

**MEETING OF THE RTP SUBCOMMITTEE
HOUSTON-GALVESTON AREA COUNCIL**

MEMBERS PLEASE USE THE TEAMS INVITATION

TELECONFERENCE PARTICIPATION VIA MICROSOFT TEAMS

[+1 346-262-0140](tel:+13462620140) United States, Houston (Toll)

Conference ID: 641 945 004#

July 13, 2022

1:30PM

AGENDA

1. Call to Order
Roll Call Attendance
2. Acceptance of Minutes
From meeting of May 11, 2022
3. Reliability, Congestion, and Air Quality Performance Measures (Karen Owen)
4. 2045 RTP Update – Visioning Phase Update (Mike Burns)
5. 2045 RTP Update – Other Elements for Discussion
 - a. Parking
 - b. Resiliency
 - c. Bipartisan Infrastructure Law
6. Announcements
 - a. Next TAC Meeting – July 20, 2022 at 9:30AM (Hybrid)
 - b. Next TPC Meeting – July 29, 2022 at 9:30AM (Hybrid)
 - c. Next RTP Subcommittee Meeting – August 10, 2022 at 1:30PM (Teleconference)
7. Adjourn

RTP Subcommittee Roster

Nominated Position	Primary-Name	Organization	Alternate-Name	Organization
Local Government	Morad Kabiri	City of Friendswood	Jildardo Arias	City of Friendswood
Transit	Perri D'Armond	Fort Bend County	Stacy Slawinski	Fort Bend County
Active Transportation	Joe Cutrufo	Bike Houston	Nikki Knight	SE Management Dist.
Airport	Bill Zrioka	Houston Airport System	Marcel Allen	Houston Airport System
Business Interest	Elizabeth Whitton	Energy Corridor	Elijah Williams	Energy Corridor
Citizen Interest	Andrea French	Scenic Houston	Jonathan Brooks	LINK Houston
Environmental	Harrison Humphreys	Air Alliance Houston	Vacant	
Local Government	Todd Stephens	The Woodlands Township	Ruthanne Haut	The Woodlands Township
Local Government	Karen McKinnon	Brazoria County	Matt Hanks	Brazoria County
Local Government	Hon. John Bowen	City of League City	Christopher Sims	City of League City
Local Government	Robert Upton, P.E.	City of Pearland	Rajendra Shrestha	City of Pearland
Local Government	David Fields	City of Houston-P&D	Peter Eccles	City of Houston - Planning
Local Government	Loyd Smith, P.E.	Harris County	Brannan Hicks	Harris County
Local Government	Monique Johnson	City of Sugar Land	Rick Ramirez	City of Sugar Land
Local Government	Yancy Scott	Waller County	Hon. Jay Knight	Liberty County
Planning	Katherine Parker	GCRD	Carol Lewis, PhD	TSU
Port	Bruce Mann	Port of Houston	Rohit Saxena	Port of Houston
Port	Mike Wilson	Port of Freeport	Rodger Rees	Port of Galveston
State	Charles Airiohuodion	TxDOT-HOU	Jeffrey English	TxDOT-HOU
State	Lisa Collins	TxDOT-BMT	Scott Ayres	TxDOT-BMT
Toll Road	Vacant		Vacant	
Transit	Ken Fickes	Harris County	Vernon Chambers	Harris County
Transit	Taylor Marcantel	METRO	Jose Pulido	METRO

**MEETING OF THE RTP SUBCOMMITTEE
HOUSTON-GALVESTON AREA COUNCIL
TELECONFERENCE PARTICIPATION VIA MICROSOFT TEAMS
May 11, 2022
1:30PM
Minutes**

Member Attendance:

Primary-Name	Present	Alternate-Name	Present
Morad Kabiri	Yes	Jildardo Arias	Yes
Perri D'Armond	Yes	Stacy Slawinski	No
Joe Cutrufo	No	Nikki Knight	No
Bill Zrioka	Yes	Marcel Allen	No
Elizabeth Whitton	Yes	Elijah Williams	No
Andrea French	No	Jonathan Brooks	Yes
Harrison Humphreys	Yes	VACANT	-
Todd Stephens	Yes	Ruthanne Haut	No
Karen McKinnon	No	Matt Hanks	No
Hon. John Bowen	No	Christopher Sims	Yes
Robert Upton, P.E.	No	Rajendra Shrestha	No
David Fields	Yes	Peter Eccles	No
Loyd Smith, P.E.	Yes	Brannan Hicks	No
Monique Johnson	Yes	Rick Ramirez	No
Yancy Scott	No	Hon. Jay Knight	No
Katherine Parker	Yes	Carol Lewis, PhD	No
Bruce Mann	Yes	Rohit Saxena	No
Mike Wilson	Yes	Rodger Rees	No
Charles Airiohuodion	Yes	Jeffrey English	Yes
Lisa Collins	No	Scott Ayres	Yes
VACANT	-	VACANT	-
Ken Fickes	Yes	Vernon Chambers	Yes
Taylor Marcantel	Yes	Jose Pulido	Yes

Others Present: Amy Skicki, Caroline Bailey, Daniel Brassil, Jose Cantu, Chelsea Young, Andrew DeCandis, Jim Dickinson, Carrie Evans, David Fink, Shixin Gao, James Garland, Brandy George, Thomas Gray, Donte Green, Allie Isbell, James Koch, Susan Jaworski, Ayo Jibowu, Sharon Ju, Megan Kennison, Patrick Mandapaka, Lucinda Martinez, Melissa Beeler, Carlene Mullins, Jamila Owens, Craig Raborn, Tim (guest), Chris Van Slyke, Veronica Waller

Staff Participating:

Mike Burns, Jamila Owens, Justin Kuzila, Karen Owen, Christopher Whaley

1. Call to Order
Chair Morad K called the meeting to order at 1:30PM and conducted roll call to ensure a quorum. Morad K confirmed that a quorum was present.
2. Election of Officers
Bruce Mann made a motion to appoint Morad Kabiri as Chair and Perri D'Armond as Vice Chair, seconded by David Fields.
The motion was approved unanimously.

3. Acceptance of Minutes

Perri D made a motion to approve, Bill Z seconded.
The motion was approved unanimously.

4. Action Items

a. Transit Asset Management (TAM) Plan – request to recommend CY 2024-2026 Performance Targets (Jamila Owens and Chris Whaley)

Chris W discussed purpose of the TAM Plan and described the rolling stock, equipment, facilities, and infrastructure asset categories. The performance targets and actuals were discussed for 2018, 2020, 2022, and the proposed 2024 and 2026 targets. Current transit investments that contribute to achieve the targets were summarized, which \$40 million in transit investments in the TIP. Action was requested to endorse the TAM Plan.

Elizabeth W made a motion to endorse the Regional Transit Asset Management Performance Targets proposed for 2024 and 2026. Seconded by Mike W.
The motion was unanimous.

5. Review Timeline for System Reliability, Freight, and Congestion Management Air Quality (CMAQ) Performance Measures (PM3) (Karen Owen)

Karen O summarized the details of the timeline and activities for the reliability, congestion, and air quality performance measures and target setting. The timeline included coordination with other MPOs, TxDOT, Texas Transportation Institute, and various H-GAC Committees in June and July in an effort to meet a September 30, 2022 deadline for updated targets and reporting. There was no other discussion.

6. Transit-Oriented Development – Website (Justin Kuzila)

Justin K presented a definition of Transit-Oriented Development (TOD) and a summary of the information included on H-GAC's TOD website and H-GAC's approach to TOD in the region so that it aligns and contributes to region's transportation goals. The website also includes mapping tools with demographic and economic data, and various resources, such as City of Houston's TOD Standards and METRO's TOD Study. Next steps included a list of potential efforts, such as a statewide TOD plan and evaluation process.

Taylor M mentioned that METRO is in the early stages in starting a joint development/transit-oriented development program and encouraged additional coordination with area agencies.

David F asked if a TOD working group would be set up and mentioned interest in participating. He also noted that parking is a key element in successful TODs.

Justin K responded that ultimately a working group would be set up after internal coordination. There was no other discussion.

7. Discussion of the 2045 RTP Updating Strategy

a. Outreach Strategy – Visioning Outreach Update (Mike Burns)

Mike B briefly summarized the updating schedule and visioning outreach efforts, which included surveying, in-person meetings, and a virtual meeting on June 2. He also encouraged help in spreading the word to participate in the visioning survey.

There was no other discussion.

b. Aviation (Mike Burns)

Mike B presented graphs depicting on monthly and annual passengers and air cargo totals at Intercontinental and Hobby airports, which are the regions two commercial airports. A listing of capital projects was presented for discussion, which included mostly transit and a new bicycle and pedestrian project to improve access to Hobby Airport.

Bill Z mentioned the Houston Airport Systems is beginning a coordination effort with METRO on transit access to Intercontinental Airport for staff and general public. He also noted that the improvements around Ellington Field for Space Port would improve access to the facility and mitigate traffic impacts to area neighborhoods.

Mike B summarized other aviation elements such as Urban Air Mobility and electric vertical takeoff and landing vehicles, airport travel surveys, and roadway access improvements to airport facilities for passengers and cargo.

David F mentioned he is representing the region on a statewide task force to better understand issues and develop recommendations for Urban Air Mobility.

There was no other discussion.

c. Ferry Operations (Mike Burns)

Mike B presented graphs of monthly and annual passenger and vehicle ridership for both the Galveston and Lynchburg Ferries. A listing of capital projects for both operations were also presented for discussion.

There was no other discussion.

d. High Speed Rail (Mike Burns)

Mike B presented the Texas Central project for discussion, and noted it is included in the current RTP.

There was no other discussion.

8. Announcements

- a. Next TAC Meeting – May 18, 2022 at 9:30AM (Teleconference)
- b. Next TPC Meeting – May 20, 2022 at 9:30AM (Teleconference)
- c. Next RTP Subcommittee Meeting – June 15, 2022 at 1:30PM (Teleconference)

Morad K mentioned upcoming meetings over the next month.

