations (TSMO) website
4. Create a **Geographic Information System (GIS) database of all ITS and signal fiber in the eight-county MPO**
5. Develop a standard method for collecting inventories and implementation plans from each stakeholder agency
6. Meet with all **eight counties and in the region (and cities)** to verify existing inventory and obtain plans for new ITS, signals, TMCs, and other deployments to be implemented over the next seven years
7. Meet with the **TxDOT Houston and Beaumont Districts** to inventory all existing ITS, signal, and tolling facilities and document their implementation plans for the next seven to 10 years
8. Determine which **cities will potentially surpass 50,000 residents** in the 2030 Census **and meet with them** to document their existing ITS and signal inventories and implementation plans leading up to 2030
9. Meet with all **Toll Authorities** in the MPO to inventory all existing ITS, signal, and tolling facilities and document the implementation plans for each for the next seven to 10 years

Stakeholder Agencies

H-GAC Counties	H-GAC Cities	Regional Agencies
Brazoria <i>(Includes Toll Road Authority)</i> Chambers Fort Bend <i>(Includes Toll Road Authority and Transit)</i> Galveston Harris <i>(Includes Toll Road Authority)</i> Liberty Montgomery <i>(Includes Toll Road Authority)</i> Waller	Baytown Conroe Galveston Houston League City Missouri City Pasadena Pearland Sugar Land Texas City	Brazos Transit District Harris County Regional Transit Authority Houston Metro Port of Freeport Port of Houston TxDOT Beaumont District TxDOT Houston District Uptown TIRZ The Woodlands Regional Transit Authority

