



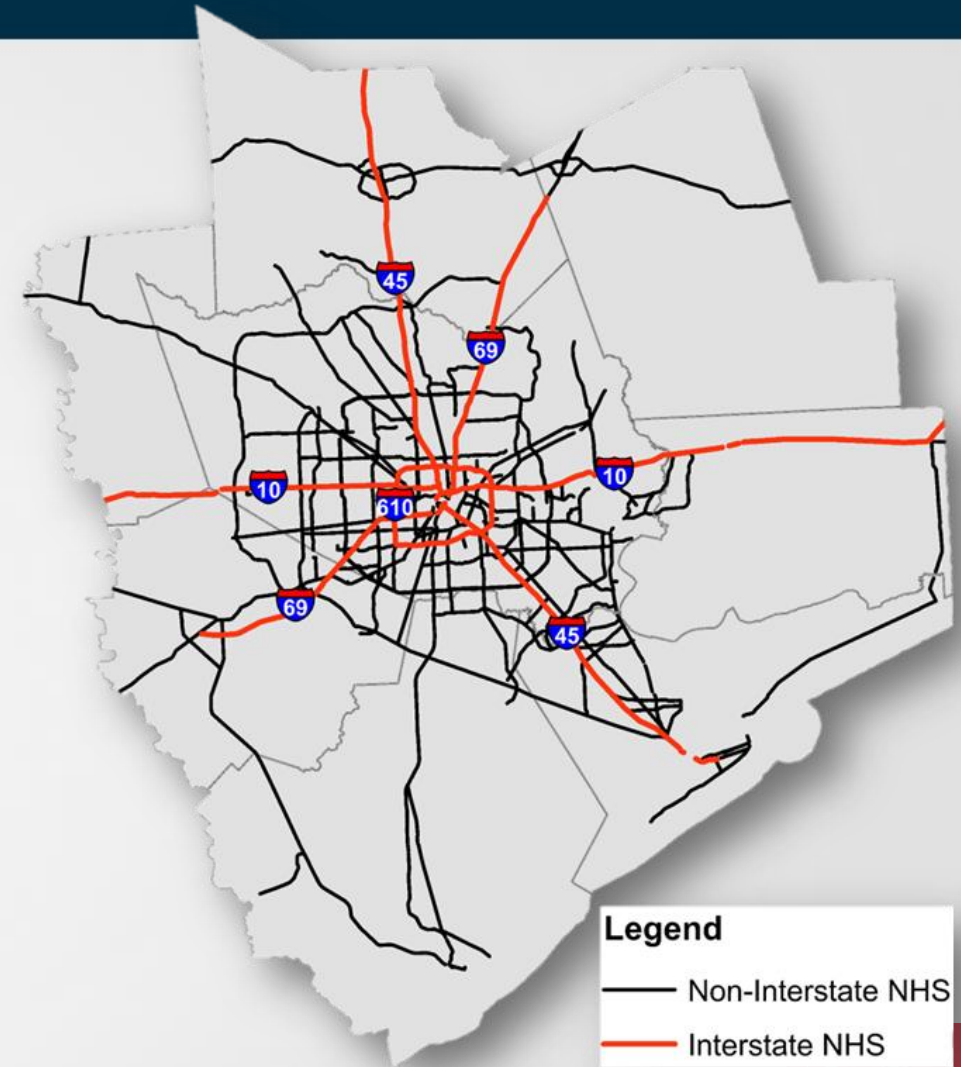
Reliability, Congestion, and Air Quality Performance Measures



Karen Owen
Transportation Air Quality Subcommittee
August 23, 2022

Federal Performance Measures

- Focus on National Highway System (NHS)
- 2022 Past Performance is based on 2021 data and 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 is considered an outlier.
- Four (4) subcommittees reviewed

Travel Reliability

		Past Performance				Targets		
Measure	2018	2020	2022	Desired Trend	2022 Target	2022 Target met?	2024 Target	2026 Target
 Person-Miles (Interstate)	65%	71%	79%	↑	69%	✓	70%	71%
 Person-Miles (Non-Interstate NHS)	75%	82%	89%	↑	80%	✓	75%	77%
 Truck Index (Interstate)	2.0	2.1	1.9	↓	2.2	✓	2.2	2.2

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National Highway System (NHS)