9. Adjourn

Morad K asked for any other comments. Hearing none, the Chair declared the meeting adjourned at 2:24PM.

Minutes submitted by: Mike Burns



Reliability, Congestion and Air Quality Performance Measures



Karen Owen
RTP Subcommittee
July 13, 2022



Reliability, Congestion & Air Quality

Reliability

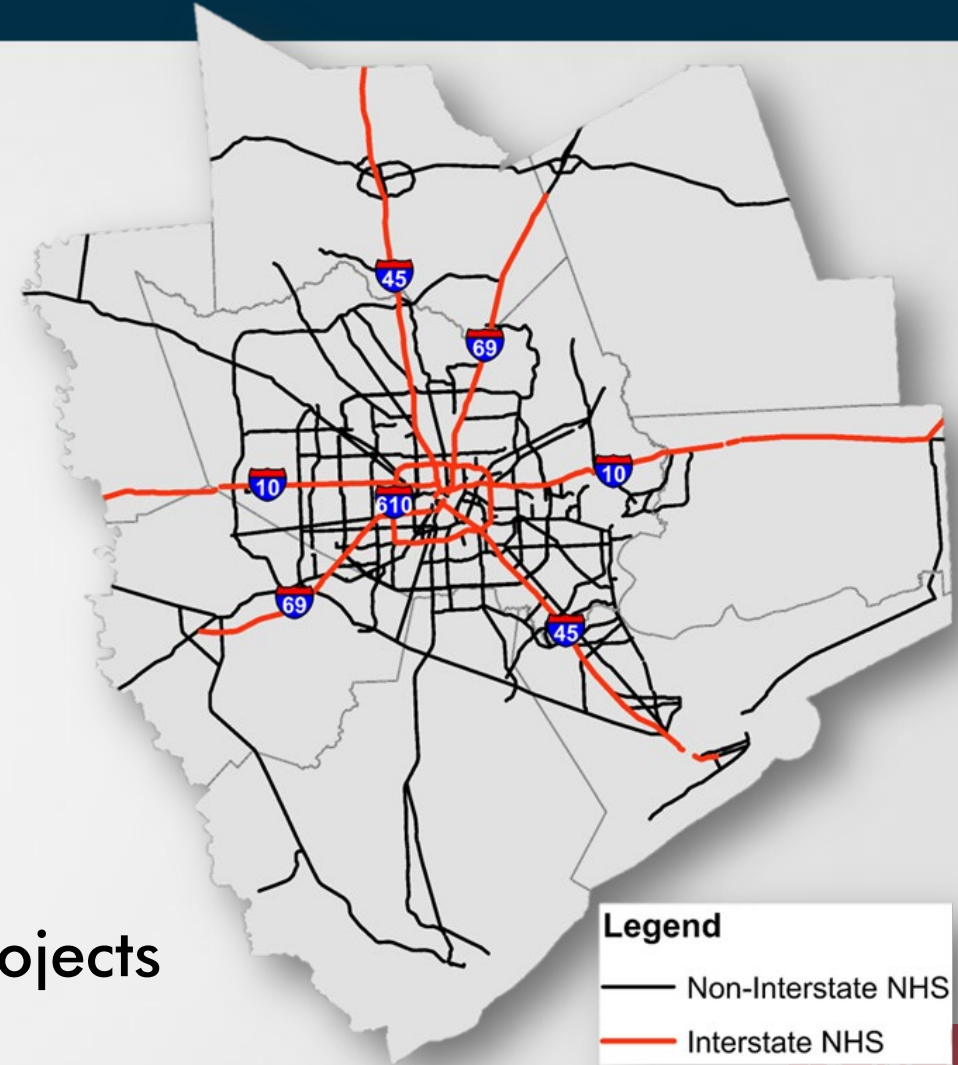
- Personal & Truck Travel

Congestion

- Peak Hour Excessive Delay
- Non-Single Occupancy Vehicles

Air Quality

- Tailpipe emissions reduced from CMAQ projects



Federal Performance Measures



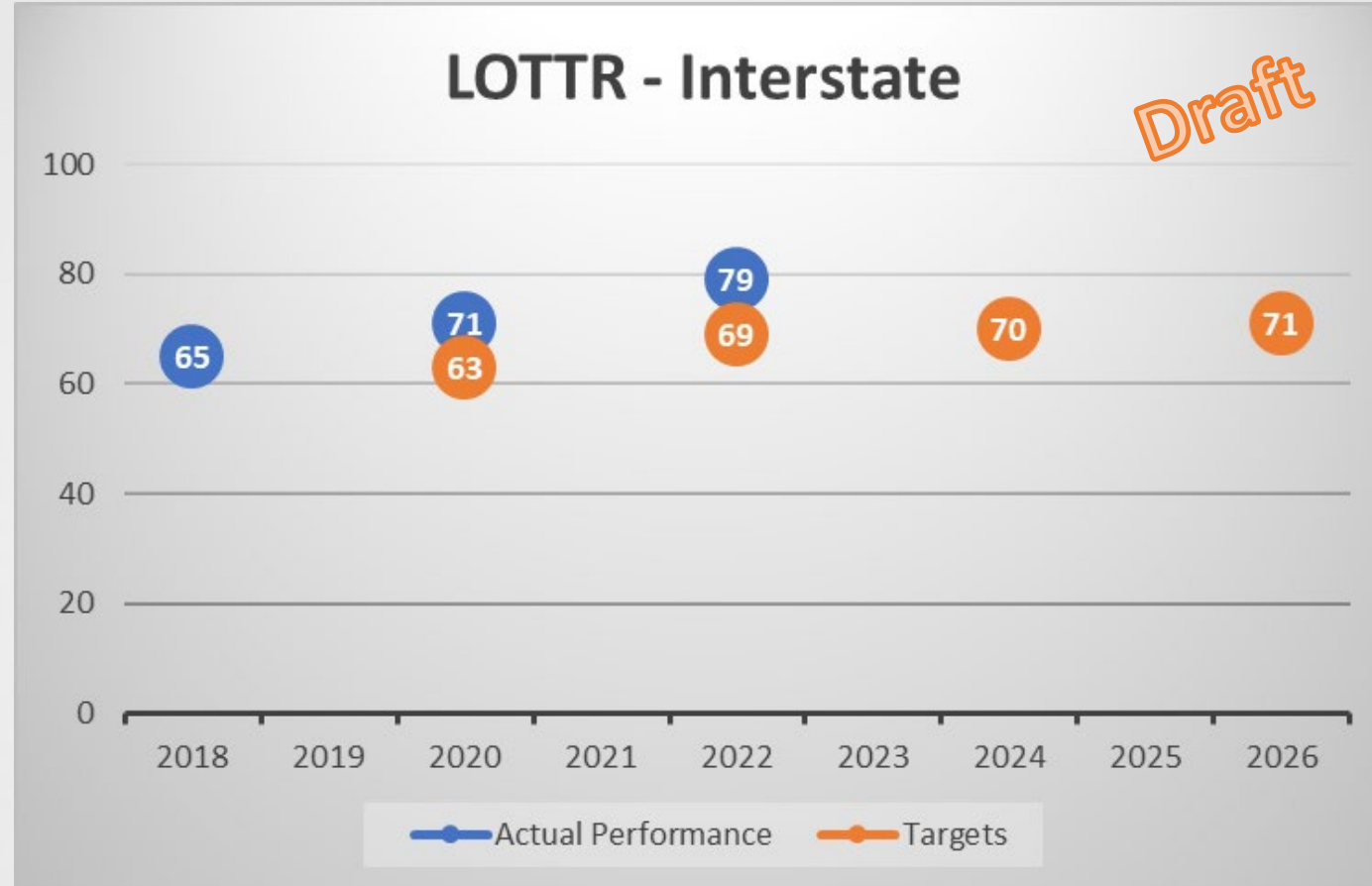
- 2022 Actual Performance based on previous year
 - 2022 performance is based on 2021 traffic conditions
- 2024 and 2026 Target Setting
 - Can adjust 2026 targets in two years
- No penalties if targets aren't met

Percentage of Reliable Person-Miles (Annual)

Level of Travel
Time Reliability
(LOTTR) =
Ratio of the
80th percentile
(bad traffic) / 50th
percentile (normal
traffic)

Example: For a 30-minute
trip:

- Reliable = 30 to 45 mins.
- Unreliable = 45 mins. or longer



Targets met in
2020 and 2022

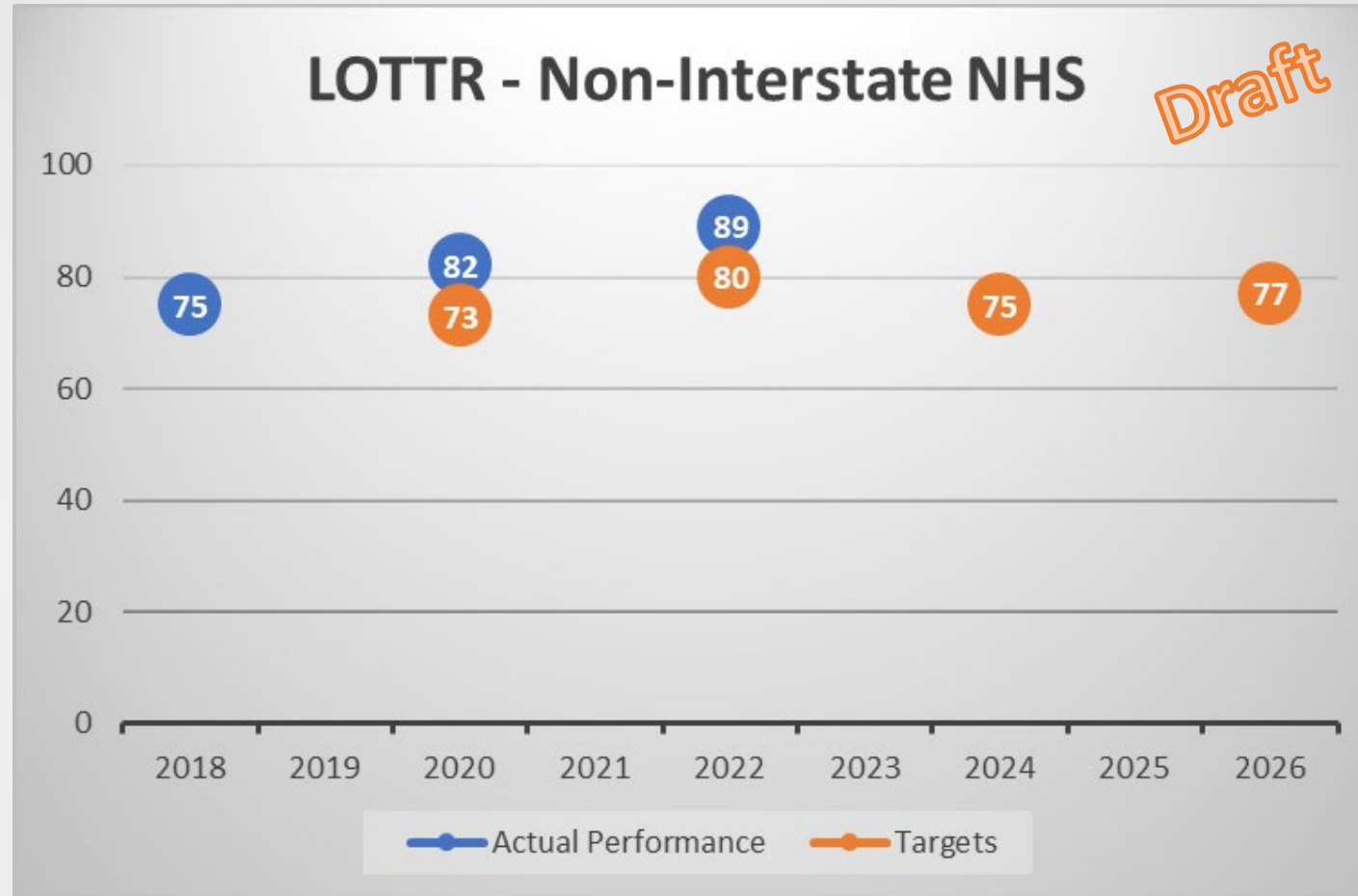
An increased value indicates improvement

Percentage of Reliable Personal Miles (Annual)

Level of Travel
Time Reliability
(LOTTR) =
Ratio of the
80th percentile
(bad traffic) / 50th
percentile (normal
traffic)

Example: For a 30-minute
trip:

- Reliable = 30 to 45 mins.
- Unreliable = 45 mins. or longer



Targets met in
2020 and 2022

An increased value indicates improvement

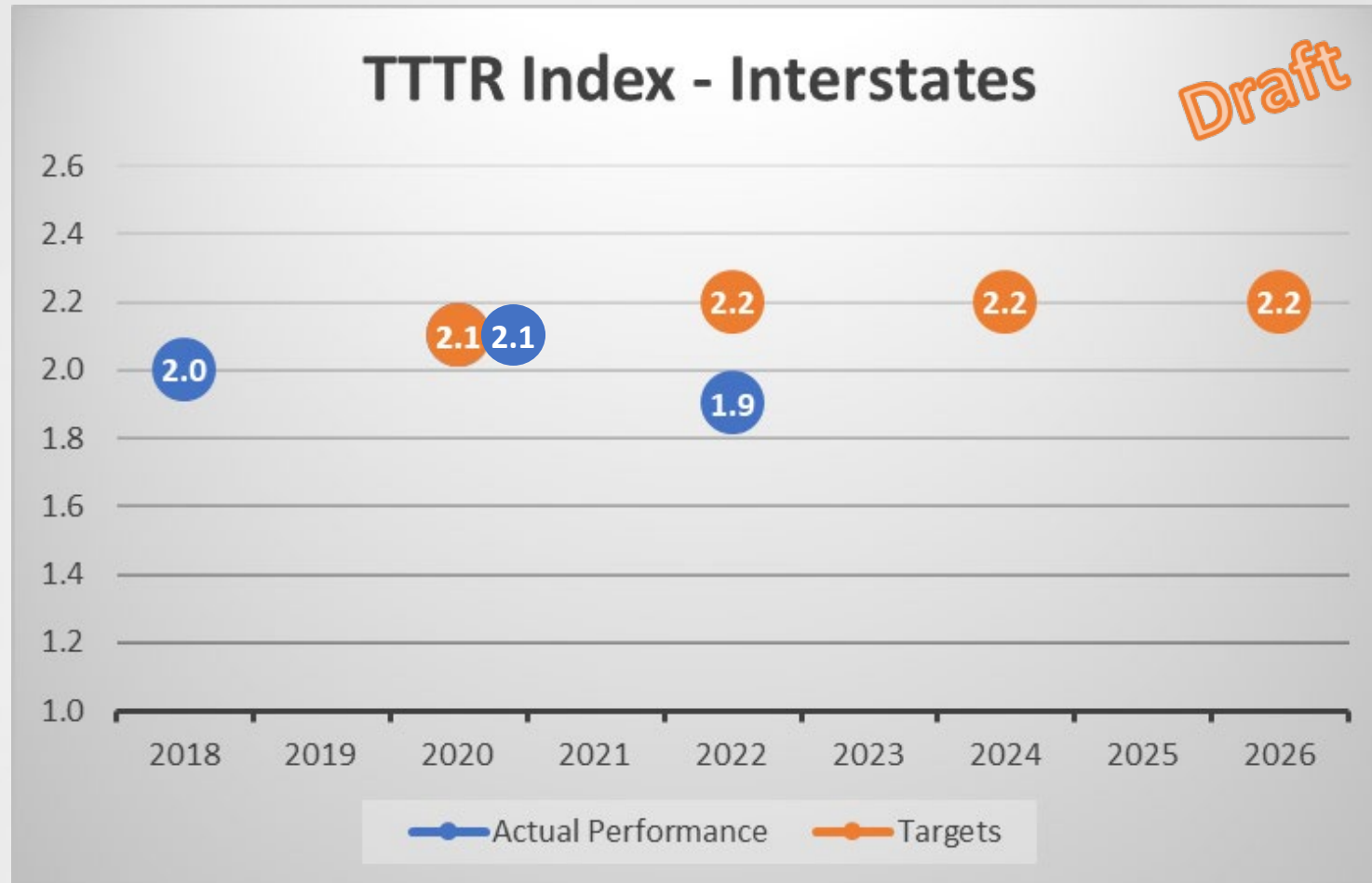
Truck Travel Time Reliability Index

Ratio of 95th (very bad traffic) percentile / 50th (normal) percentile

Truck Travel Time Reliability (TTTR) Index - time a truck driver adds to a median trip length to arrive on-time, 95% of the time.

Example:

What is normally a trip of 30 minutes X 2.1 (truck index) = 63 mins.



Targets met in 2020 and 2022

A decreased value indicates improvement

Project Types & Strategies



- Transportation Improvement Program (TIP)
- Regional Transportation Plan (RTP)
- Tow and Go Program
- TranStar
- Commute Solutions



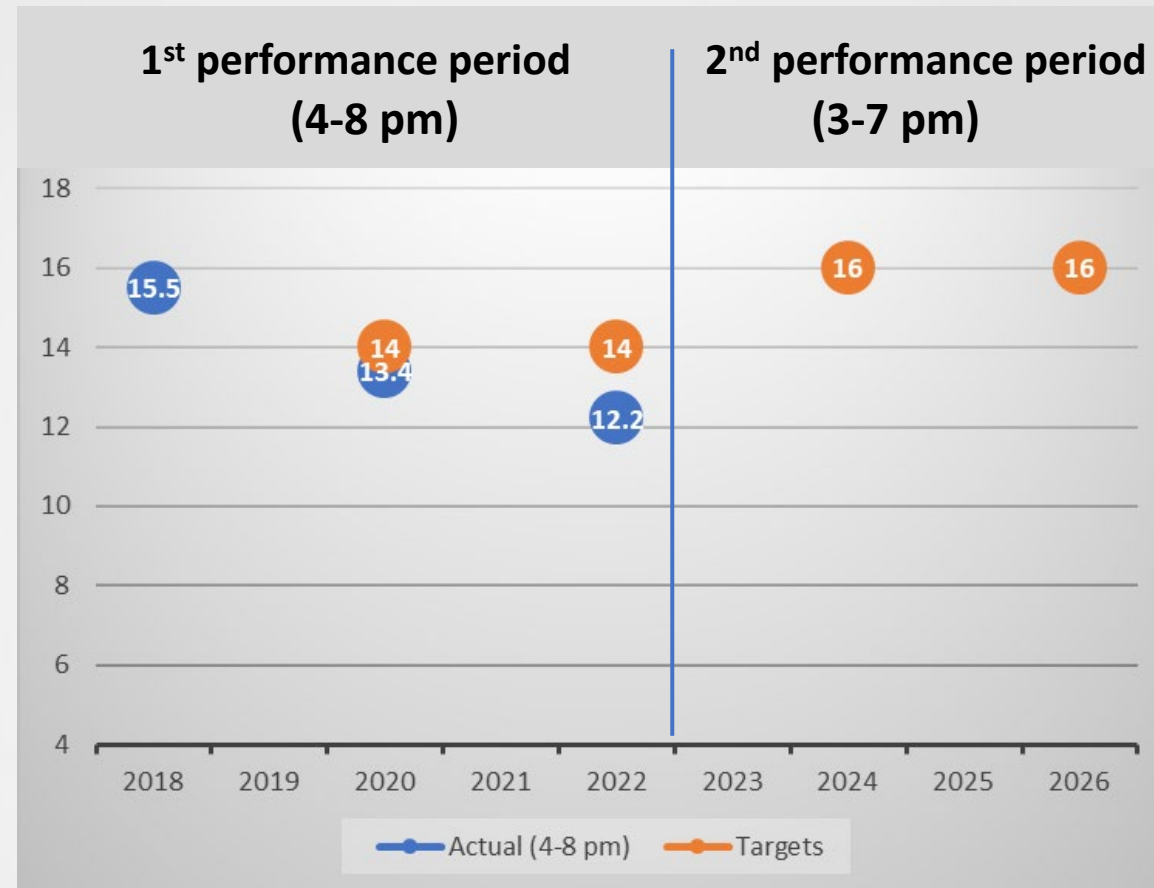
Peak Hour Excessive Delay

The annual average hours of extra travel time on the National Highway System in excessive conditions.