H-GAC ITS Architecture History

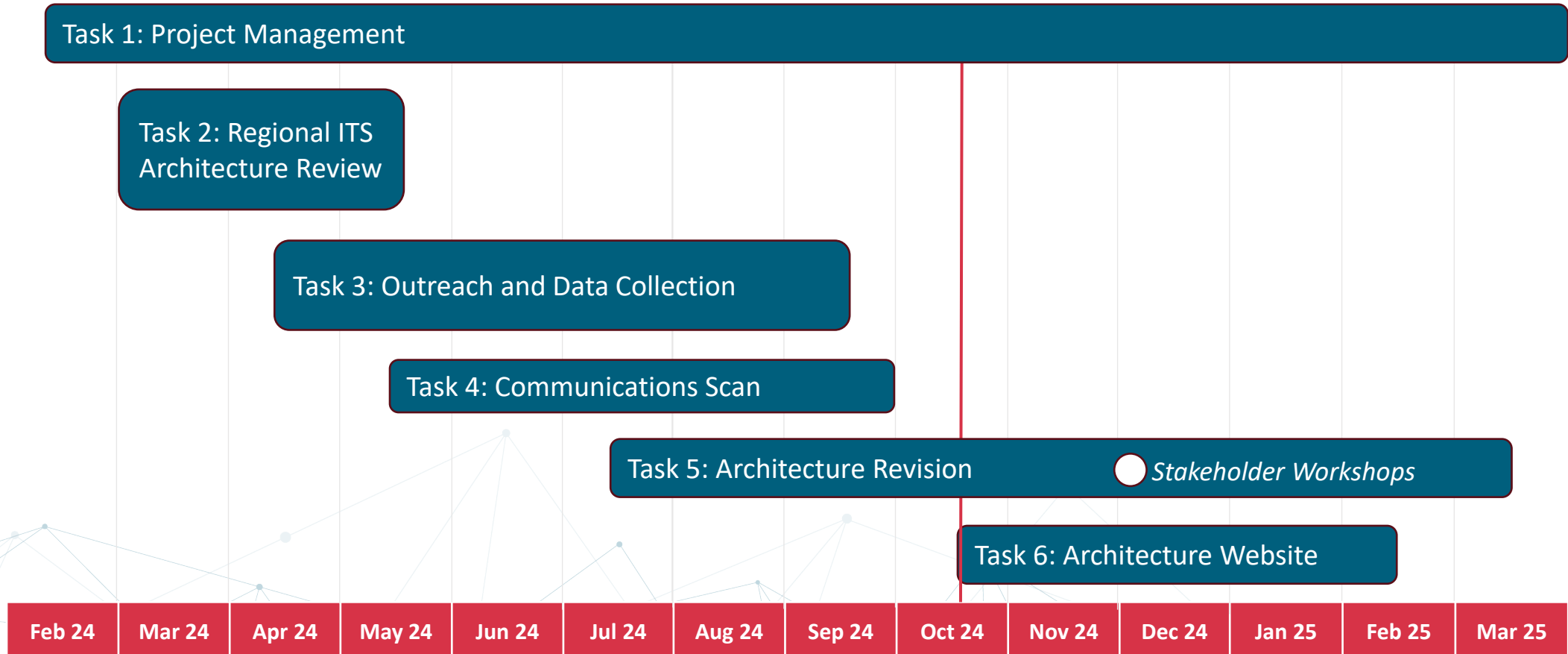
First Developed in 2003

Updated in 2010

Updated in 2017

Current Update for 2024

Key Tasks and Timeline



H-GAC Regional ITS Architecture



Inventory

Traffic Management

Closed Circuit Television Cameras

Dynamic Message Signs (Standard and Color)

Emergency Vehicle Preemption (GPS Based)

Freeway Safety Service Patrol

Ramp Metering

Smart Work Zones

Toll Lanes

Traffic Management Centers

Traffic Signal Operations

Truck Parking Availability Systems

Wrong-Way Driving Detection and Warning

Transit

AVL Systems

CCTV Security Cameras

Mobile Ticketing Application

Transit Signal Priority

Data/Information Mgmt

ConnectSmart

WAZE Integration

Claris Video Sharing

Regional Needs



COMMON REGIONAL NEEDS

Commercial Vehicle Operations

- Deploy freight signal priority
- Provide truck drivers with parking information and availability

Parking Management

- Provide parking availability information for vehicles

Public Transportation

- Install transit signal priority
- Develop a regional transit fare application

Public safety

- Expand emergency vehicle preemption

Data and Information Management

- Develop data sharing agreements and expand data sharing capabilities
- Improve utilization of data through dashboards, notification, and automation
- Develop CCTV camera sharing network to share live video feeds
- Expand fiber communications network
- Share fiber network where appropriate

Traffic Management

- Improve traffic signal timing and coordination between jurisdictions
- Expand the CCTV camera network
- Expand the DMS network (Including color and arterial DMS)
- Deploy railroad monitoring system that provides notification of blockages
- Deploy wrong-way driving detection and alert systems
- Improve traffic incident management