Peak Hour Excessive Delay

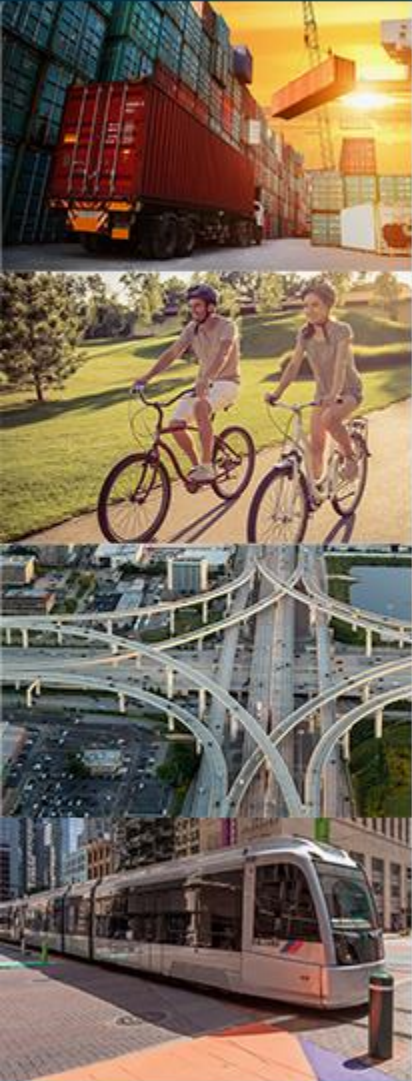


Measure	Past Performance			Desired Trend	Targets			
	2018	2020	2022		2022 Target	2022 Target met?	2024 Target	2026 Target
Peak Hour Excessive Delay (Hours per Year) Houston Urban Area	16.8	14.5	13.5	↓	14.0	✓	16.0	16.0
Peak Hour Excessive Delay (Hours per Year) Conroe-The Woodlands Urban Area	5.1	6.4	8.1	↓	N/A	N/A	8.0	8.0

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Delay hours reflect the change from the 4-8 p.m. for the Evening Peak Period to 3-7 p.m.

Projects, Programs & Strategies



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



Non-Single Occupant Vehicle Work Trips



Measure	Past Performance				Desired Trend	Targets		
	2018	2020	2022	2022 Target		2022 Target met?	2024 Target	2026 Target
Houston Urban Area Non-SOV Commuter Trips	20.1%	21.1%	21.1%	↑	20.0%	✓	21.1%	22.0%
Conroe-The Woodlands Urban Area Non-SOV Commuter Trips	18.9%	19.0%	19.7%	↑	N/A	N/A	20.0%	20.0%

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5-year average (2016-2020) - American Community Survey

Congestion Mitigation Air Quality (CMAQ)

Reductions of On-Road Mobile Source Emissions (kg/day)

1 st Performance Period (FY 2018 – 2021)	NO _x	VOC
4-Year Targets	1,429.077	234.604
4-Year Actuals	1,383.040	98.863
Difference	(46.037)	(135.741)
Target Met?	No	No

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

Nitrogen Oxides (NO_x)
Volatile Organic Compounds (VOC)

CMAQ Air Quality – Future Targets

Reductions of Source Emission Reductions (kg/day)

2nd Performance Period (FY 2022 – 2025)	NOx	VOC
2-Year Targets	221.251	69.939
4-Year Targets	601.465	172.864

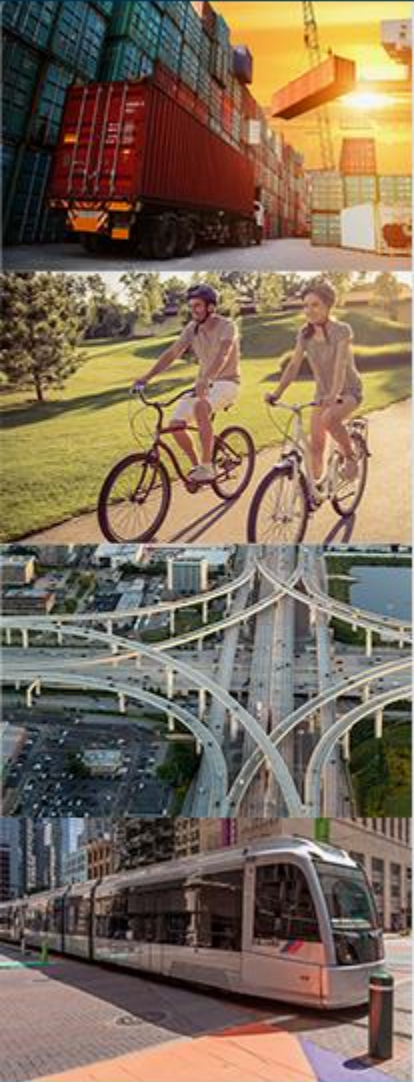
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Applied a project delivery success rate
from previous TIP projects to future TIP projects.

Nitrogen Oxides (NOx)

Volatile Organic Compounds (VOC)

Project Types & Strategies



- **Air Quality Projects**
 - Clean Cities/Clean Vehicles Program
 - Commute Solutions/Outreach
 - Regional Vanpool
 - Transit Pilot Projects
- **Construction Projects**
 - Bicycle/Pedestrian
 - Intelligent Transportation Systems (ITS)
- **Seek opportunities for CMAQ-eligible Projects**
- **Project Development & Delivery**
- **Develop an Analysis Tool**

Reliability, Congestion & Air Quality Performance Measures



TIP, RTP, Transportation Air Quality, and Transportation Systems Management & Operations Subcommittees

Federal Performance Measures

Public Comment Period - July 15 to August 14

Performance Measures

<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>

Recommend the performance and targets be forwarded to the Transportation Advisory Committee and the Transportation Policy Council for approval

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

