

**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#

**August 17, 2022**

**1:30PM**

**AGENDA**

1. Call to Order  
*Roll Call Attendance*
2. Acceptance of Minutes  
*From meeting of July 13, 2022*
3. Reliability, Congestion, and Air Quality Performance Measures (Karen Owen)
4. 2045 RTP Update (Mike Burns)
  - a. Review Visioning Survey responses
  - b. Phase 2 Outreach
5. Announcements
  - a. Next TPC Meeting – August 26, 2022 at 9:30AM (Hybrid)
  - b. Next TAC Meeting – September 14, 2022 at 9:30AM (Hybrid)
  - c. Next RTP Subcommittee Meeting – September 21, 2022 at 1:30PM (Teleconference)
6. 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  
July 13, 2022  
1:30PM  
Minutes**

**Member Attendance:**

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

**Others Present:** Amy Skicki, Caroline Bailey, Adam Beckom, Daniel Brassil, Catherine McCreight, Vernon Chambers, Andrew DeCandis, Eliza Paul, Carrie Evans, David Fink, Shixin Gao, James Garland, Veronica Green, Harrison Humphreys (Guest), Fizza Hassan, Anita Hollmann, Allie Isbell, Jeffrey English, Ayo Jibowu, Catherine Kato, Stephen Keen, Megan Kennison, Justin Kuzila, Vishu Lingala, Lisa Collins, Mike Wilson, Monique Johnson, Carlene Mullins, Frank Pagliei, Craig Raborn, Alan Rodenstein, Loyd Smith, Tim (Guest), Tim (Guest), Veronica Waller, Christopher Whaley

**Staff Participating:**

Mike Burns, Karen Owen

1. Call to Order
  - Chair Morad Kabiri called the meeting to order at 1:33PM and conducted roll call to ensure a quorum.
  - Morad Kabiri confirmed that a quorum was present.
  
2. Acceptance of Minutes
  - Ken Fickes made a motion to approve, Jonathan Brooks seconded.
  - The motion was approved unanimously.

3. Reliability, Congestion, and Air Quality Performance Measures (Karen Owen)
  - Karen Owen gave a presentation on reliability, congestion and air quality federal performance measures. She mentioned the differences between reliable and unreliable trips (Level of Travel Time Reliability), differences in reliability between interstate and non-interstate NHS, what affects reliability levels (COVID, population increases, etc), and recommendations for LOTTR and TTR (Truck Travel Reliability).
  - Karen mentions staff recommends new performance measures in peak hour excessive delay, as well as percentage of non-single occupant vehicles for 2024 and 2026.
  - Karen says we did not meet performance targets for CMAQ (Congestion Mitigation Air Quality) and going forward we are modifying future targets.
  - Karen provided a timeline of pertinent dates for federal performance measures before ending the presentation
  - Comments/Questions
    - Bruce Mann asks for clarification on CMAQ slides, which Karen provides.
    - Harrison Humphreys asks how to isolate emission productions by project
      - Karen says TIP projects that are obligated have emission totals and are reported, which leads to the totals.
    - Loyd Smith asks for clarification on federal performance measures and if this data is useful for project selection, etc.
      - Karen mentions federal measures are solely about the NHS
    - Craig Raborn states tools are in the works on measuring the effects that projects have on achieving federal performance measures.
    - David Fields asks if H-GAC receives any guidance, Karen says no.
      - He also says that if occupancy goes up, delay goes down per person and believes that is compelling and should be in the RTP
        - Mike Burns mentions that this may be better served in the CMP, but open to this.
    - Charles Airohuodion asks about non-interstate NHS LOTTR federal performance measures and constructions affect
      - Karen says that construction makes the system less reliable.
    - Ken Fickes had a comment on LOTTR
  - There was no further discussion
4. 2045 RTP Updating – Visioning Phase Update (Mike Burns)
  - Mike Burns 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. Mike also shared current statistics on the engagement tools and gave next steps in the RTP process.
    - Loyd Smith mentions that teleworking isn't a representative sample.
    - Loyd asks about 30 day stop control after fatality, Mike mentions this idea is to bring up intersection safety issue (not from H-GAC staff).
    - Yancy Scott talks about right turn lanes and is a fan of roundabouts
    - Jose Pulido says CIG is used for METRO buses.
    - Perri D'Armond interested in freight shuttle to decrease emissions
      - Would move freight quickly and efficiently and truck drivers would not lose their jobs.
      - Would also relieve workforce shortages of drivers with CDL licensing.

- There was no further discussion.
5. 2045 RTP Update – Other Elements for Discussion (Mike Burns)
- a. Parking
    - Mike Burns presented topics related to regional parking assets, including solutions to contribute to a congestion relief program, commercial motor vehicle parking facilities assessment, and electric vehicle charging infrastructure. Parking benefits districts, curb lane management, park and ride potential locations via METRONext were also mentioned.
    - David Fields expanded on parking
    - Taylor Marcantel from METRO – recommended park and ride improvements
    - Perri D’Armond spoke about Park and Ride in FBC and a Park and Ride at UH-Sugar Land
      - Looking at all options to bring people in and take them out of Fort Bend County.
    - Justin Kuzila spoke about TOD working group
      - Ken Fickes added to the discussion.
    - Mike Burns mentions the TxDOT Truck Parking Study and TxDOT Electric Vehicle Charging Plan
      - Charles expounds further on these two TxDOT initiatives
  - b. Resiliency
    - Mike Burns presented an overview of required regional activities related to resilience, including federal planning process requirements and the need to develop a Resilience Improvement Plan.
  - c. Bipartisan Infrastructure Law
    - Mike Burns presented some elements of the BIL related to MPO activities for discussing, such as what is MPO specific programs for funding and MPO changes.
    - There was no further discussion
6. Announcements
- a. Next TAC Meeting – July 20, 2022 at 9:30AM (Teleconference)
  - b. Next TPC Meeting – July 29, 2022 at 9:30AM (Teleconference)
  - c. Next RTP Subcommittee Meeting – August 10, 2022 at 1:30PM (Teleconference)
- Morad Kabiri mentioned upcoming meetings over the next month.
7. Adjourn
- Morad Kabiri asked for any other comments. Hearing none, the Chair declared the meeting adjourned at 2:56PM.