Weather

- Deploy road weather information systems (RWIS) for flood monitoring

ITS Service Package Areas

ITS Service Package Areas from the National ITS Architecture

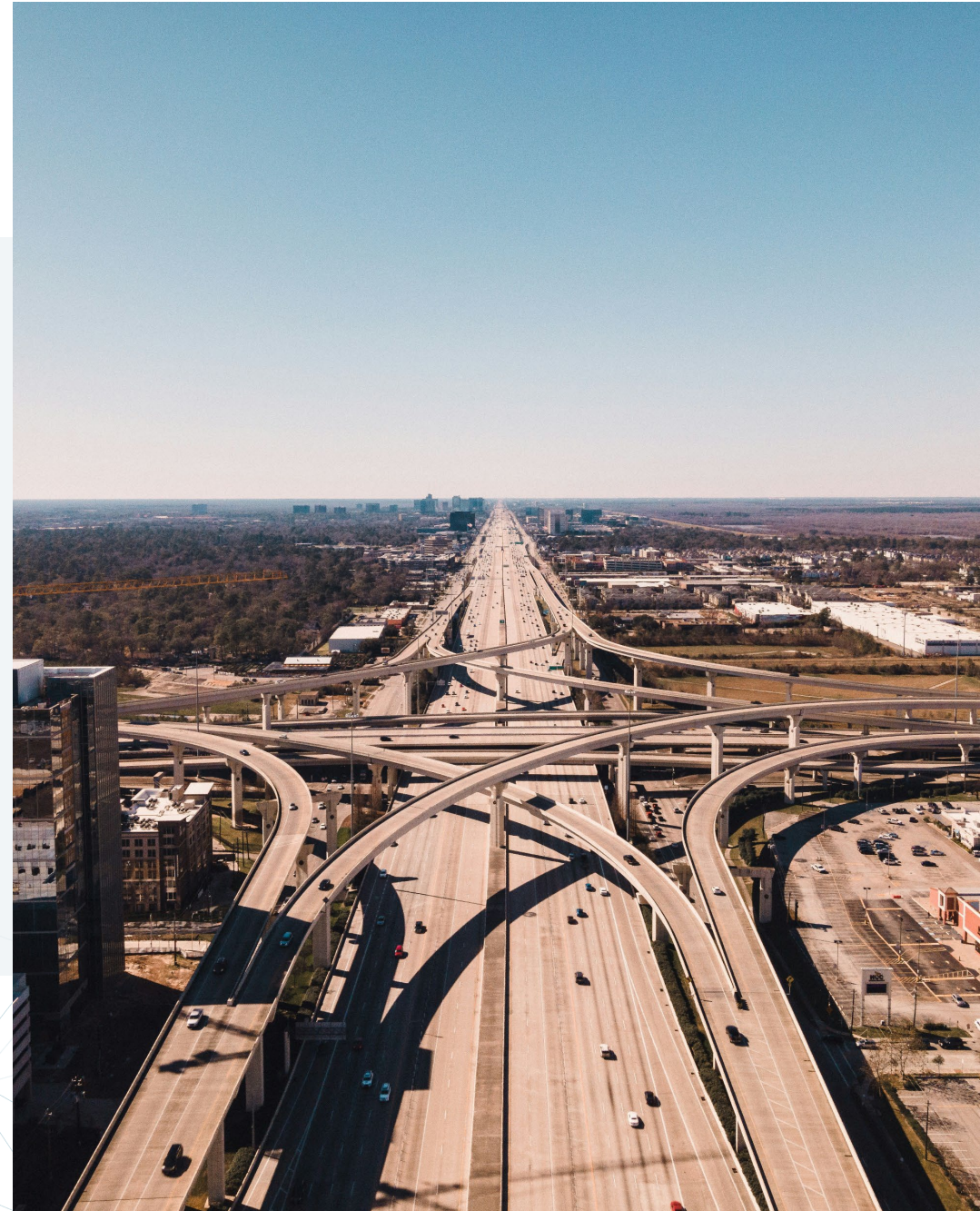
- Commercial Vehicle Operations
- Data Management
- Maintenance and Construction
- Parking Management
- Public Safety
- Public Transportation
- Sustainable Travel
- Traffic Management
- Traveler Information and Personal Mobility
- Vehicle Safety
- Weather

ITS Service Package Areas

ITS Service Package Areas from the National ITS Architecture

- Commercial Vehicle Operations
 - **Commercial Vehicle Parking**
 - **Freight Signal Priority**
- Data Management
- Maintenance and Construction
- Parking Management
- Public Safety
- Public Transportation
- Sustainable Travel
- Traffic Management
- Traveler Information and Personal Mobility
- Vehicle Safety
- Weather

Potential ITS Focus Areas within the Region



Potential ITS Focus Areas

Operations and Staffing

Improve Signal Timing on Arterials and Across Jurisdictional Boundaries

Automate Operational Capabilities (Includes Data Sharing)

Increase Staffing for ITS

Project Deployments

Expand CCTV Camera and DMS Coverage on Freeways and Arterials

Develop Regional CCTV Camera Video Sharing System

Deploy Railroad Crossing Detection and Notification Systems

Develop Regional Transit Rider Application

Expand Fiber Optic Communication Network

Potential ITS Focus Areas

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Signal Timing and Coordination

Improve signal timing on
arterials and coordination
across jurisdictional boundaries.

League City | Missouri City | Pearland
Port Freeport | Port Houston
Houston METRO