Peak Periods (Mon-Fri)
AM Peak (6-10 am)
PM Peak (4-8 pm) less delay or
(3-7 pm) more delay

For a speed limit of 60 mph (60% of 60 mph), the excessive delay occurs below 36 mph.

Houston Urban Area



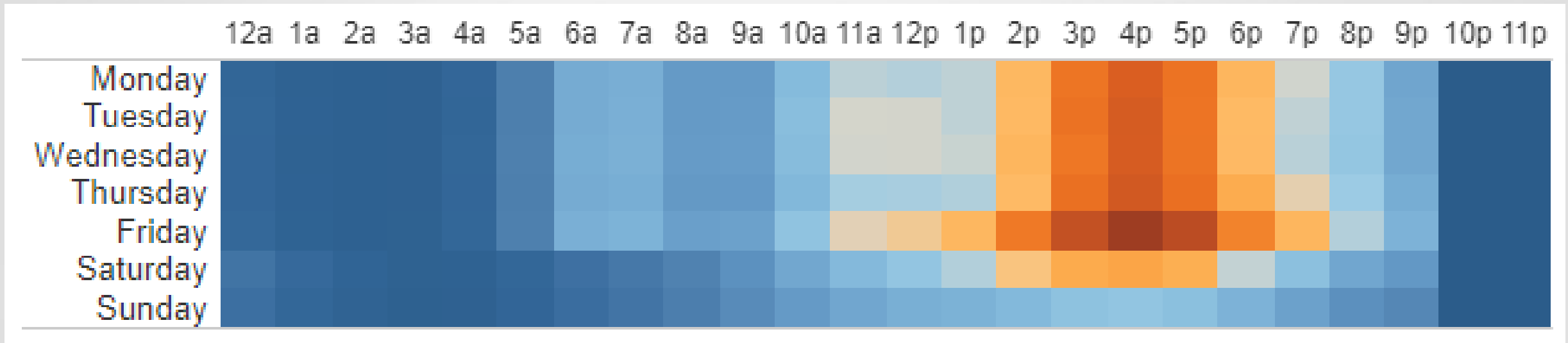
Draft

Targets met in
2020 and 2022

A decreased value indicates improvement

Excessive Delay – Evening Peak Period

(4-8pm) versus (3-7pm)



Congestion levels – Houston Urbanized Area

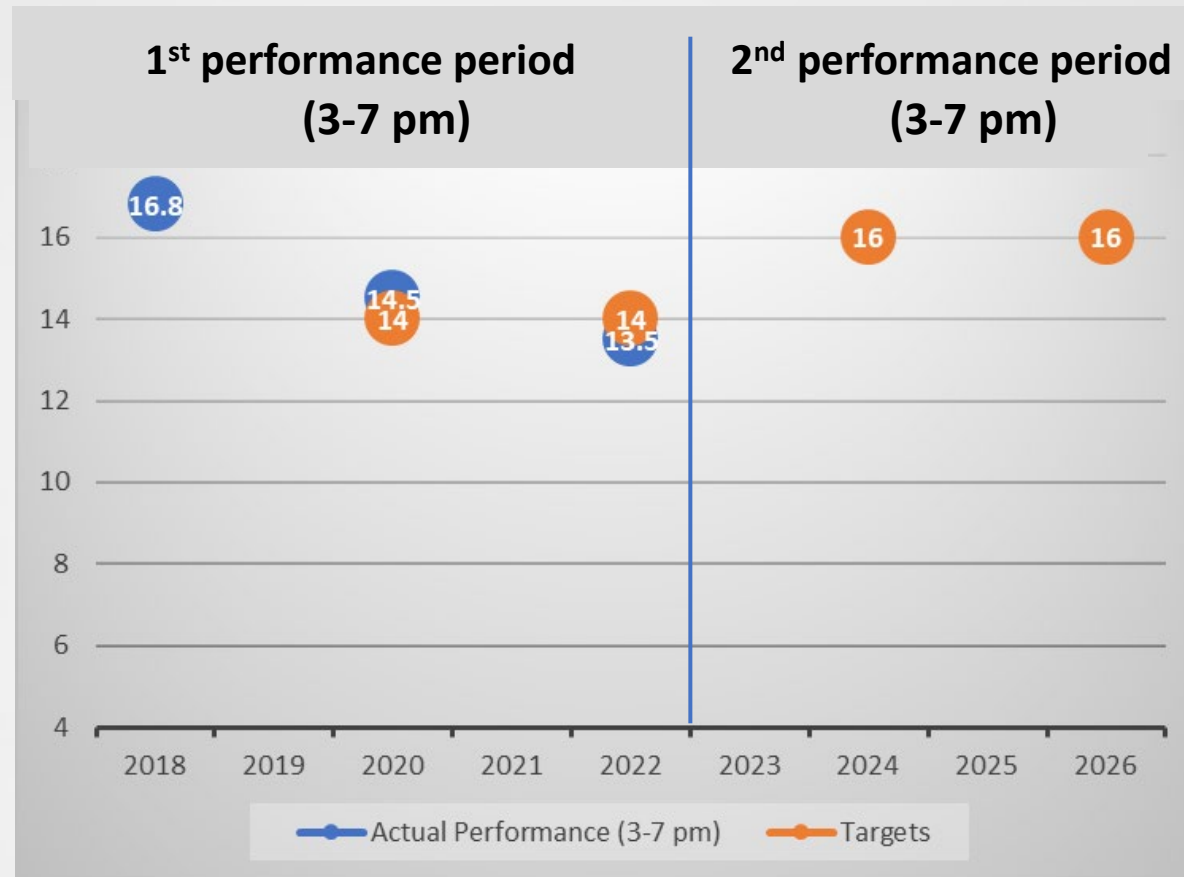
Peak Hour Excessive Delay

The annual average hours of extra travel time on the National Highway System in excessive conditions.

Peak Periods (Mon-Fri)
AM Peak (6-10 am)
PM Peak (4-8 pm) less delay or
(3-7 pm) more delay

For a speed limit of 60 mph (60% of 60 mph), the excessive delay occurs below 36 mph.

Houston Urban Area



Draft

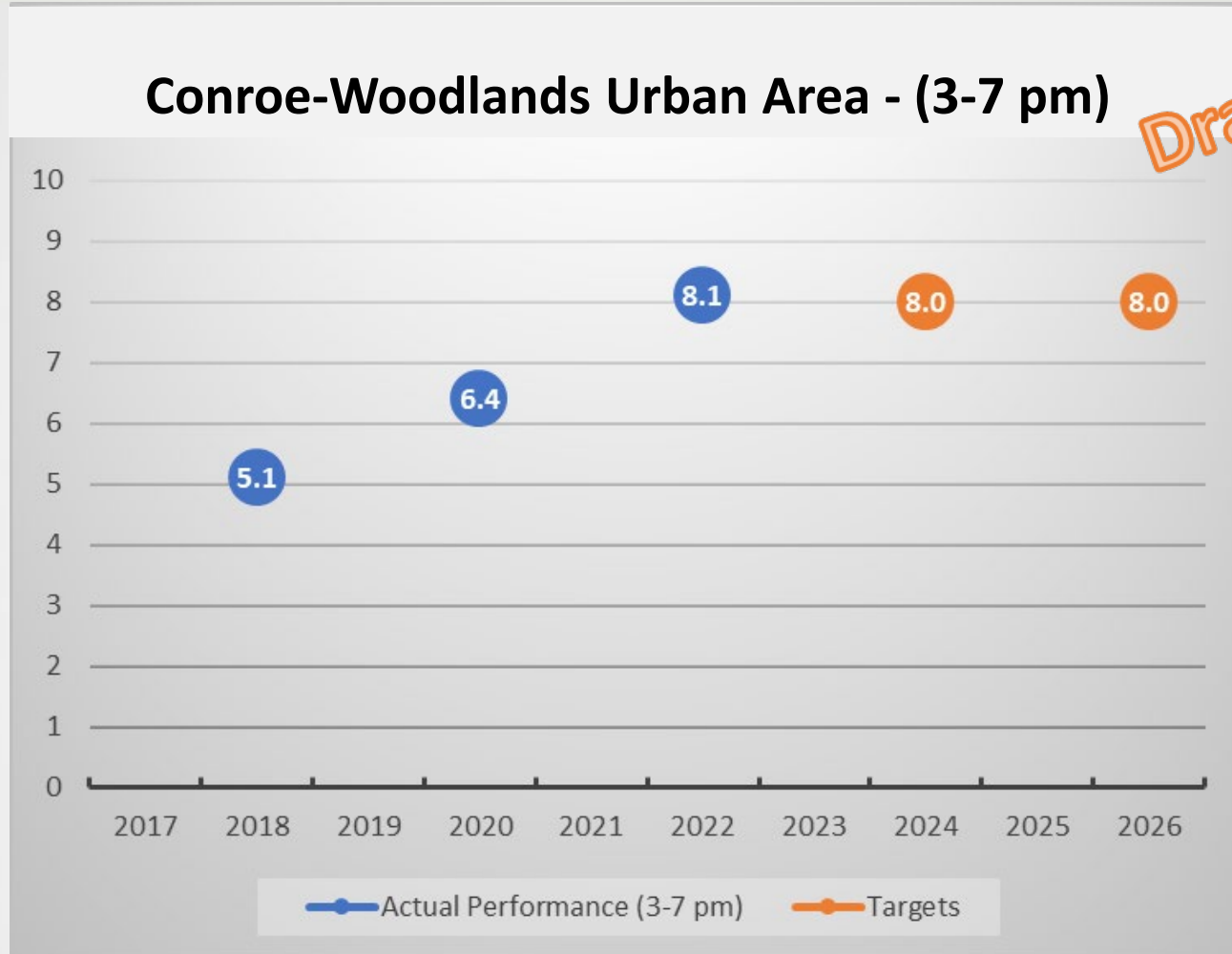
A decreased value indicates improvement

Peak Hour Excessive Delay

The annual average hours of extra travel time on the National Highway System in excessive conditions.