Minutes submitted by: Stephen Keen



# Reliability, Congestion and Air Quality Performance Measures



**Karen Owen**  
**RTP Subcommittee**  
**August 17, 2022**



# Performance Measures

## Reliability

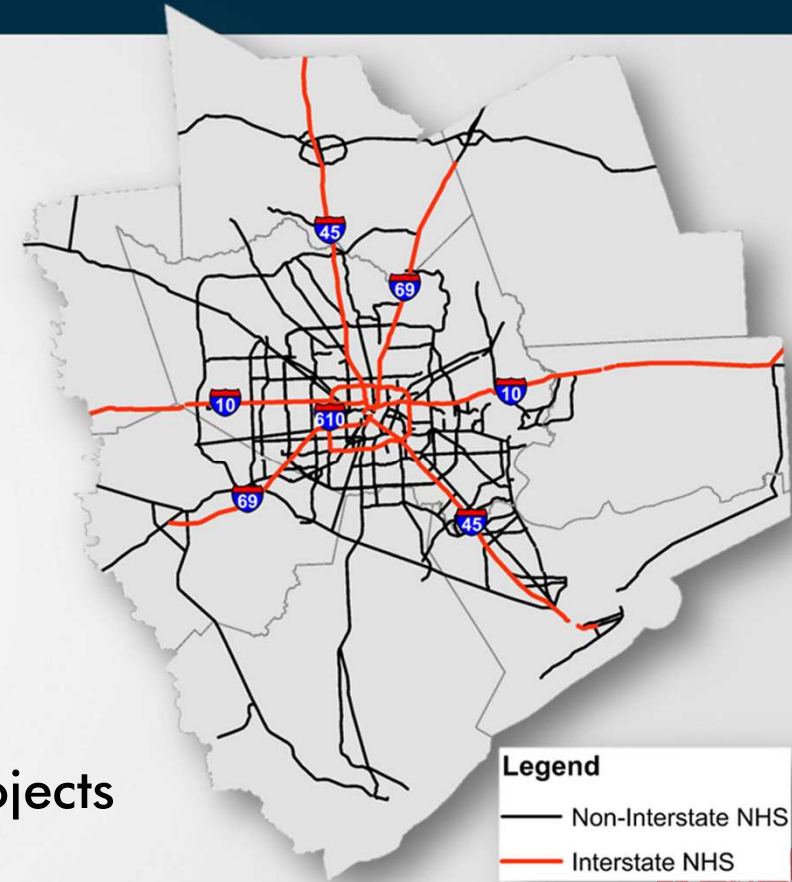
- Personal & Truck Travel

## Congestion

- Peak Hour Excessive Delay
- Non-Single Occupancy Vehicles

## Air Quality

- Tailpipe emissions reduced from CMAQ projects



# Reliability, Congestion & Air Quality



- 2022 Performance Reporting is based on 2021 data & traffic conditions
- 2024 and 2026 Target Setting
  - Can adjust 2026 targets in two years
- No penalties if targets aren't met



# Target Setting Considerations



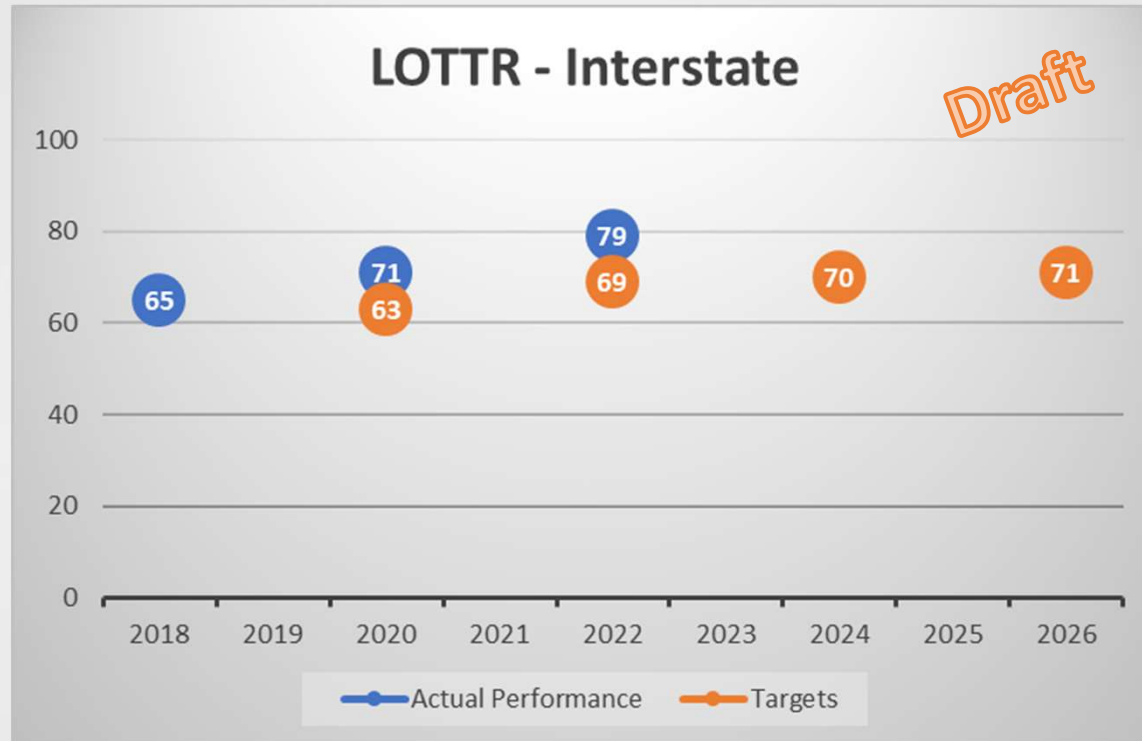
- Pandemic impacted travel patterns
- Working from Home increased
- Population growth
- 2022 Actual Performance based on 2021 data considered an outlier.

