

Mobility Report

2018

The West Loop Bus Lanes

Connecting Uptown Galleria to advanced transit service



Houston-Galveston Area Council

TRENDS in the REGION

92,000
**MORE PEOPLE
IN REGION**



↑1% 6,997,500 in 2018¹
6,905,500 in 2017²

Source: U.S. Census 2018
^{1,2} Rounded to nearest 500

108,000
**NEW JOBS
CREATED**



↑3% 3,181,700 in 2018
3,073,000 in 2017

Source: Texas Workforce Commission 2018

194 MILLION
**MILES DRIVEN
EACH DAY**



↑5% in 2018³
184 million in 2017

Source: TxDOT 2018
³ Estimated for VMT growth

The 2018 Mobility Report summarizes key transportation and economic performance indicators that reflect the region's progress toward achieving a safe, reliable, multimodal transportation system. This year, we introduce new travel time reliability performance measures for personal travel and truck travel. The Houston-Galveston Area Council worked with the U.S. Department of Transportation, Texas Department of Transportation (TxDOT), and regional transit providers to identify new performance measures and targets to better guide policymakers' investment decisions. These new performance measures were also used to develop the new 2045 Regional Transportation Plan (RTP).

IMPROVING SAFETY

The safety performance measures focus on the number and rate of fatalities and injuries for drivers and occupants, bicyclists, and pedestrians. In 2018, the number of fatalities decreased 16% to 602 and serious injuries decreased 9% to 3,021. Non-motorized fatalities are down 15% to 160 and non-motorized serious injuries remain at 422.

H-GAC continues to work with local governments to improve safety through law enforcement, public outreach, education, and the management of high-volume roadways.

ASSET MANAGEMENT AND OPERATIONS

TxDOT continues to make improvements to its roadway system. The overall condition of the region's infrastructure has remained stable over the past few years. The percentage of TxDOT roadways rated "good or better" increased to 84% in 2018. Bridge conditions decreased to 81%.

Improving Safety

FATALITIES

Number of Fatalities (Rate)
Per year (Per 100 million VMT)

602(0.85)



↓16% (↓20%) in 2018
713 (1.09) fatalities in 2017

Source: TxDOT 2018

SERIOUS INJURIES

Number of Serious Injuries (Rate)
Per year (Per 100 million VMT)

3,021(4.26)



↓9% (↓14%) in 2018³
3,321 (4.94) serious injuries in 2017

Source: TxDOT 2018

³ Includes only incapacitating injuries

NON-MOTORIZED FATALITIES

Number of Fatalities
(Per year)

160



↓15% in 2018
178 fatalities in 2017

Source: TxDOT 2018

NON-MOTORIZED SERIOUS INJURIES

Number of Serious Injuries
(Per year)

422



↔ **NO CHANGE** in 2018⁴
422 serious injuries in 2017

Source: TxDOT 2018

⁴ Includes only incapacitating injuries

The response time needed to clear a major incident on area freeways decreased 4% from 33.3 minutes to 31.8 minutes, as reported by Houston TranStar. This decrease is due in part to the Tow and Go program which launched in May 2018.

Asset Management and Operations

PAVEMENT CONDITION

Percent of Lane Miles
(Rated Good or Better)

84%



↑3% in 2018
81% in 2017

Source: TxDOT 2018

BRIDGE CONDITION

Percent of Bridges
(Rated Good or Better)

81%



↓2% in 2018
83% in 2016

Source: TxDOT 2018

INCIDENT RESPONSE

Time to Clear a Traffic Incident
(In minutes, excluding heavy trucks)

31.8



↓4% in 2018
33.3 minutes in 2017

Source: Houston TranStar 2018

BUS VEHICLE RELIABILITY

METRO Buses (Mean distance between mechanical failures in miles)

11,016



↑2% in 2018
10,790 miles in 2017

Source: METRO 2018

Bus vehicle reliability improved 2% to 11,016 miles in 2018.

CONGESTION MITIGATION

Travel on the roadway system increased 5% to an estimated 194 million vehicle miles per weekday.