Operations and Staffing

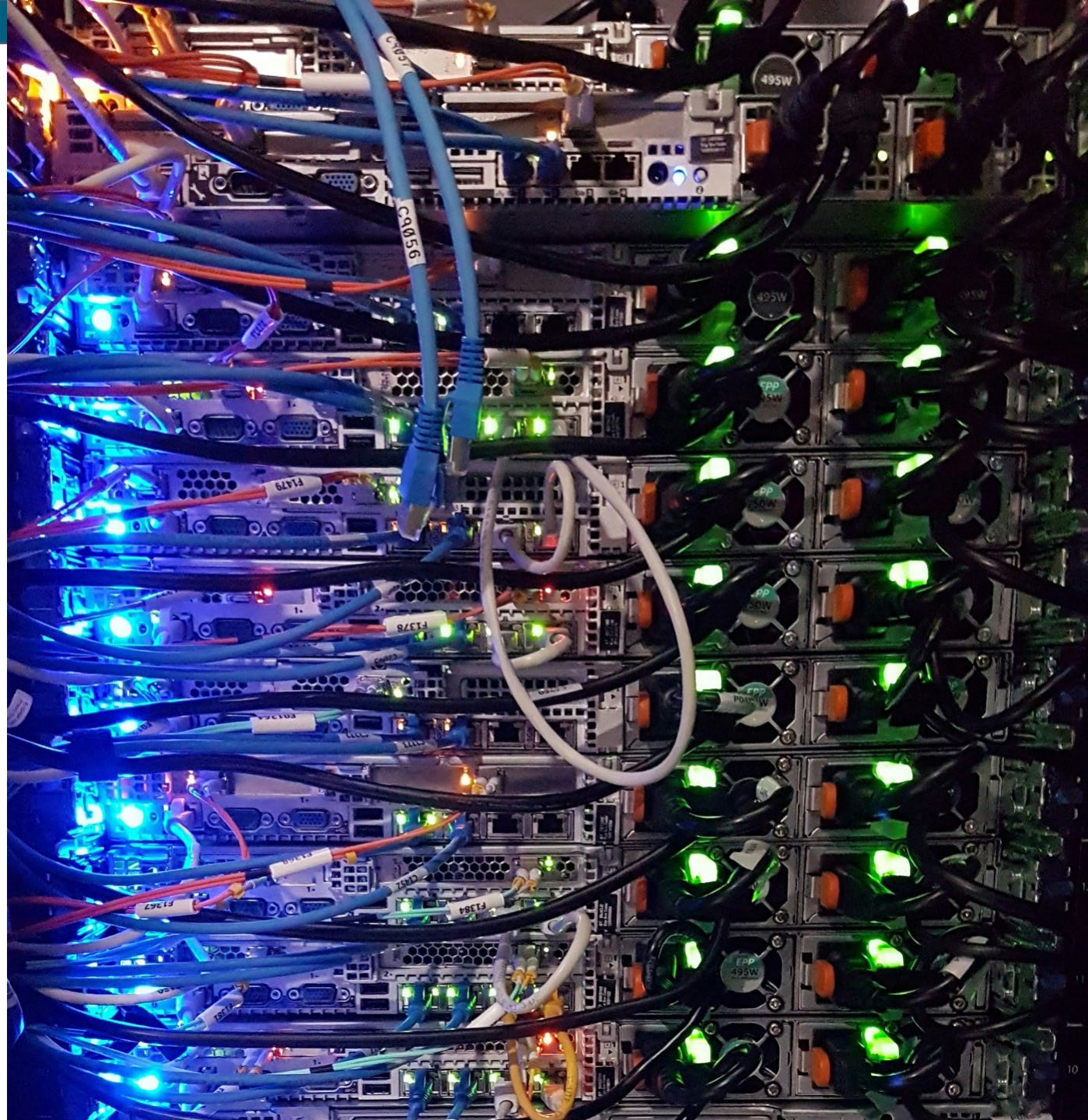


Automate Operational Capabilities

Expand use of data dashboards, automation, data sharing, and AI to more actively manage transportation network.

Missouri City | Sugarland
Chambers County
Port Freeport
TxDOT Beaumont

Operations and Staffing



CCTV Camera and DMS Coverage on Freeways and Arterials

Expand CCTV camera and DMS coverage on freeways and arterials. Provide advanced information on traffic conditions prior to freeways. Use full color DMS.

Baytown | Galveston | Houston
Chambers County | Harris County
Port Freeport
TxDOT Beaumont



CCTV Camera Video Sharing System

Develop regional system to share full-motion high resolution video between all transportation agencies in the region.

League City | Houston METRO
Brazoria County | Chambers County
Harris County Transit | Houston METRO
TxDOT Beaumont | TxDOT Houston

Project Deployment



Railroad Crossing Detection and Notification System

Improve rail detection systems and provide capability to notify drivers and emergency personnel of blockages cause by rail.