# Percentage of Reliable Person-Miles (Annual)

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

Desired Trend

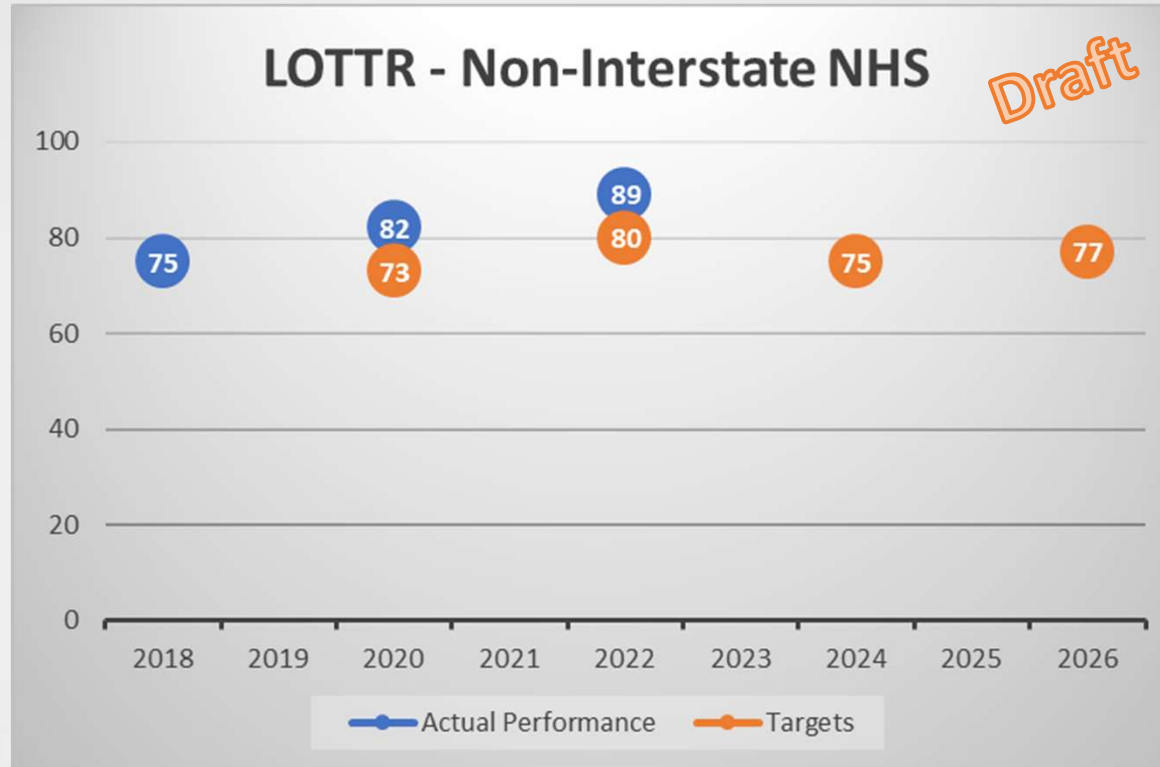


# Percentage of Reliable Personal Miles (Annual)

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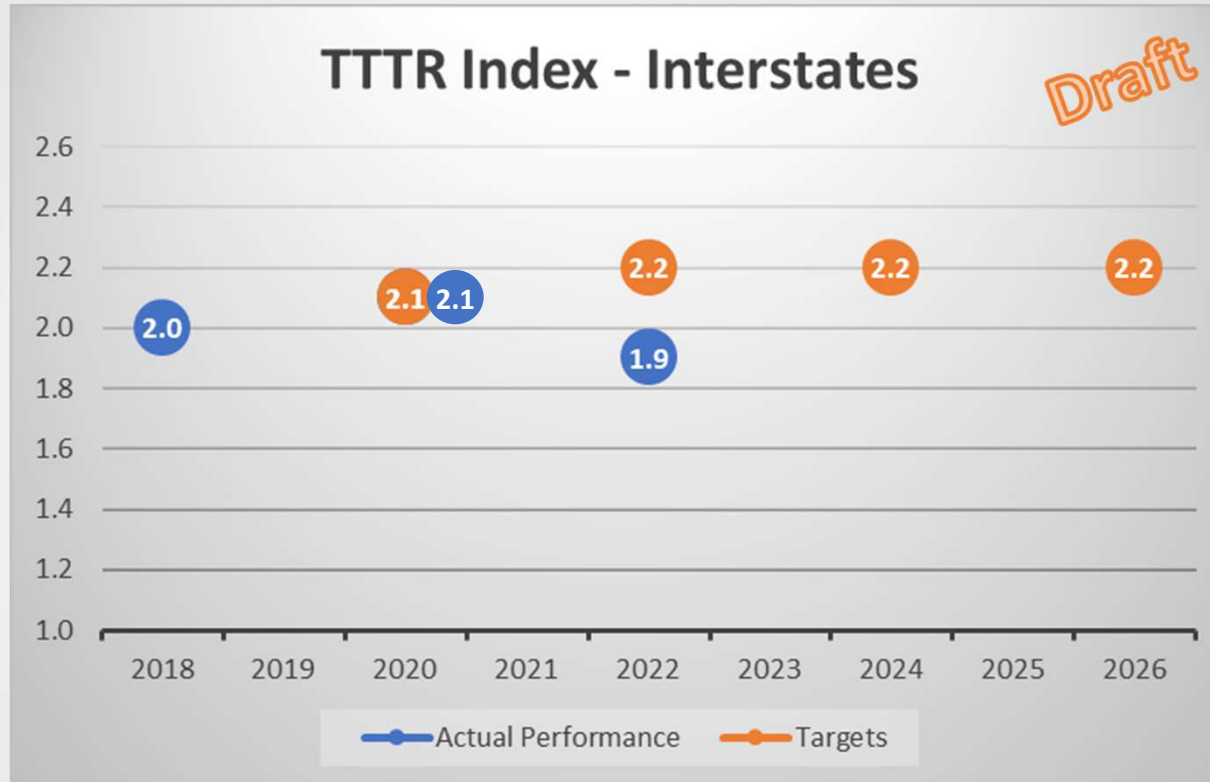
# Truck Travel Time Reliability Index

Ratio of 95<sup>th</sup> (very bad traffic) percentile / 50<sup>th</sup> (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

Desired Trend



# Project Types & Strategies



- Transportation Improvement Program (TIP)
- Regional Transportation Plan (RTP)
- Tow and Go Program
- TranStar
- Commute Solutions
- TxDOT's Connect Smart app