91 MILLION

PASSENGER BOARDINGS

↑3% in 2018
88 million in 2017

Source: Regional Transit Agencies 2018



330 MILLION

SHORT TONS OF PORT CARGO

↑4% in 2017
319 million in 2016

Source: U.S. Army Corps of Engineers 2017



58 MILLION

AIRPORT PASSENGERS

↑8% in 2018
54 million in 2017

Source: Houston Airport System 2018



Congestion Mitigation

TRAVEL TIME RELIABILITY

Percent of Reliable Person-Miles
Interstate (Non-Interstate)

63% (73%)



↔ **NEW METRIC** in 2018

Baseline year 2018

Source: Texas A&M Transportation Institute 2018

BUS ON-TIME PERFORMANCE

METRO Local Bus/Park & Ride Bus
(Percent of bus trips)

75.8%



↓1% in 2018

76.8% in 2017

Source: METRO 2018

Economic Competitiveness

TRUCK TRAVEL TIME RELIABILITY

95% On-time Delivery
(Interstate)

2.1



↔ **NEW METRIC** in 2018

Baseline year 2018

Source: Texas A&M Transportation Institute 2018

COMMUTE CHOICE

Use of Alternative Transportation
(Percent of regional commuters)

20%



↔ **NO CHANGE** in 2017

20% in 2016

Source: American Community Survey 2017

Natural and Cultural Resources

AIR QUALITY

NOx Emission Reductions
(In tons per year)

334.5



↑19% in 2018*

281.2 tons in 2018

Source: H-GAC 2018

*Preliminary estimate

AIR QUALITY

Ozone Level
(In parts per billion)

79



↓3% in 2018

81 ppb in 2017

Source: Texas Council on Environmental Quality 2018

This corresponds to the 108,000 jobs added to the region's economy.

Travel reliability is when the travel time of a roadway remains consistent. Based on current methodology, 63% of miles traveled on the region's interstate roadways are reliable. The region's non-interstate roadways are more reliable at 73%.

Transit ridership in the region increased 3% with 91 million passenger boardings in 2018 due to recovery from Hurricane Harvey and METRO system improvements. Bus on-time performance decreased slightly to 75.8%.

ECONOMIC COMPETITIVENESS

The 2045 RTP identifies truck travel reliability and commute alternative usage as two indicators of economic competitiveness. Truck travel time reliability assesses how reliable freight movement on the interstate is with a high standard of 95% on-time

deliveries. The base figure is 2.1, which means a truck trip of 30 minutes requires 63 minutes for the truck to arrive on-time 95% of the time.

The percentage of the region's commuters who use an alternative mode of transportation to work at least once a week remains unchanged at 20%. This includes transit, vanpool, carpool, biking, walking, and teleworking.

NATURAL AND CULTURAL RESOURCES

H-GAC supports vehicle emissions reductions through funding and promotion of alternative commute options and the accelerated replacement of older diesel vehicles with newer, cleaner models. In 2018, these programs reduced 334.5 tons of NOx. This figure is 19% higher than in 2017 due to new participation in the Clean Vehicles Program.

The region's three-year average of the ozone level decreased 3%

to 79 parts per billion (ppb) which remains above the new national ambient air quality standard of 70 ppb.

SUMMARY

The Houston-Galveston region depends on a safe, efficient, and reliable transportation system to maintain its economic success and overall quality of life. This report provides a snapshot of the performance information available. For additional transportation performance measures, visit h-gac.com/regional-mobility-report.