Houston | Missouri City
Pearland | Sugarland
Fort Bend County
Port Houston | Port Freeport

Project Deployment



Next Steps

- Continue Update to the Regional ITS Architecture
- Conduct Stakeholder Workshop (December 2024)
- Develop Training Classes for the Regional ITS Architecture

Contacts

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**Thank
You**



MAKING TRACKS IN TEXAS

October 17, 2024 update on passenger rail in Texas

Peter J LeCody, President

Presented by [TexasRailAdvocates.org](https://www.texasrailadvocates.org)

for Greater Houston Freight Committee

- ▶ “Train Daddy”, Texas Central, Amtrak and the Dallas to Houston High Speed Rail project (Dallas drama added for effect)
- ▶ Texas DOT gets 2 wins in the Corridor ID Lottery for Houston and 1 surprise
- ▶ Corridor ID: Dallas to Meridian MS, the Crescent extension
- ▶ Corridor ID: Heartland Flyer extension to Kansas
- ▶ I-35 Corridor: County Judges: passenger rail Austin-San Antonio and beyond
- ▶ FRA Amtrak Daily Long-Distance Vision: Two potential routes from Houston
- ▶ A Daily Sunset Limited – (the occasional train that goes through Houston)
- ▶ TxDOT Texas Rail Plan
- ▶ We got close in 2023 Session: \$200 million rider for passenger and freight rail
- ▶ What’s in the cards for the 2025 Texas session

TODAY’S SUMMARY



HIGH SPEED RAIL IN TEXAS

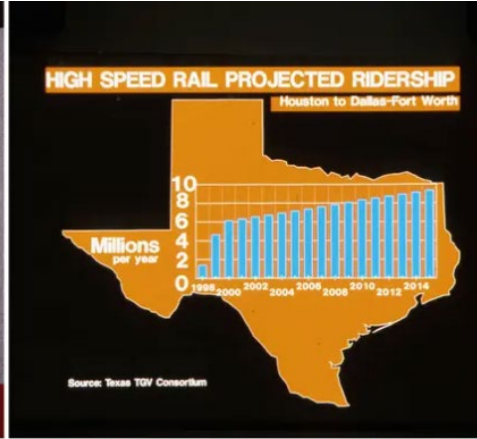
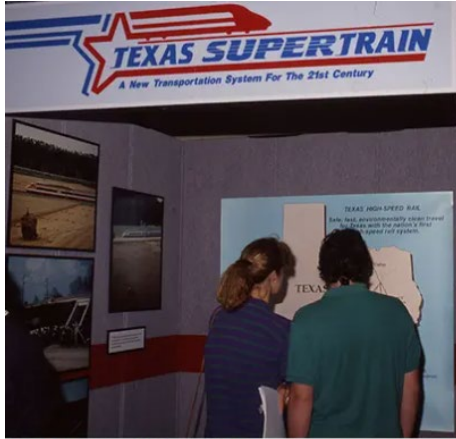
First a bit of history