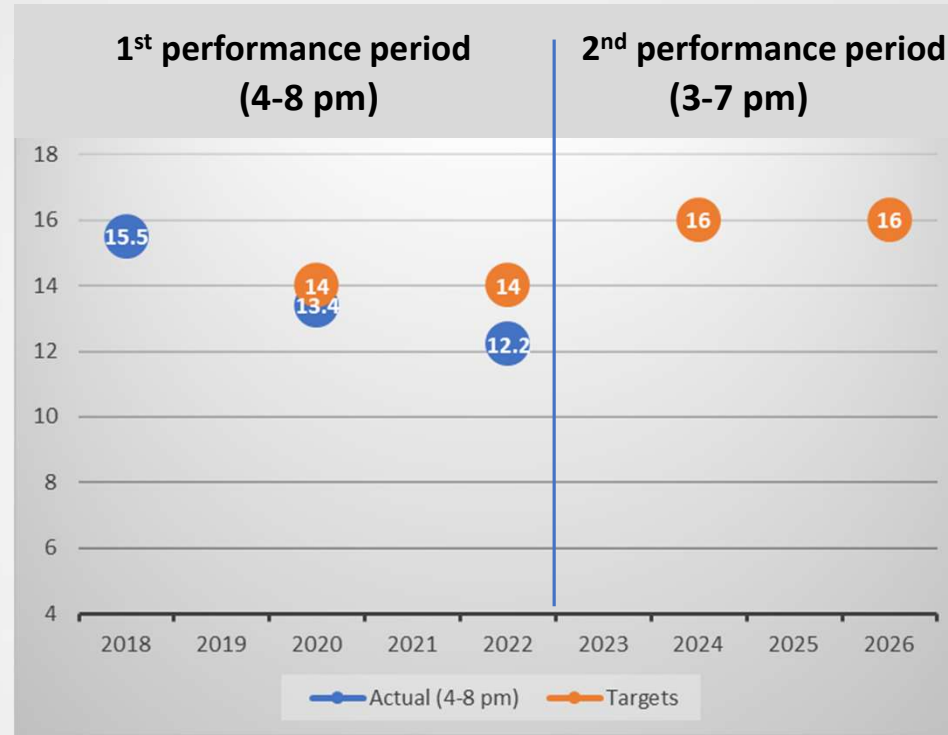
# Peak Hour Excessive Delay

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

Desired Trend



# 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.

## Conroe-Woodlands Urban Area (3-7 pm)



Draft

New target setting requirement for 2024 & 2026

Desired Trend

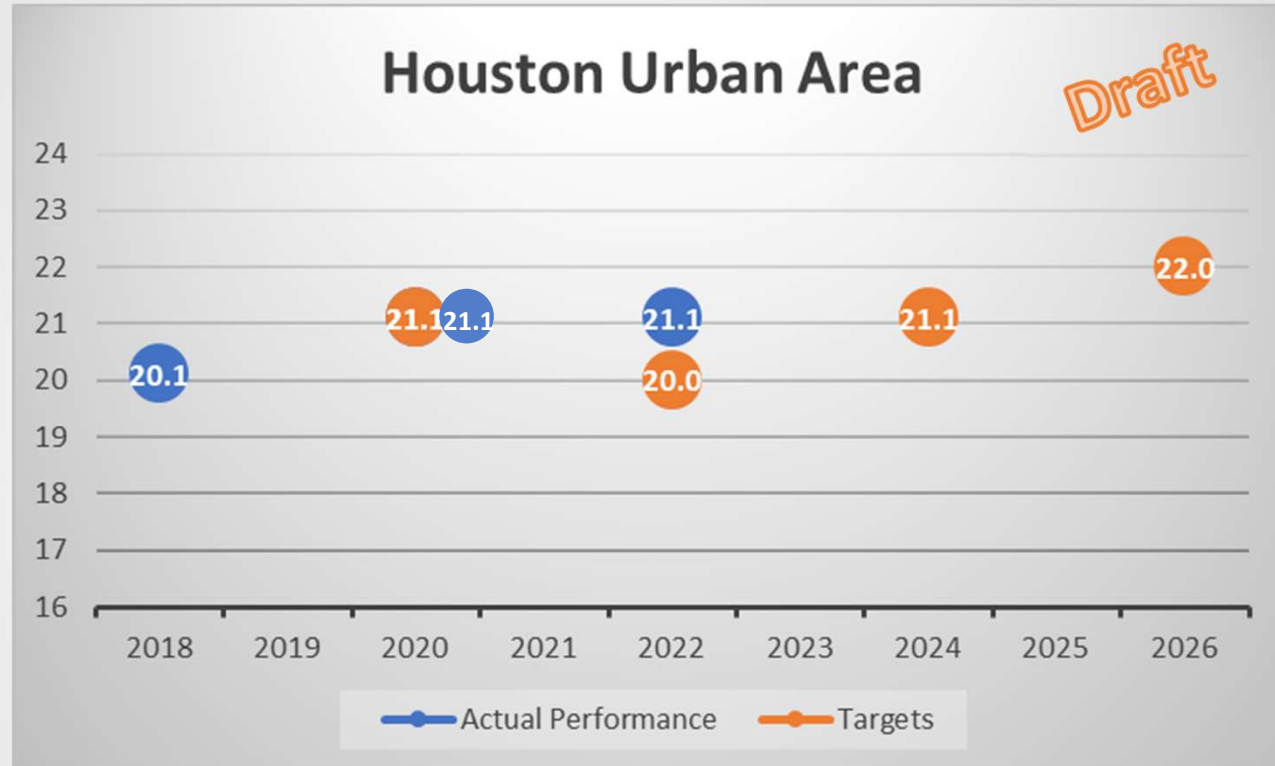


# Percent of Non-Single Occupant Vehicle Trips

Percent of Work Trips made in Non-Single Occupant Vehicles:

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

American Community Survey  
5-year averages



Targets met in  
2020 and 2022

Desired Trend



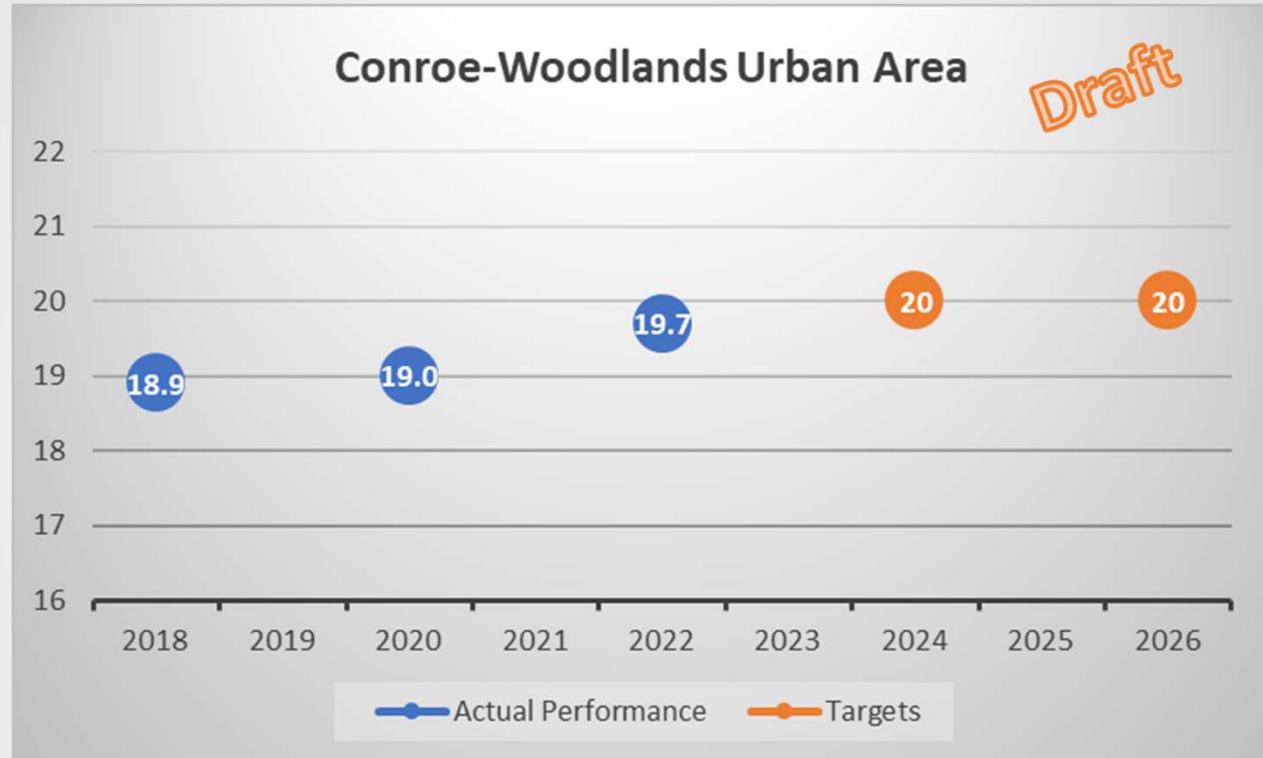


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- Working from home
- Taxicab, motorcycle or other means

American Community Survey  
5-year averages



New target setting  
requirement for  
2024 & 2026

Desired Trend



# Congestion Mitigation Air Quality (CMAQ)

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

NO<sub>x</sub> and VOC emission reductions from CMAQ projects that went to construction in FY 2018 to 2021.

1 <sup>st</sup> Performance Period (FY 2018 – 2021)	NO <sub>x</sub>	VOC
4-Year Targets	1,429.077	234.604
4-Year Actuals	1,383.040	98.863
Difference	(46.037)	(135.741)

Nitrogen Oxides (NO<sub>x</sub>)  
Volatile Organic Compounds (VOC)

4-Year Targets were not met

Desired Trend



# CMAQ Air Quality – Future Targets

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

2nd Performance Period (FY 2022 – 2025)	NO <sub>x</sub>	VOC
2-Year Targets	221.251	69.939
4-Year Targets	601.465	172.864

Draft

Applied a project delivery success rate from TIP projects the 1<sup>st</sup> performance period to future TIP projects in the 2<sup>nd</sup> performance period.