LEGEND

GREEN - Positive Effect

RED - Negative Effect

ORANGE - No Discernible Effect

↑ Net Increase

↓ Net Decrease

↔ Slight or No Net Change

H-GAC Ten-Year Transportation Plan FY 2019-2028 \$42.8B

INVESTMENT BY STRATEGY IN BILLIONS	
Expand	\$15.9
Maintain	\$21.2
Manage	\$5.7
TOTAL	\$42.8

IH 610 Inset



FOR MORE INFORMATION
h-gac.com/regional-mobility-report
h-gac.com/ten-year-plan

WALKER
SAN JACINTO
HARDIN
JEFFERSON
CHAMBERS
GALVESTON
BRAZORIA
MATAGORDA

0 5 10 20 Miles

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PROJECT TYPE

Ten-Year Plan

- 2019-2028
- Under Construction

N

Top 20 Roadway Investments FY 2019-2028

IN MILLIONS

PROJECT	COST
1 IH 45 NORTH - North Houston Highway Improvement Project	\$3,600
2 SH 99 GRAND PARKWAY SEGMENTS B & C	\$1,800
3 IH 45 SOUTH	\$963
4 SH 36	\$763
5 IH 10 WEST	\$692
6 HEMPSTEAD HIGHWAY	\$610
7 FM 1488 & MAGNOLIA BYPASS	\$378
8 SH 35	\$375
9 SH 146	\$348
10 IH 10 WEST BUS RAPID TRANSIT	\$316

PROJECT	COST
11 SH 105 EAST	\$314
12 FM 2100	\$305
13 SH 242/ FM 1314/ FM 1485	\$298
14 SH 288	\$280
15 BELTWAY 8 EAST	\$260
16 HARDY TOLL ROAD DOWNTOWN EXTENSION	\$250
17 SH 99 GRAND PARKWAY SEGMENT E	\$248
18 FORT BEND TOLLWAY EXTENSION	\$240
19 SH 249 TOLLWAY EXTENSION	\$200
20 SH 249	\$141



Sometimes, the most remarkable events are those that do NOT happen. As illustrated in this year's Mobility Report, fatalities and serious injuries from vehicle crashes declined regionally after multiple years of double-digit or near double-digit increases. Serious and severe injuries declined by almost 10% and fatalities decreased by an amazing 16% year over year! Let's recommit to making this our new safety trend.

Increasing safe travel by all modes does not happen without a concentrated team effort. It requires the sustained hard work of our many partners, including transportation agencies, local governments and businesses, law enforcement, education, and safety advocates of all kinds to produce positive results. And I particularly appreciate the work of our local media for their excellent, in depth reporting on key safety issues this past year.

I also appreciate the commitment of the Transportation Policy Council (TPC) to safer travel in the Houston-Galveston region. The Tow and Go program and incident management activities funded by TPC showed a 5% decrease in crashes on freeways currently part of the program. This year, Tow and Go expands within Harris County and, very soon, to other counties in our eight-county urban region. With financial support from TPC, we will initiate a safety education campaign and offer high crash intersection safety audits to our local governments and transportation agencies. This work will be overseen by a newly appointed transportation safety committee which reports to the TPC.

Much of the planning work in 2018 was devoted to the development of the new 2045 Regional Transportation Plan (RTP). With a price tag of almost \$130 billion, it reflects the transportation needs of a region expected to add more than four million new residents over the next 20 years. The Ten-Year Plan element of the 2045 RTP is illustrated in this report.

Expanding transportation choices is a key theme of the 2045 RTP. Thanks to the work of the High Capacity Transit Task Force and many volunteers, a truly regional, eight-county vision for new transit services has been provided. In addition to the stand-alone investment in transit and active transportation projects, many of the traditional highway investments are multi-modal including investments in sidewalks, bicycle paths, and trails.

Congratulations to all who made 2018 an excellent year for transportation investment, operations, and safety.

Alan C. Clark

Transportation Director
Houston-Galveston Area Council



The Houston-Galveston Area Council (H-GAC) is a voluntary association of local governments and local elected officials in the 13-county Gulf Coast Planning Region. The Gulf Coast Planning Region consists of Austin, Brazoria, Chambers, Colorado, Fort Bend, Galveston, Harris, Liberty, Matagorda, Montgomery, Walker, Waller, and Wharton counties. Organized in 1966, H-GAC provides a forum for the discussion of area-wide concerns, promoting regional cooperation through comprehensive planning and services to local governments.

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