Mon. – Fri. Peak Periods
AM Peak (6-10 am)
PM Peak (4-8 pm) less delay or
(3-7 pm) more delay

For a speed limit of 60 mph (60% of 60 mph), the excessive delay occurs below 36 mph.



New target setting requirement for 2024 & 2026

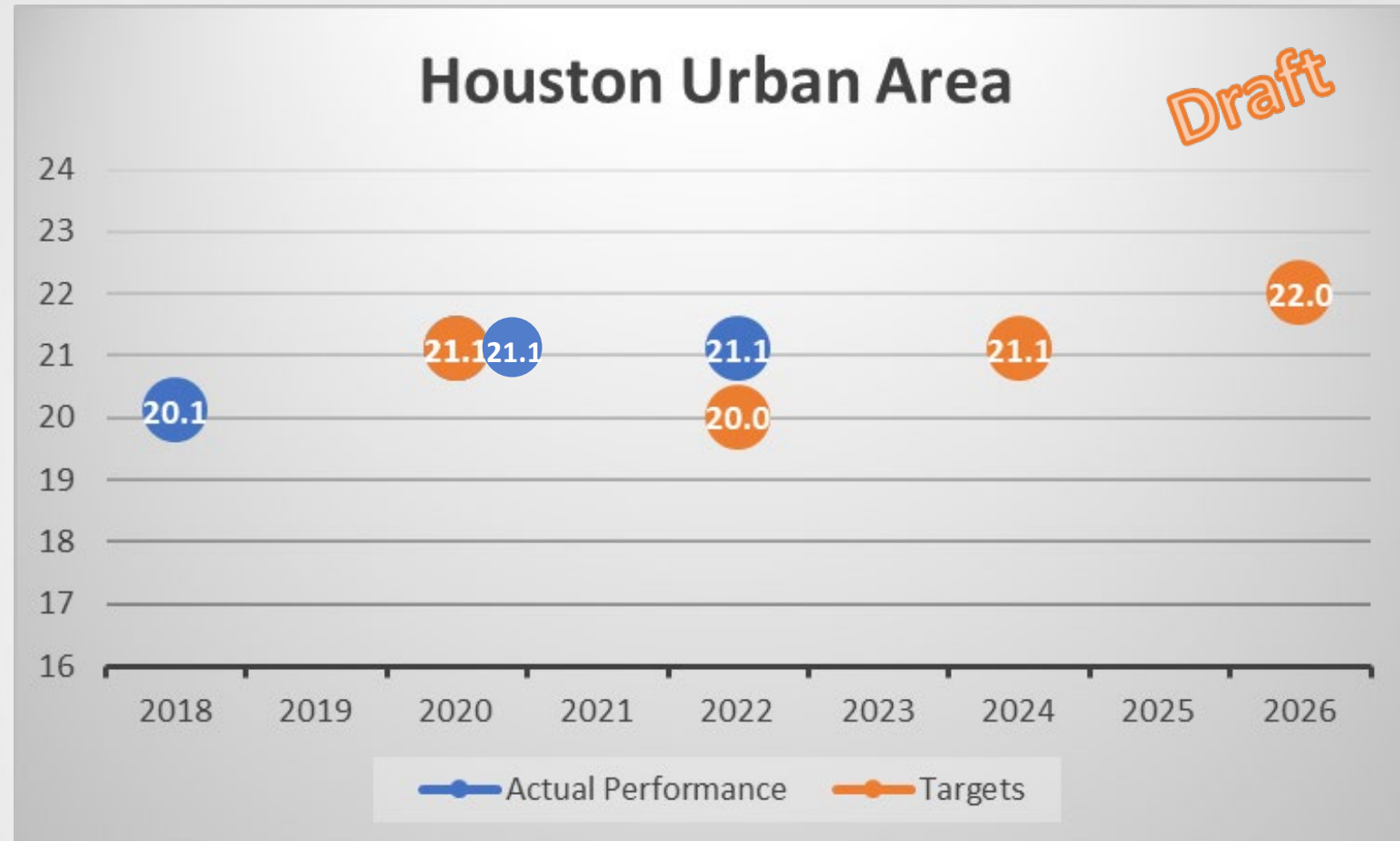
A decreased value indicates improvement

Percent of Non-Single Occupant Vehicles

Percent of Work Trips made in Non-Single Occupancy Vehicles

- Carpooling
- Riding public transportation
- Walking
- Bicycling
- Working from home
- Taxicab, motorcycle or other means

Based on American Community Survey 5-year averages



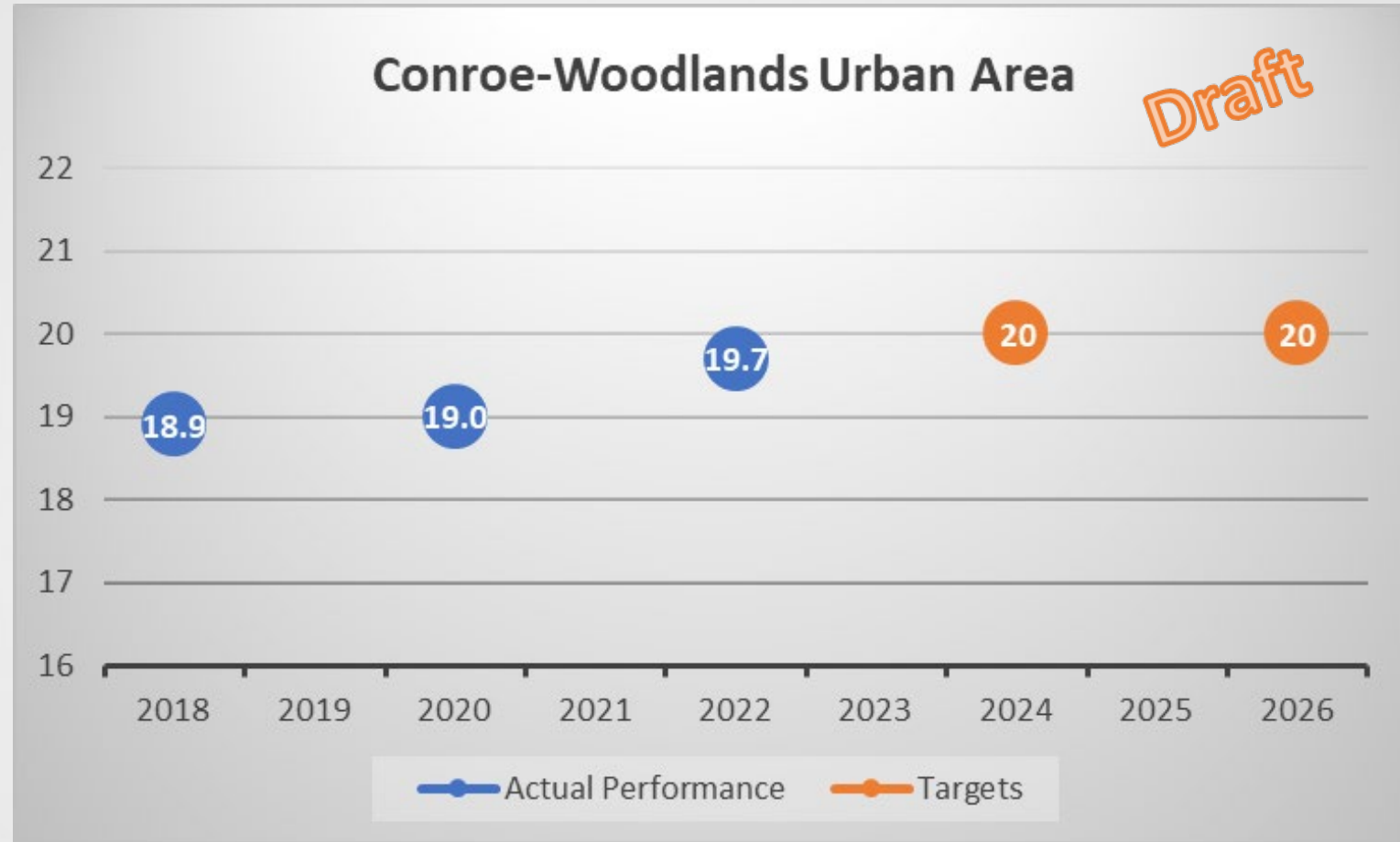
Targets met in 2020 and 2022

An increased value indicates improvement

Percent of Non-Single Occupant Vehicles

Percent of Work Trips made in Non-Single Occupancy Vehicles

Carpooling
Riding public transportation
Walking
Bicycling
Working from home
Taxicab, motorcycle or other means



New target setting requirement for 2024 & 2026

An increased value indicates improvement

Congestion Mitigation Air Quality (CMAQ)

On-Road Mobile Source Emission Reductions (kg/day)

NOx and VOC emission reductions from CMAQ projects that went to construction in FY 2018 to 2021.

Nitrogen Oxides (NOx)
Volatile Organic Compounds (VOC)

1 st Performance Period (FY 2018 – 2021)	NOx	VOC
4-Year Targets	1,429.077	234.604
4-Year Totals	1,383.040	98.863
Difference	(46.037)	(135.741)

4-Year Targets were not met

CMAQ Air Quality – Future Targets

On-Road Mobile Source Emission Reductions (kg/day)

2nd Performance Period (FY 2022 – 2025)	NO _x	VOC
2-Year Targets	221.251	69.939
4-Year Targets	601.465	172.864

Draft

Applied a project delivery success rate from the 1st performance period to future TIP projects.