Nitrogen Oxides (NO<sub>x</sub>)  
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

# Performance Measures



**Public Comment Period July 15 to August 14**

## **Performance Measures Comments**

**<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>**

**Recommendation for the reporting and targets to be forwarded to the Transportation Advisory Committee (TAC) and the Transportation Policy Council (TPC)**

**Karen Owen [karen.owen@h-gac.com](mailto:karen.owen@h-gac.com) (832) 681-2614**



# 2045 RTP Update – Visioning Survey Responses



August 17, 2022  
RTP Subcommittee



# RTP Update – Visioning

## ■ Engagement Tools

- Survey closed July 31<sup>st</sup> – 2,088 responses
- Comment Map – 293 pins dropped
- Ideas – 8 contributions
- Story Map – includes background, performance measures, and interactive mapping

## ■ Next Steps

- August to December 2022 – Prioritization Phase
  - October to December – Conduct Outreach
- January to April 2023 – Draft Plan Review

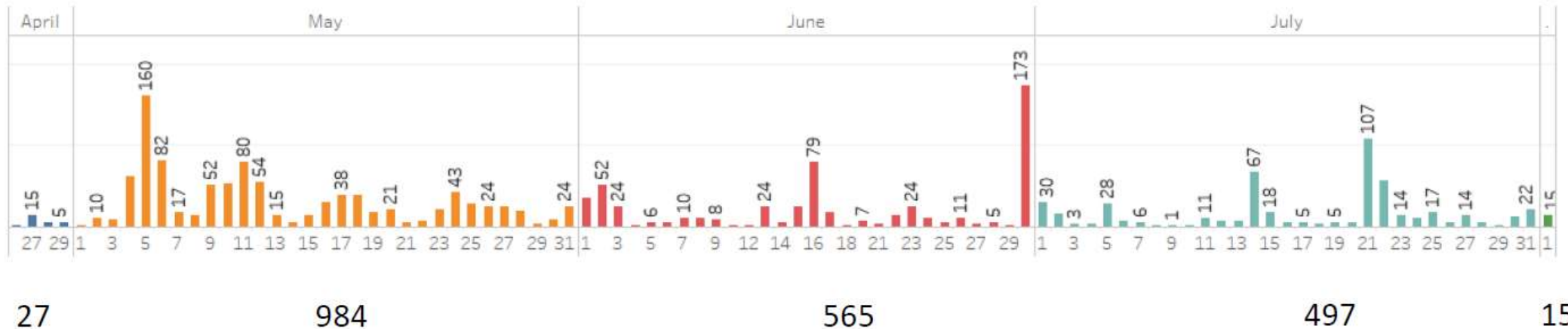


# Visioning Survey Response Dashboard

- Final dashboard will display mapping and cross tabulation
- A link will be provided prior to the September meeting.