Texas Central at the 10 Yard Line

Texas Central morphs to Amtrak

Andy “Train Daddy” Byford at Southwestern Rail Conference

Dallas throws a monkey wrench



TEXAS T-BONE CORRIDOR

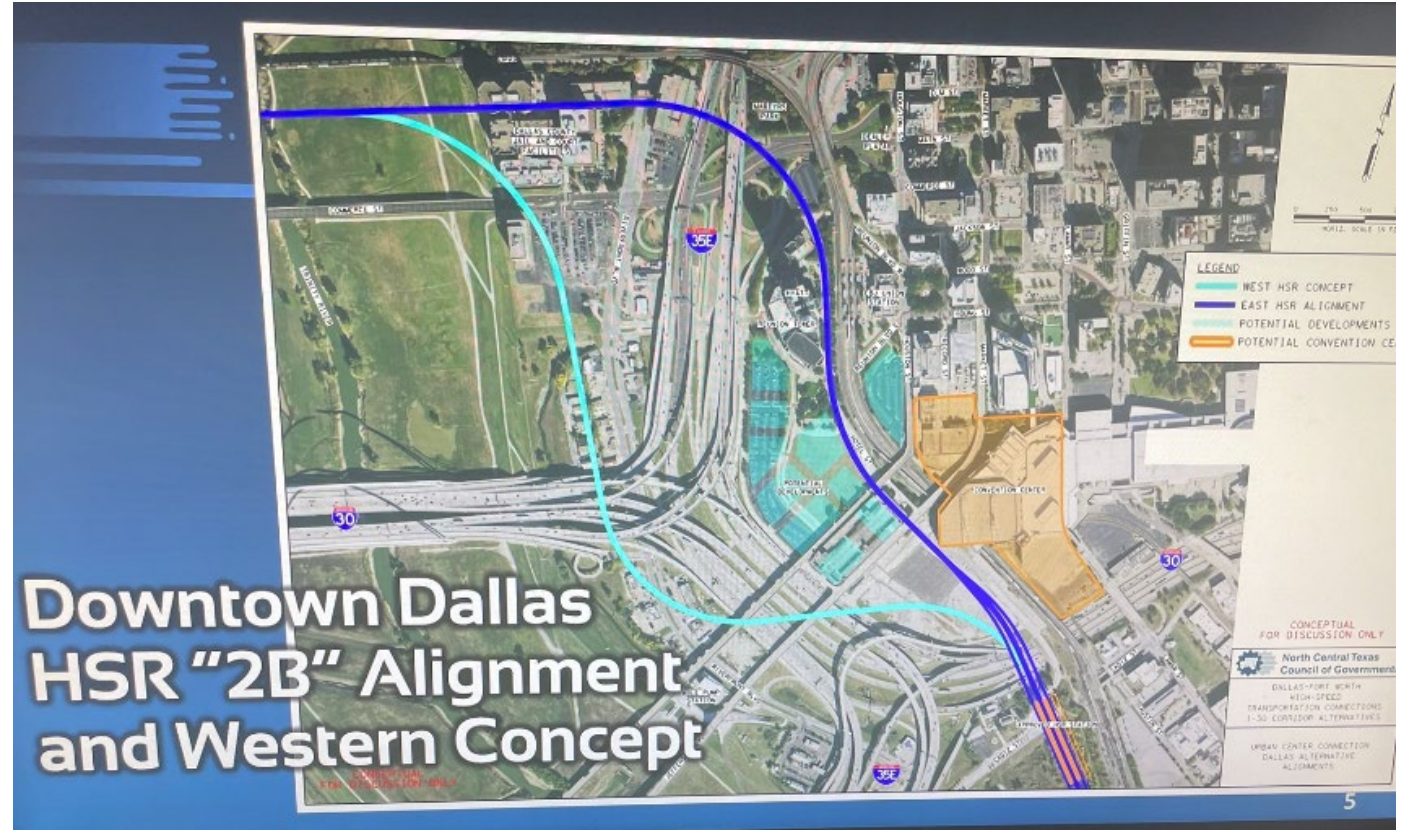
A group headed by former Harris County Judge Robert Eckels is pushing for a high-speed rail connecting the Texas T-Bone, which would run from Dallas-Fort Worth through Austin to San Antonio, and branch off in Temple to Houston.