Nitrogen Oxides (NO_x)
Volatile Organic Compounds (VOC)

Project Types & Strategies



- **Air Quality Projects**
 - Clean Vehicles
 - Commute Solutions/Outreach
 - Regional Vanpool
 - Transit Pilot Projects
- **Construction Projects**
 - Bicycle/Pedestrian
 - Intelligent Transportation Systems (ITS)
- **Seek opportunities for CMAQ-eligible Projects**

Reliability, Congestion & Air Quality Performance Measures



DRAFT

Next Steps



Performance Measures Webpage

<https://www.h-gac.com/transportation-performance-measures>

Performance Report

<https://www.h-gac.com/getmedia/66c3af3f-83be-4738-b34f-5f4603afe305/Appendix-B-FAST-Act-Compliance-Performance-Measures-April-2022>

Performance and future target recommendations in August

Karen Owen karen.owen@h-gac.com (832) 681-2614



2045 RTP Update – Visioning Update



July 13, 2022
RTP Subcommittee



RTP Update – Visioning

■ Engagement Tools

- Survey – open until July 31st
- Comment Map – 287 pins dropped
- Ideas – 7 contributions
- Story Map – includes background, performance measures, and interactive mapping

■ Next Steps

- July to December 2022 – Prioritization Phase
 - July to October – Visioning Analysis to inform Prioritization
 - October to December – Prioritization Outreach
- January to April 2023 – Draft Plan Review

RTP Update – Visioning Survey

County	Population Distribution	Response Distribution
Harris	66.8%	69.5%
Fort Bend	11.7%	7.5%
Montgomery	8.8%	9.0%
Brazoria	5.2%	4.2%
Galveston	4.9%	7.5%
Liberty	1.2%	0.3%
Waller	0.7%	1.6%
Chambers	0.7%	0.5%

Note: 1,660 survey responses to date

RTP Update – Visioning Survey

How frequently do you use each of the following modes of travel?



Frequently	86%	41%	31%	4%	33%	20%	9%	6%
Sometimes	11%	28%	28%	53%	23%	22%	23%	9%
Never	3%	31%	41%	43%	45%	58%	68%	85%

RTP Update – Visioning Survey

What do you like or dislike (concerns you) about traveling in and around the region?



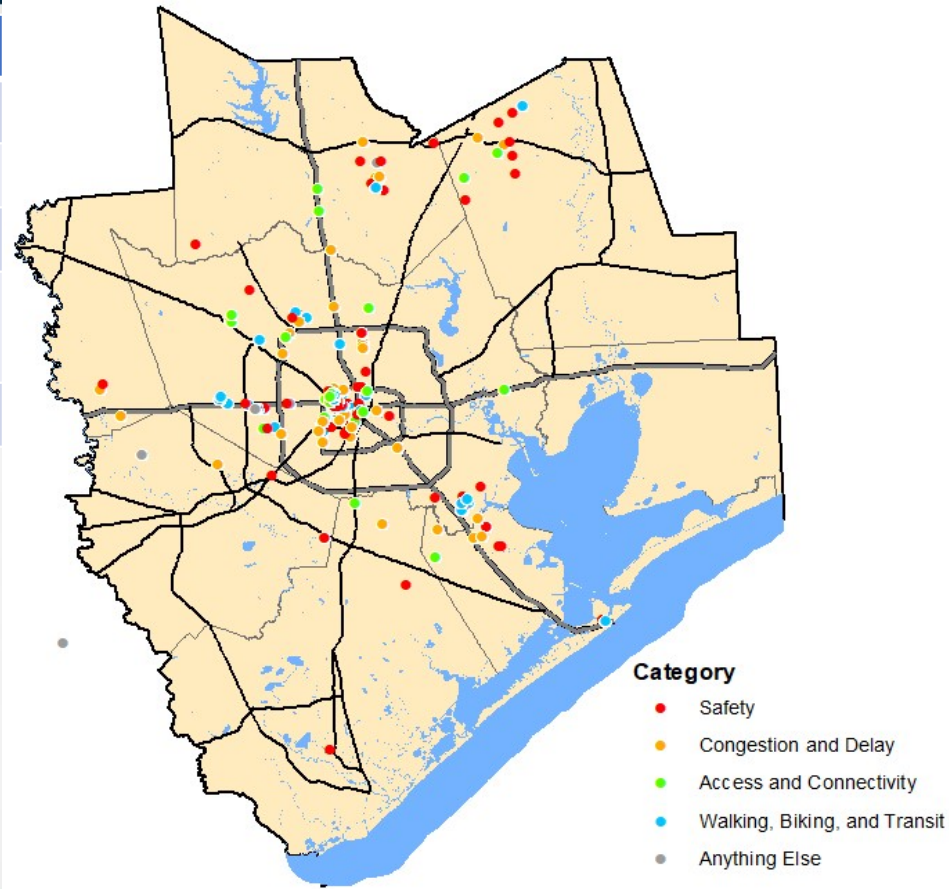
“Other” comments:

Like – Nothing, METROLift, reliable highways, tree canopies

Dislike – aggressive drivers, mix of trucks and passenger vehicles, road construction

RTP Update – Visioning Comment Pins

Category	Number	Percentage
Safety	97	33%
Congestion	54	18%
Connectivity	53	18%
Walk, Bike, Transit	70	24%
Anything else	13	4%



RTP Update – Visioning Ideas

1. Multimodal Corridors – major corridors should accommodate all modes
2. Traffic Calming – use other methods (roundabouts, on-street parking, etc.)
3. Intersection Safety – 30-day stop control (flashing red) after fatality
4. Road Diets – more dedicated left turning lanes while reducing lanes from 4 to 2
5. Sidewalks – use regional funding for sidewalk repairs; accessible during road work
6. Alternative Fuels – use natural gas for public transit to downtown, Galleria, etc.
7. Commuter Rail – grand plan for the Houston Area (similar to the Vision Network)



2045 RTP Update – Other Elements



July 13, 2022
RTP Subcommittee



Parking

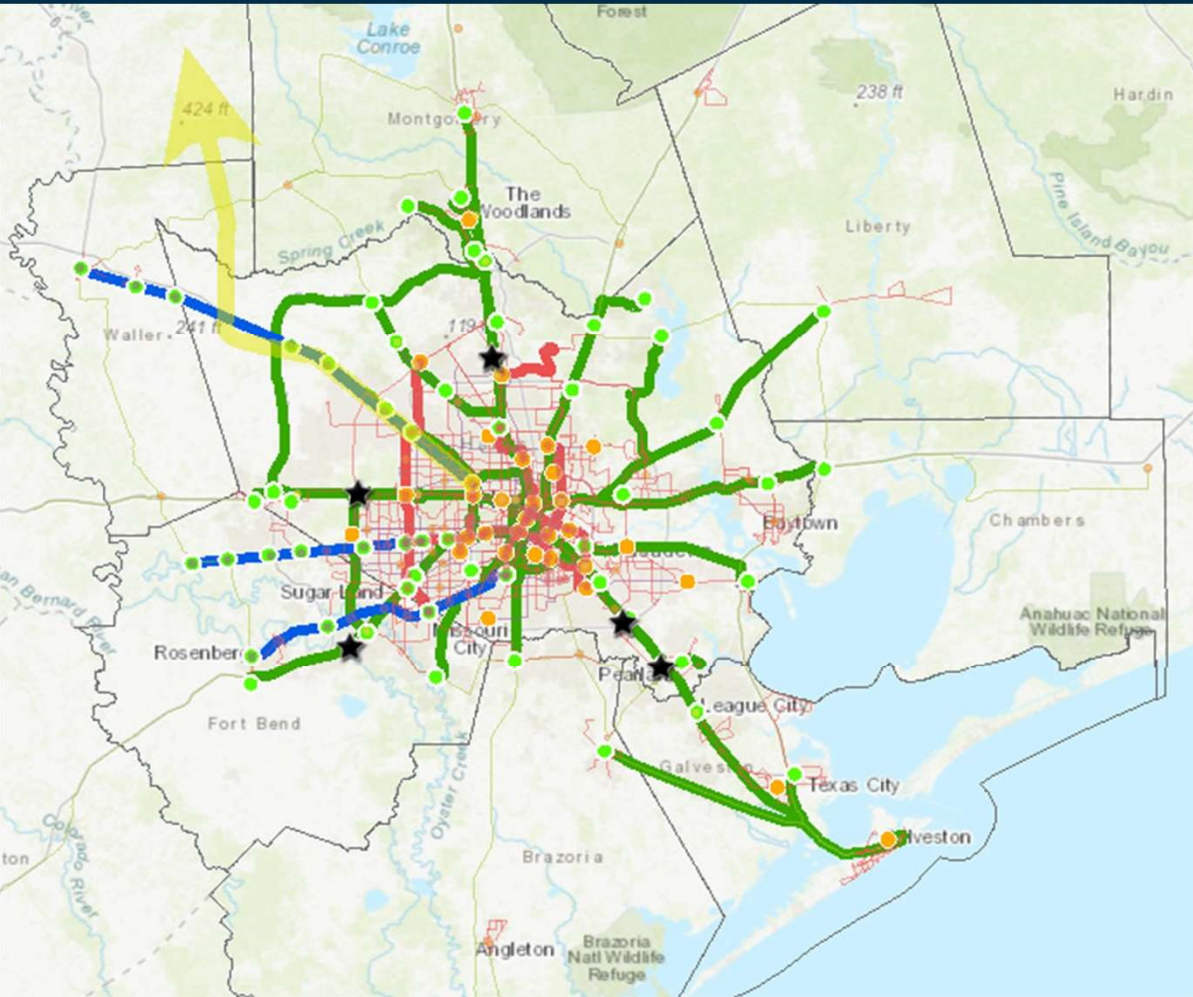
- **Contribute to a Congestion Relief Program:**
 - Parking Management Districts
 - Park and Ride Locations
- **Commercial Motor Vehicle Parking Facilities Assessments**
 - Ensure adequate parking and rest facilities for commercial motor vehicles
- **Electric Vehicle Charging Infrastructure**
 - Public buildings, schools, parks, or other publicly accessible parking facilities

Parking Management

- **Parking Benefit Districts**
 - Use pricing to reduce highway congestion, economic, and environmental costs
 - Utilize revenue for transit, pedestrian, bicycle mode accommodations
- **Curb Lane Management**
 - Prioritize mix of users – freight, transit, bike/pedestrian, valet, and parking