- Total 2,088 Responses
- Excluding 7 outside Texas and outside 77XXX zip codes

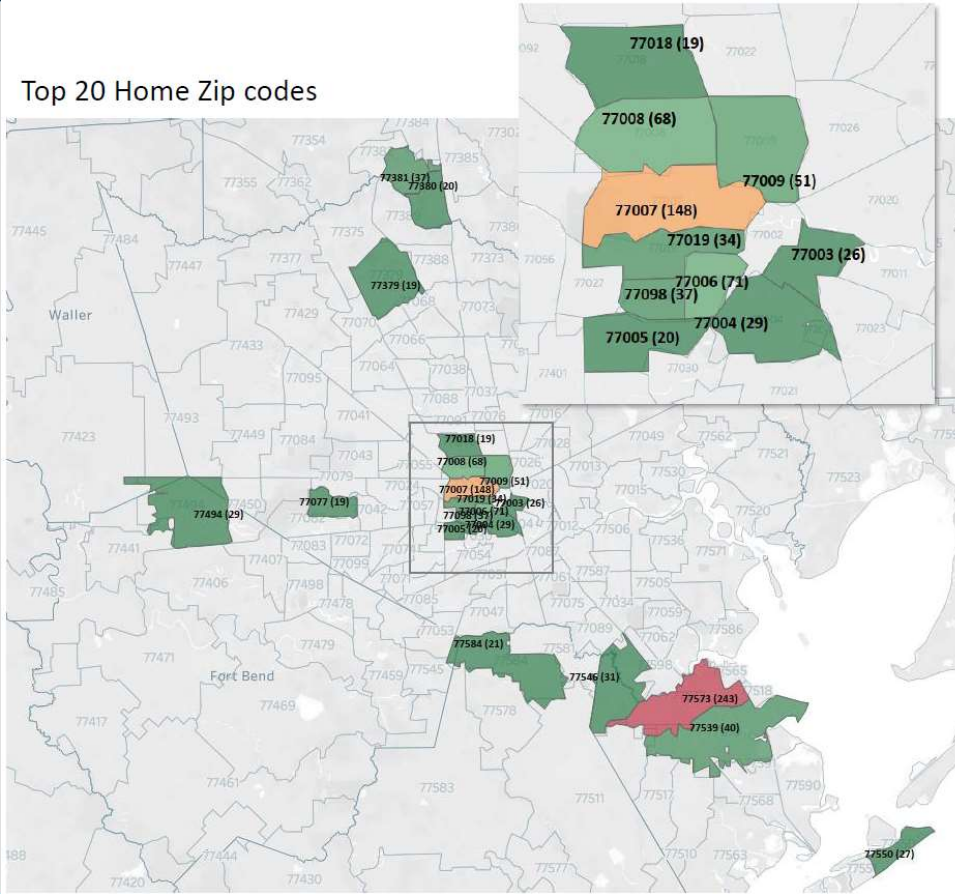
Responses by Date



# Survey Responses – Top 20 Zip Codes



Top 20 Home Zip codes



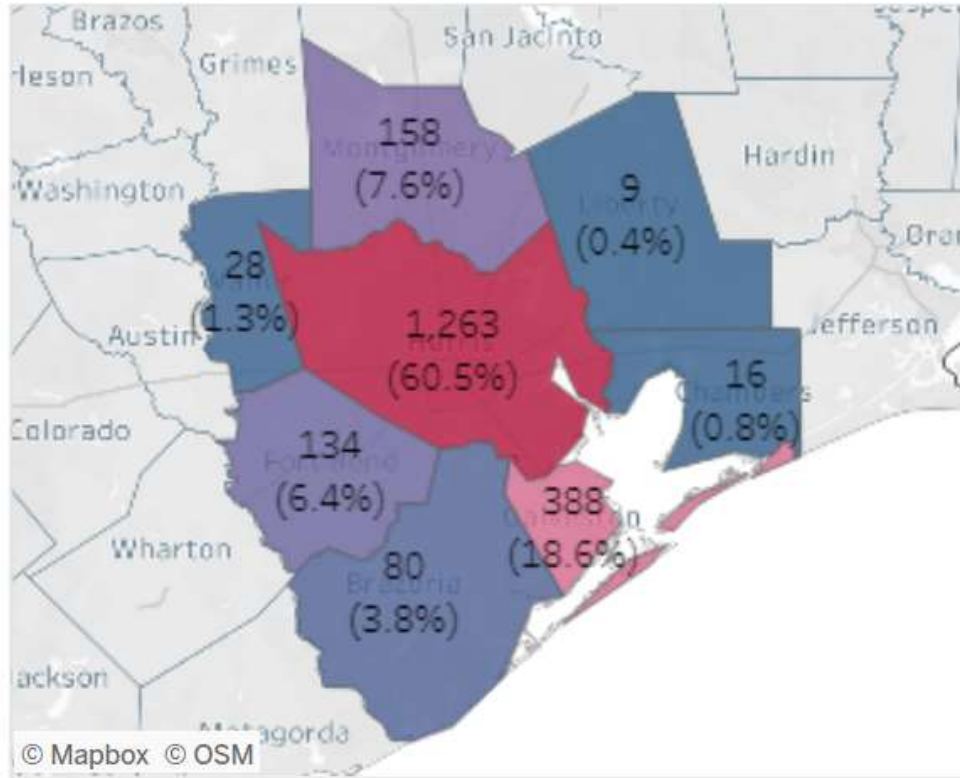
Top 20 Home Zipcode

Q1 Ho..	≡
Grand Total	2,088 (100.00%)
77573	243 (11.64%)
77007	148 (7.09%)
77006	71 (3.40%)
77008	68 (3.26%)
77009	51 (2.44%)
77539	40 (1.92%)
77098	37 (1.77%)
77381	37 (1.77%)
77019	34 (1.63%)
77546	31 (1.48%)
77004	29 (1.39%)
77494	29 (1.39%)
77550	27 (1.29%)
77003	26 (1.25%)
77584	21 (1.01%)
77005	20 (0.96%)
77380	20 (0.96%)
77018	19 (0.91%)
77077	19 (0.91%)
77379	19 (0.91%)

# Survey Responses by County



## Home Counties



Home County	RTP Survey	%	H-GAC Region
Total	2,088		
Brazoria	80	3.8%	5.3%
Chambers	16	0.8%	0.6%
Fort Bend	134	6.4%	11.4%
Galveston	388	18.6%	4.9%
Harris	1,263	60.5%	67.3%
Liberty	9	0.4%	1.2%
Montgomery	158	7.6%	8.5%
Waller	28	1.3%	0.8%
Outside 8 Counties	17	0.8%	

# Survey Responders vs Regional Demographics

Gender	RTP Survey	%	H-GAC Region
Total	2,088		
Male	984	47.1%	49.6%
Female	937	44.9%	50.4%
Prefer not to answer	167	8.0%	

Age	RTP Survey	%	H-GAC Region
Total	2,088		
Under 25 years (20-24)	89	4.3%	9.9%
25 to 44 years	955	45.7%	41.3%
45 to 64 years	711	34.1%	33.8%
65 to 84 years	286	13.7%	14.1%
85 years and over	5	0.2%	1.6%
Prefer not to answer	42	2.0%	

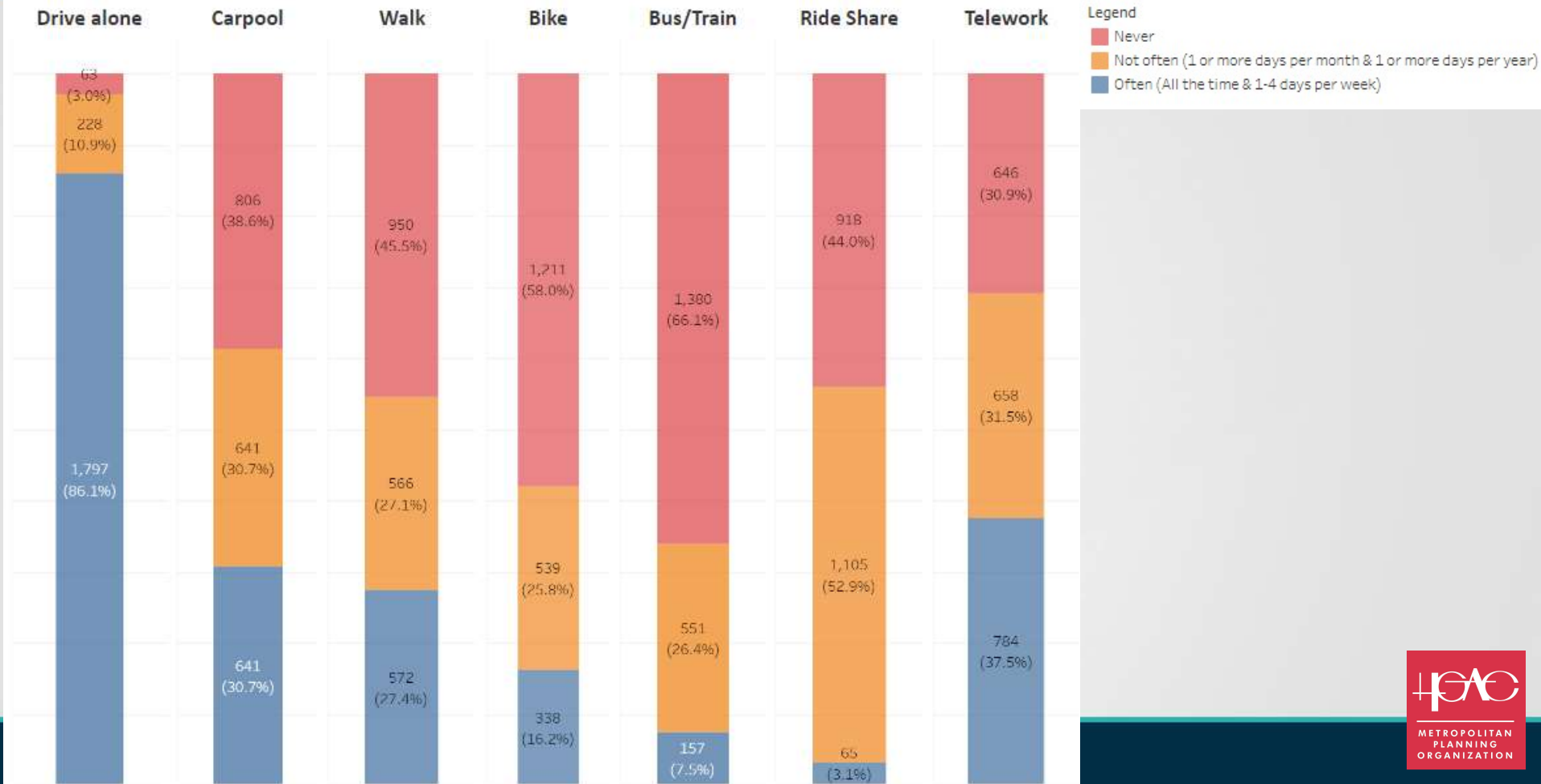
Race	RTP Survey	%	H-GAC Region
Total	2,088		
White	1,1253	60.0%	35.4%
Black or African American	108	5.2%	16.8%
Asian or Pacific Islander	105	5.0%	7.8%
Hispanic	331	15.9%	37.5%
Other	125	6.0%	2.5%
Prefer not to answer	166	8.0%	