Source: Texas High Speed Rail and Transportation Corporation



HIGH-SPEED NORTH TEXAS





AMTRAK *Connects US*

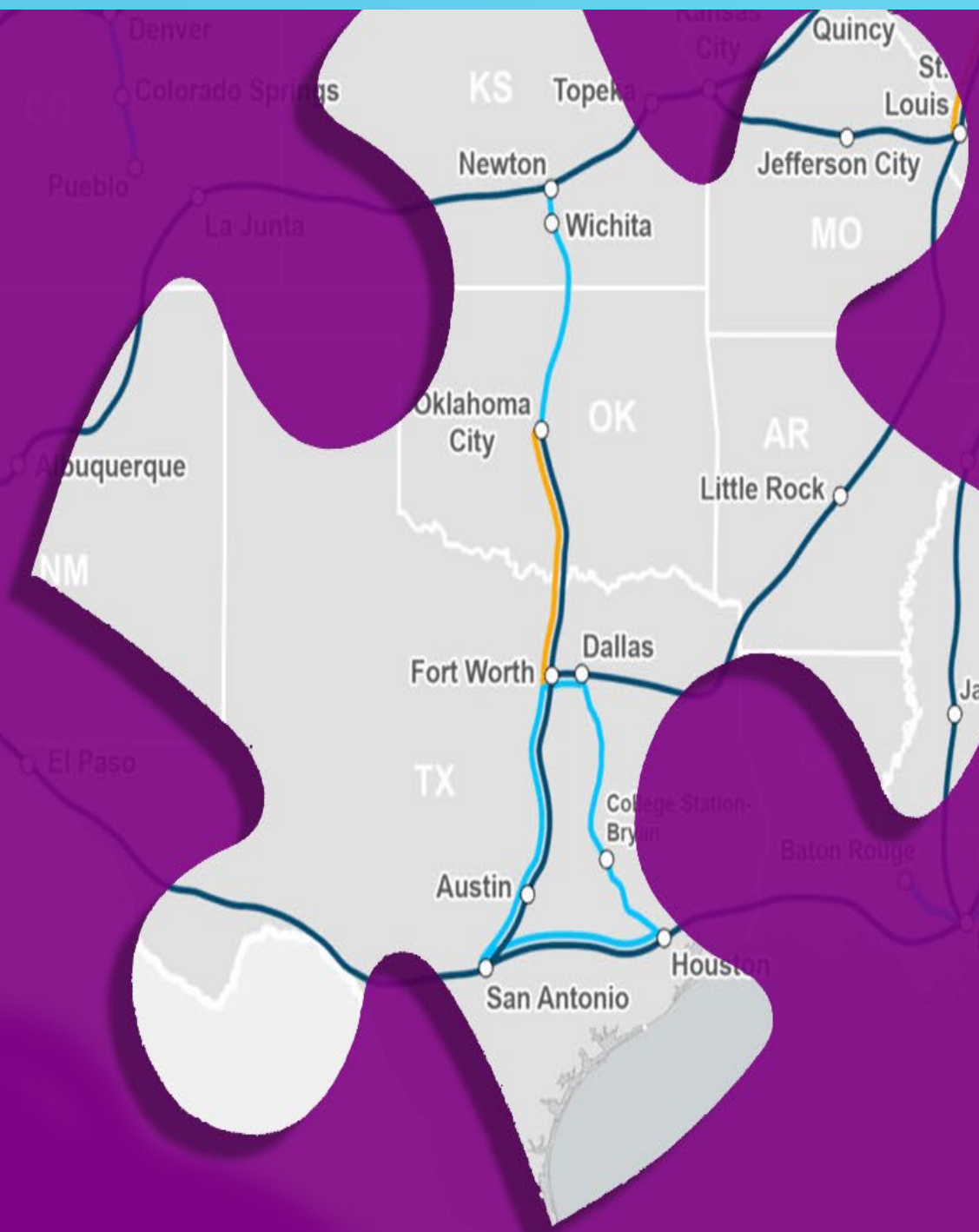


CORRIDOR IDENTIFICATION GRANTS:

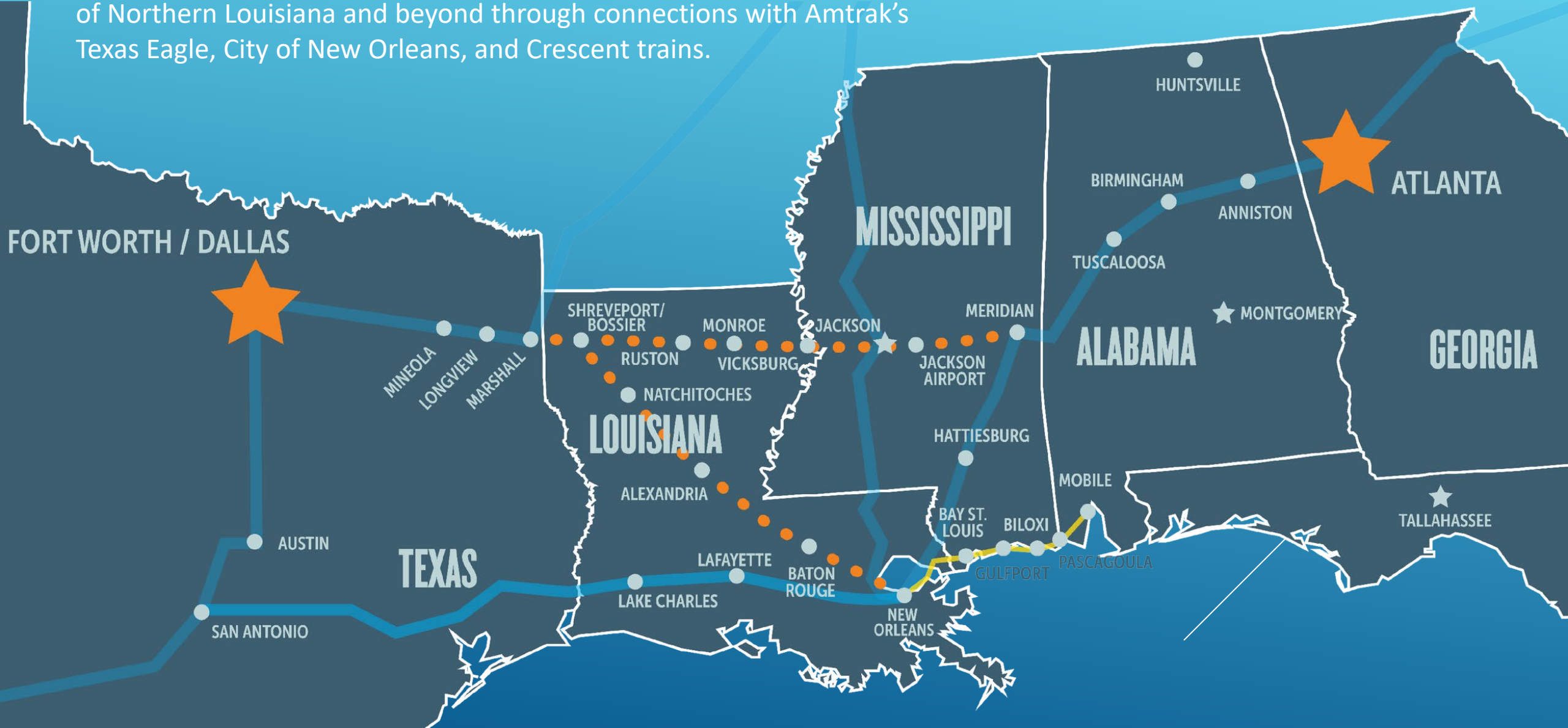
YES: Dallas to Houston via College Station / Bryan

YES: Houston to San Antonio

WAITING: Dallas-Fort Worth/Austin/San Antonio



The proposed I-20 Rail Corridor service will connect the mega-regions of Dallas-Fort Worth and Atlanta with the economies and populations of Northern Louisiana and beyond through connections with Amtrak's Texas Eagle, City of New Orleans, and Crescent trains.



Proposed Network of Preferred Routes



SAS-MSP / HOU-DEN / DFW-SFO / DFW-NYC / DFW-ATL / DFW-MIA / HOU-NYC / ELP-BIL

2023 – CLOSER THAN EVER (\$200M RIDER)

2024 – TXDOT & TRANSPORTATION COMMISSION

\$202M “EXCEPTIONAL ITEMS”

2024/25 – IDENTIFY CHAMPIONS AND PUSH



A composite image showing a white and blue high-speed train on the left and a yellow and black freight train on the right, both moving along tracks. The background is a blurred landscape with a sunset or sunrise sky in shades of orange, red, and blue.

Southwestern Rail Conference **2025**

Mon & Tues • April 7-8, 2025

Registration is now open - Google
Southwestern Rail Conference

Thank you to Greater Houston Freight Committee and
Houston-Galveston Area Council
for hosting this update



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Panelist



Dennis Kearns
General Counsel of the
Texas Railroad Association



Katherine Parker
Executive Director
Gulf Coast Rail District



Richard Zientek
Senior Director – Public Affairs
North and East Texas Union Pacific

Announcements



- TxDOT has completed the Southeast Texas Truck Parking Action Plan. For more information, please visit [Houston/Southeast Texas truck parking \(txdot.gov\)](https://www.txdot.gov/houston-southeast-texas-truck-parking).
- Research “Houston’s Freeways: Who Was Displaced and Why?” has been published. For more information, please visit the Baker Institute for Public Policy [HERE](#)

Future Meetings



- ✓ Transportation Policy Council – October 25, 2024
- ✓ Transportation Advisory Committee – November 6, 2024
- ✓ Safety Committee – October 29, 2024
- ✓ GHFC Meetings – Tentatively January 16, 2025

Thank you for attending today's meeting