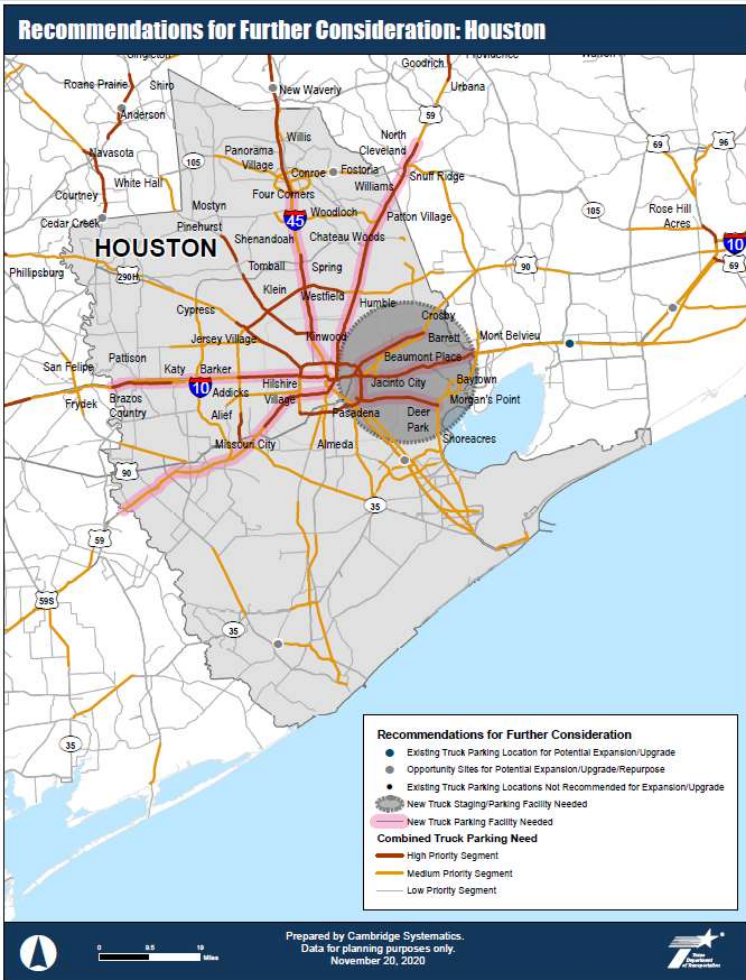


Park and Ride / TOD Potential



TxDOT Truck Parking Study

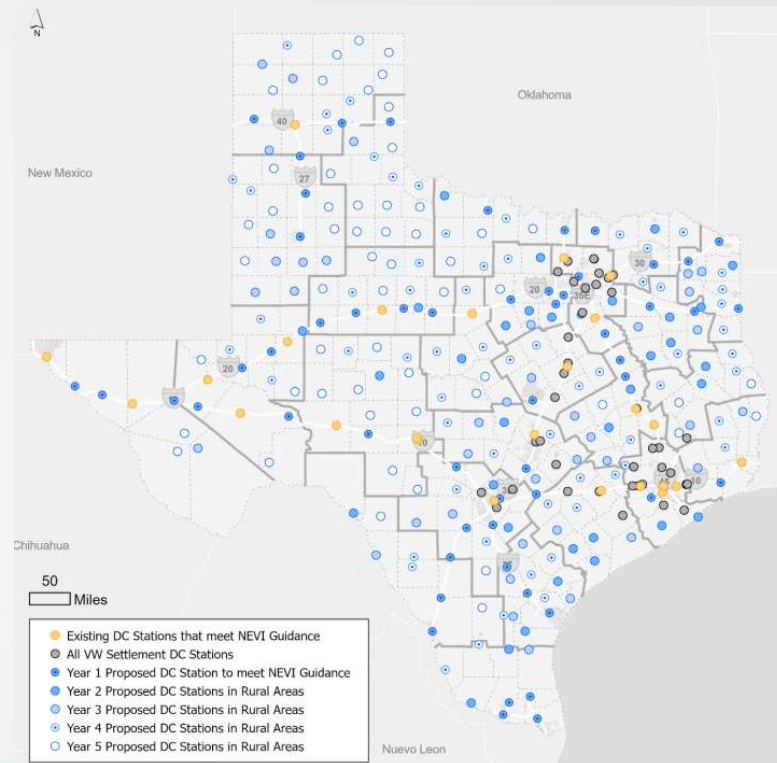
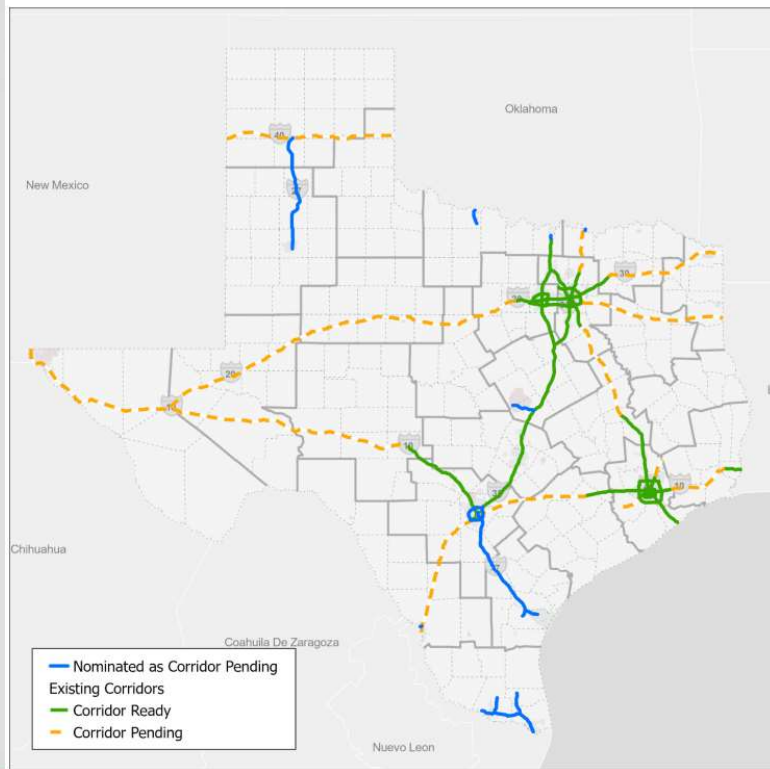
- TxDOT Truck Parking Study:
 - Houston-Galveston region has shortage of 500 or more spaces
 - SH 249 – 0.6 crashes per mile involving parked trucks (3rd highest in Texas)



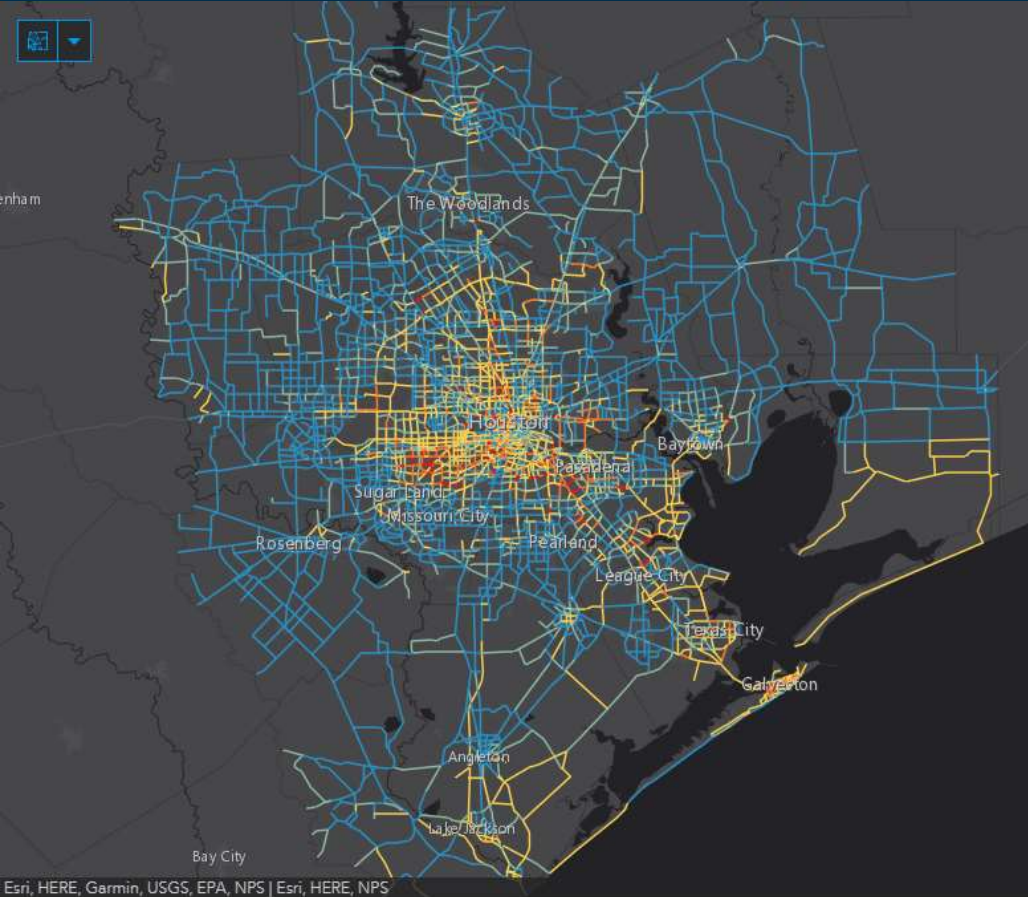
TxDOT Electric Vehicle Charging Plan

Prioritize Electric Alternative Fuel Corridors for NEVI Grant

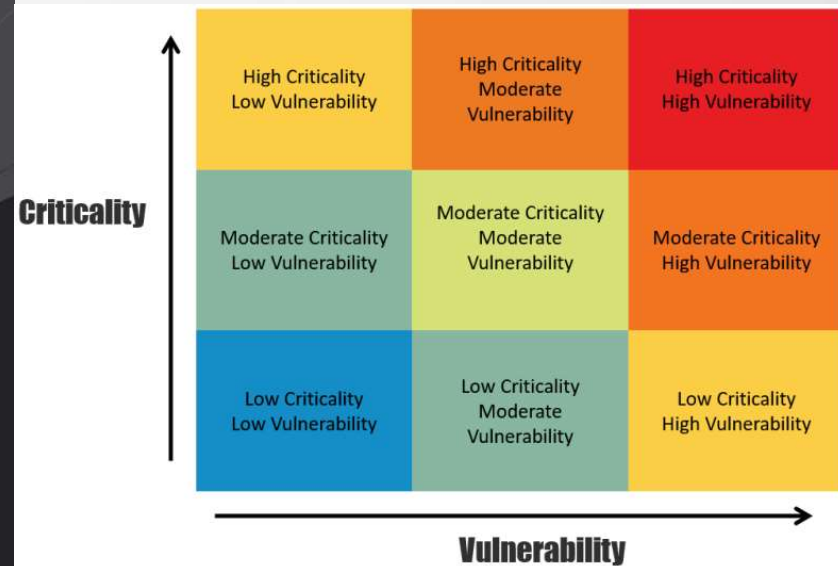
Round 6 Electric – Alternative Fuel Corridor Nomination Map