Home County	RTP Survey	%	H-GAC Region
Total	2,088		
Brazoria	80	3.8%	5.3%
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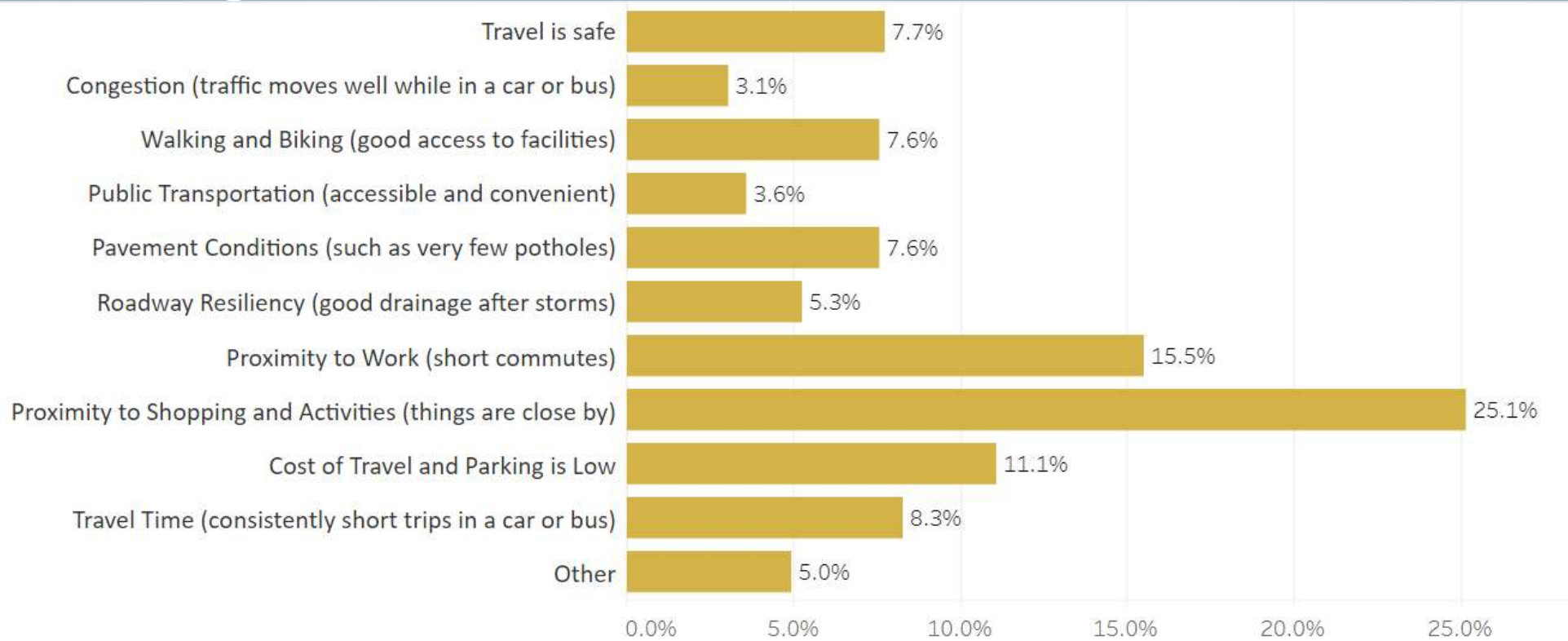
Income	RTP Survey	%	H-GAC Region
Total	2,088		
Less than \$30,000	72	3.4%	24.9%
\$30,000 to \$59,999	229	11.0%	28.5%
\$60,000 to \$84,999	301	14.4%	12.3%
\$85,000 to \$99,999	179	8.6%	
\$100,000 to \$149,999	480	23.0%	16.2%
\$150,000 or more	736	35.2%	18.2%
Prefer not to answer	91	4.4%	

Vehicle Ownership	RTP Survey	%	H-GAC Region
Total	2,088		
No vehicle	34	1.6%	5.2%
1 vehicle	529	25.3%	31.8%
2 vehicles	1,047	50.1%	40.9%
3 vehicles	295	14.1%	15.3%
4 vehicles or more	122	5.8%	6.8%
Prefer not to answer	61	2.9%	

# Q3. How often do you use the following modes of transportation?



# Q4. What do you *LIKE* about traveling around the region?



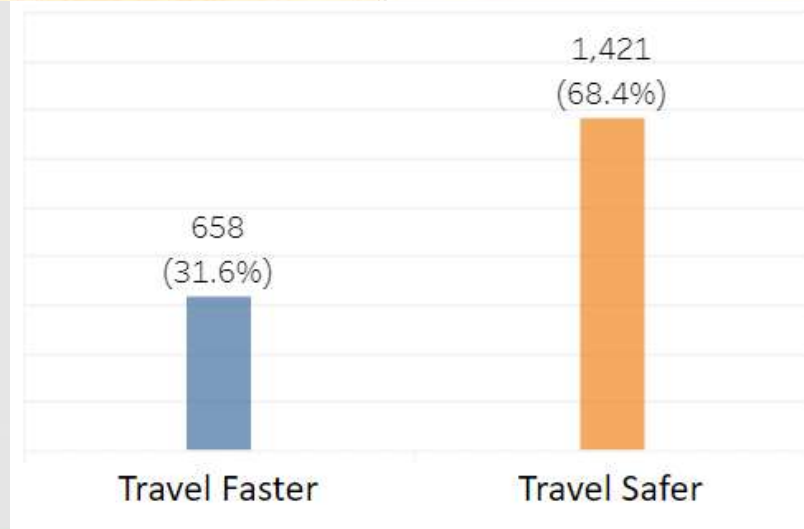
Note: Up to three could have been chosen

# Q5. What CONCERNS you about traveling around the region?



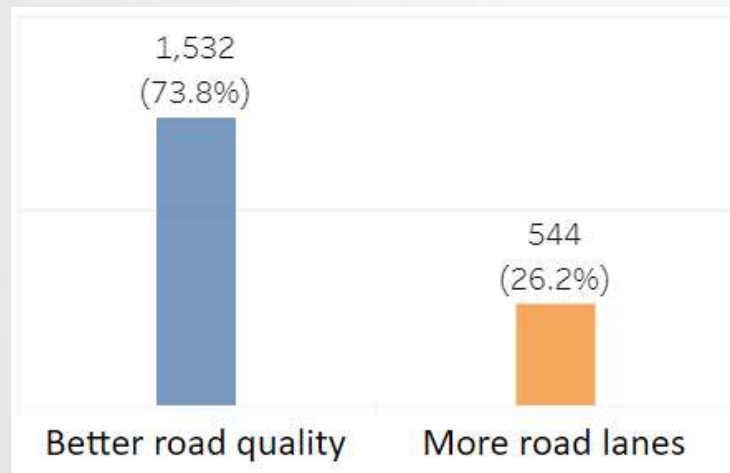
Note: Up to three could have been chosen

# Q6. What is important to you (Safety)?

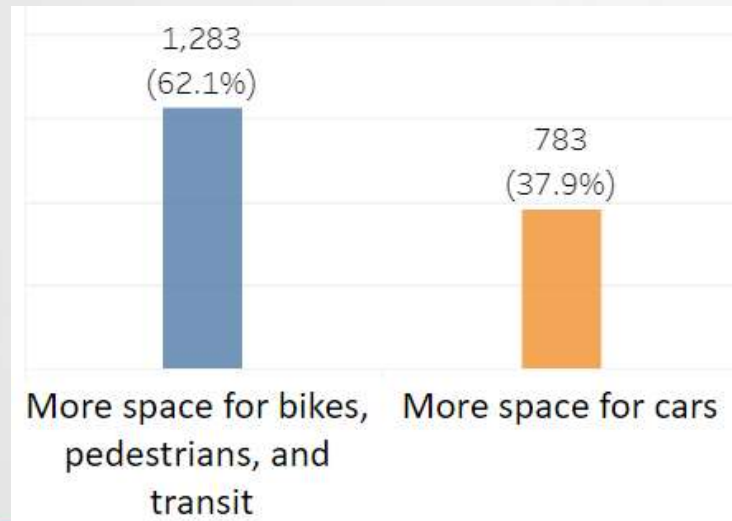




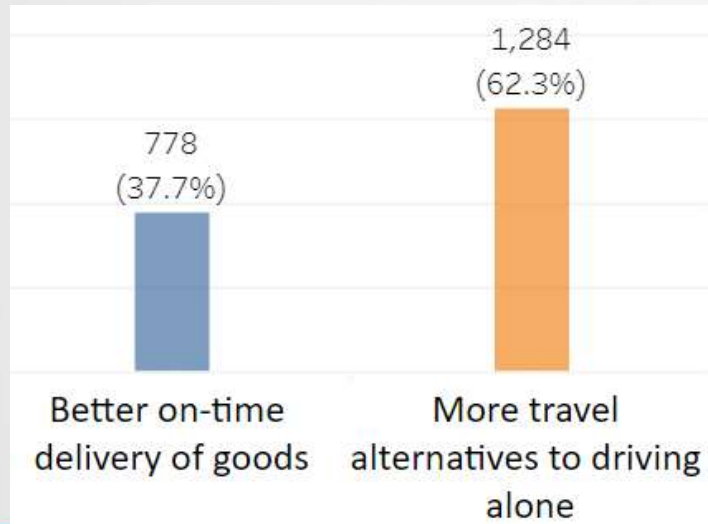
# Q7. Given limited resources, which option do you prefer (Road Condition)?



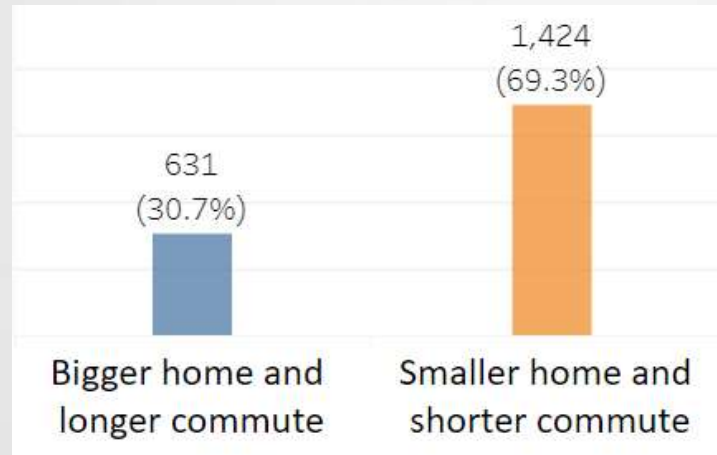
# Q8. Which do you prefer (Mobility)?



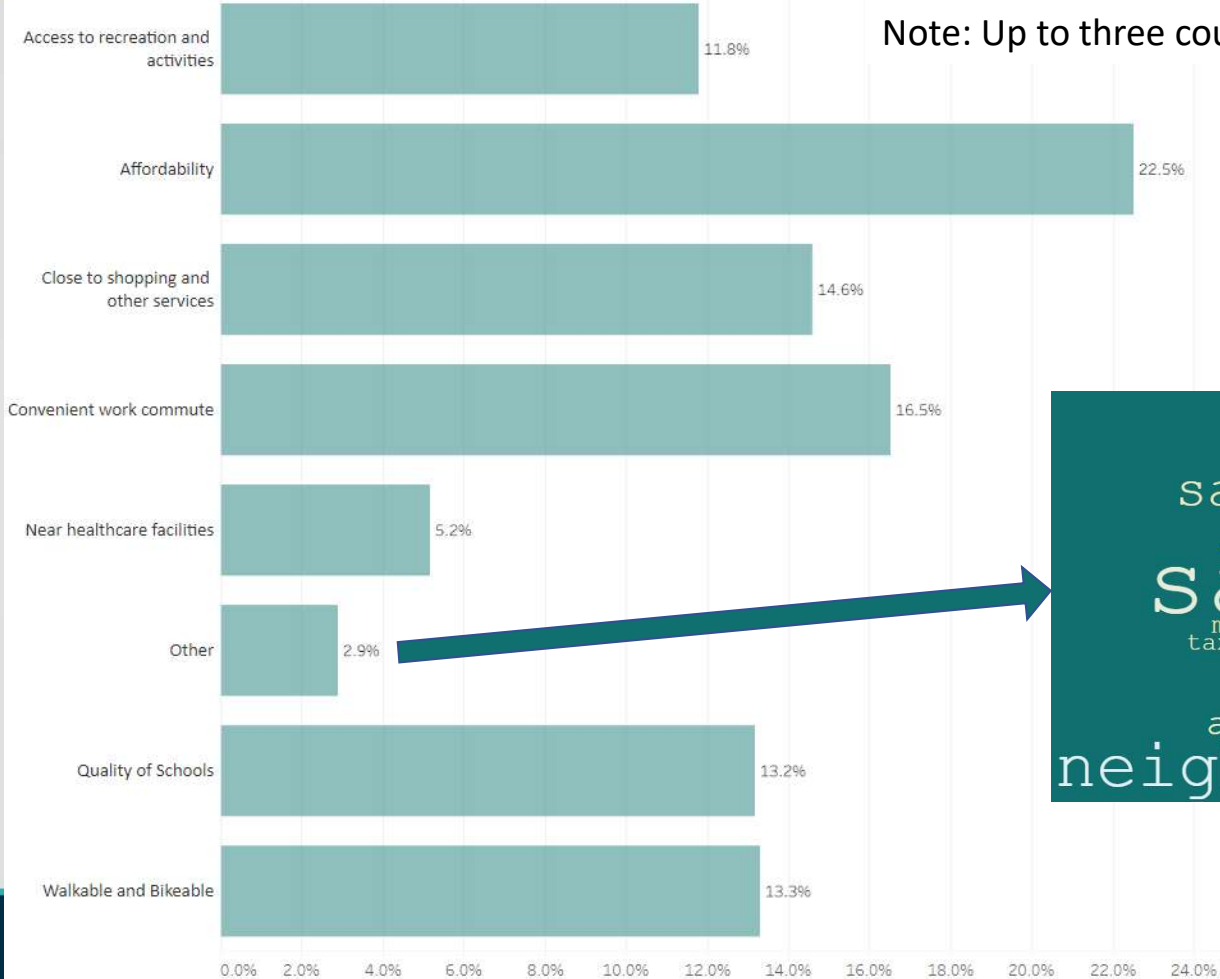
# Q9. Which option do you prefer (Economy)?



# Q10. Which option do you prefer (Environment)?



# Q11. What concerns impact your housing choice?



# Q12. Is there anything else...?

Q12. Is there anything else you would like to share to influence how transportation investments are made in our region?





# 2045 RTP Update – Phase 2 Outreach



**August 17, 2022**  
**RTP Subcommittee**



# DRAFT RTP Update – Phase 2 Outreach

## ■ Focus:

- Visioning Outreach
  - Who responded? What did they say?
- Strategies
  - Address Visioning feedback and RTP requirements
- “Vision Map” of existing investments
- Needs, desired outcomes, and future tasks

## ■ Timeframe:

- October 3, 2022 to December 1, 2022

## ■ Where:

- Online participation – [engage.h-gac.com](https://engage.h-gac.com)
- Up to 8 in-person meetings – TBD (could change)