Resiliency



- Vulnerability Assessment Study (2018)
- Highly Critical/Highly Vulnerable:
 - 9.5 Miles of highway
 - 48 miles of major roadways



Resiliency

■ Federal Planning Process Requirements

Requirement	Response
Improve the resiliency and reliability of the transportation system (FAST Act)	<ul style="list-style-type: none">• Assessment of vulnerability of assets• Identified initiatives to improve resiliency• Included in Project Scoring
Reduce or mitigate stormwater impacts of surface transportation	<ul style="list-style-type: none">• Identified susceptible roadways• Listing of mitigation projects
Identify policies and design standards to reduce stormwater impacts	Identified 25 adaptation strategies
Coordinate resiliency planning with Emergency Management agencies	Emergency Evacuation Zone Program (Zip Zones)
Increase resiliency of the National Highway System to extreme weather	Address through Transportation Asset Management Plan (stateDOT)

Resiliency

■ Other Regional Response

- Transportation Vulnerability Assessment Study
 - Foresight Panel on Environmental Effects
 - Pilot Eco-Corridors
 - Incorporate Adaptation Strategies into RTP
- Need to develop a Resilience Improvement Plan
 - Credit for local match on projects included in MPO's Resiliency Plan (BIL)

■ Project Scoring

- Resiliency will be a significant factor in project scoring
- Maintain Category – Infrastructure Resiliency

Bipartisan Infrastructure Law – Highway

Note: This table does not include all BIL programs or eligible entities, and there are additional nuances not represented in this table.

* “PA” means a special purpose district or public authority with a transportation function; FLMA means Federal Land Management Agency

Program Examples	State	MPO	Local	Tribe	PA*	Territory	FLMA*
Apportioned programs (formula)	✓						
Bridge Program (formula)	✓			✓			
National Electric Vehicle Formula Program	✓		✓				
Safe Streets and Roads for All program		✓	✓	✓			
PROTECT Grants (discretionary)	✓	✓	✓	✓	✓		✓
Charging and Fueling Infrastructure Program	✓	✓	✓	✓	✓	✓	
Congestion Relief Program	✓	✓	✓				
Bridge Investment Program (discretionary)	✓	✓	✓	✓	✓		✓
Reconnecting Communities Pilot Program	✓	✓	✓	✓			
Rural Surface Transportation Grants	✓		✓	✓			
INFRA	✓	✓	✓	✓	✓		✓
National Infrastructure Project Assistance	✓	✓	✓	✓	✓		
Local and Regional Project Assistance	✓	✓	✓	✓	✓	✓	

Bipartisan Infrastructure Law – Highway

■ Changes to Metropolitan Planning Program

Topic	Changes
MPO Representation	Requirement to consider equitable and proportional representation of population of metropolitan planning area when MPO designates officials or representatives <u>for the first time</u>
Consistency of planning data	When <u>more than one MPO is designated within an urbanized area</u> , requires the MPOs to ensure consistency of planning data to the maximum extent practicable
Public participation	Encouragement for <u>MPOs to use social media and web-based tools</u> to foster public participation and to solicit public feedback during the transportation planning process
Travel demand data and modeling	Requirements for <u>DOT to support State/MPO travel demand data and modeling</u> , including a study, data, and an evaluation tool (§11205)
Safe and accessible transportation options	Requirement that each MPO <u>use ≥2.5% of funds</u> apportioned for Metropolitan Planning (PL) on one or more activities <u>to increase safe and accessible options</u> for multiple travel modes for people of all ages and abilities (§11206)

Bipartisan Infrastructure Law – Highway

■ Highway Resources

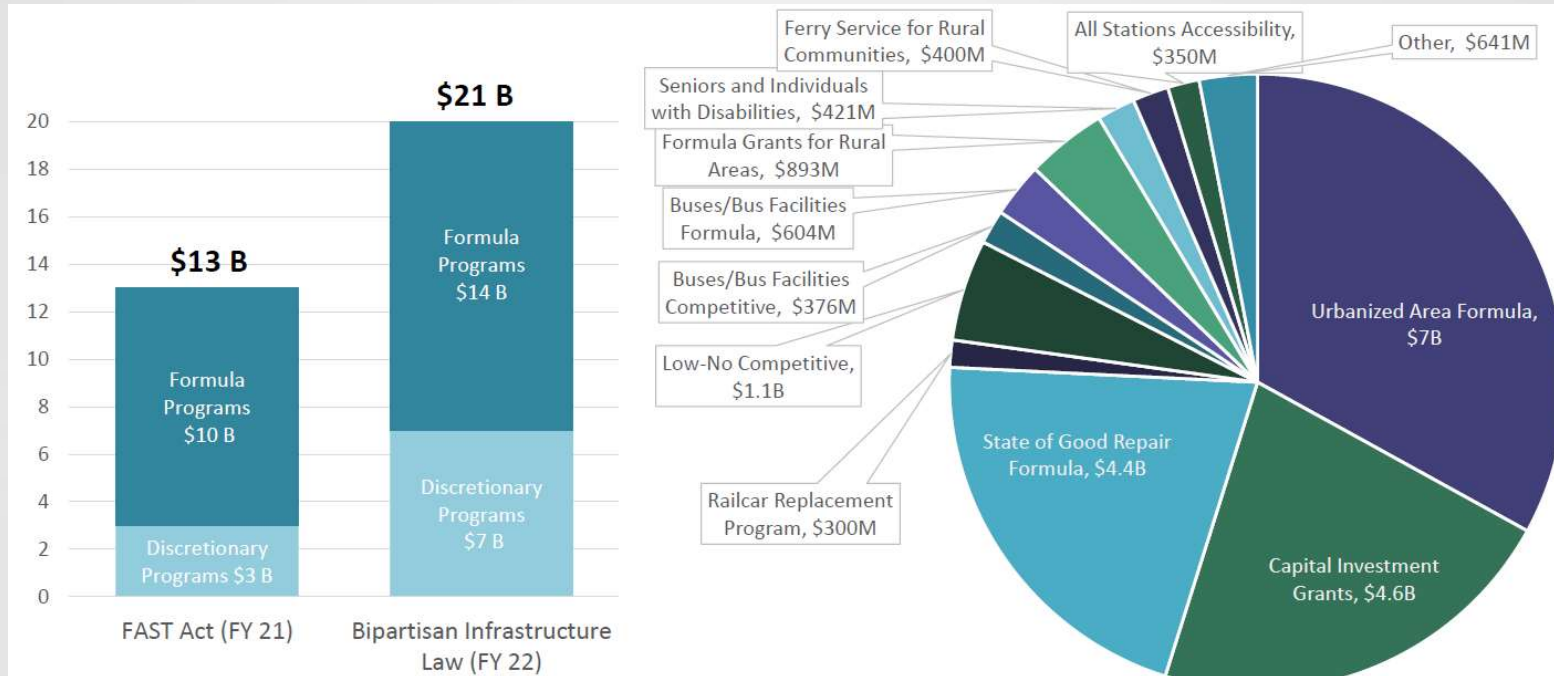
- BIL website: <https://www.fhwa.dot.gov/bipartisan-infrastructure-law/>
- BIL Highway Program Fact Sheets: https://www.fhwa.dot.gov/bipartisan-infrastructure-law/fact_sheets.cfm

Bipartisan Infrastructure Law – Transit

- Significant Funding Increases
 - Up to \$108 billion for public transit over five years
 - \$69.9 B from Highway Trust Fund
 - \$21.25 B in Advance Appropriations
 - \$17 B in Authorized Appropriations
 - Continues existing structure for FTA programs focused on urban, rural, and targeted populations
- New Grant Programs
 - Rail Vehicle Replacement Program
 - All Station Accessibility Program
 - Electric / Low-Emitting Ferry Pilot Program
 - Ferry Service for Rural Communities
- Notices of Funding Opportunity for 10 competitive programs
 - Will be issued on a rolling basis; will combine to extent possible
 - NOFOs will contain program guidance for new programs
 - Buses & Bus Facilities and Low or No Emission Vehicle Program likely first to be issued
 - Schedule for some programs depends on timing of a full year appropriation

Bipartisan Infrastructure Law – Transit

- Increased Funding for Public Transportation (FAST Act vs BIL)



Note: Total funding shown includes authorized trust fund contract authority, authorized annual appropriations for FY22 and certain advance appropriations for FY22 enacted as a part of the Bipartisan Infrastructure Law. Annual appropriations are subject to Congressional action.

Bipartisan Infrastructure Law – Transit

■ Transit Resources

- Bipartisan Infrastructure Law Website - <https://www.transit.dot.gov/BIL>
- Program Fact Sheets - <https://www.transit.dot.gov/funding/grants/fta-program-fact-sheets-under-bipartisan-infrastructure-law>