

MOBILITY REPORT 2014



REGIONAL TRENDS

128,000

MORE PEOPLE IN REGION

Source: H-GAC 2014



97,500

NEW JOBS CREATED

Source: Texas Workforce Commission 2014



50 BILLION

MILES DRIVE ANNUALLY

Source: H-GAC 2014

The 2040 Regional Transportation Plan (2040 RTP) was recently adopted by H-GAC's Transportation Policy Council. The 2040 RTP builds on previous plans and strengthens the linkages between regional goals, key outcomes and the strategies designed to achieve them. This report features performance measures from the 2040 RTP that illustrate how well the region's transportation system is performing.

SAFETY IMPROVEMENTS

Safety remains a regional priority. In 2014, the region experienced both an increase in the number of vehicle crashes and crash rate for a third straight year. The regional crash rate grew 13% and the number of crashes climbed to nearly 130,000. The use of improved reporting tools by law enforcement may have contributed to this increase.

Accidents involving buses are up 9% to 509. Bicycle crashes with vehicles are another area of concern, with a high chance of fatality, but remain flat at 648 in 2014. Lastly, railroad crossing accidents are up significantly, 34% to 78.

H-GAC continues to work with local governments and law enforcement to improve safety with new public outreach campaigns and crash clearance initiatives.

ASSET MANAGEMENT AND OPERATIONS

Although TxDOT has improved the condition of the region's infrastructure over the past few years, the percentage

Safety Improvements

VEHICLE CRASHES

Crash Rate
(Per 100 million annual VMT)

229.0

↑13% in 2014 (129,482 crashes)
202.2 in 2013 (113,112 crashes)
Source: TxDOT, H-GAC 2014

BUS ACCIDENTS

Crash Rate
(Per 100,000 vehicle miles)

0.75

↑9% in 2014 (509 accidents)
0.69 in 2013 (467 accidents)
Source: METRO 2014

BICYCLE/VEHICLE CRASHES

Crash Rate
(Per 100 million annual VMT)

1.15

↔1% in 2014 (648 crashes)
1.16 in 2013 (650 crashes)
Source: TxDOT, H-GAC 2014

RAILROAD CROSSING ACCIDENTS

Number of Accidents
(Per year)

78

↑34% in 2014
58 accidents in 2013
Source: Federal Railroad Administration 2014

of roadways rated "good or better" fell to 82% in 2014. Bridges rated "good or better" remain at 83%.

Incident response times reported by Houston TranStar remain flat at 31.4 minutes to clear a major incident.

Bus vehicle reliability, which measures the average distance between breakdowns increased 6% to 10,493 miles in 2014.

Asset Management and Operations

PAVEMENT CONDITION

Percent of Lane Miles
(Rated Good or Better)

82%

↓3% in 2014
85% in 2013
Source: TxDOT 2014

BRIDGE CONDITION

Percent of Bridges
(Rated Good or Better)

83%

↔No Change in 2014
83% in 2012
Source: TxDOT 2014

INCIDENT RESPONSE

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

31.4

↔1% in 2014
31.1 minutes in 2013
Source: Houston TranStar 2014

BUS VEHICLE RELIABILITY

All Buses (Mean distance between mechanical failures in miles)

10,493

↑6% in 2014
9,932 miles in 2013
Source: METRO 2014

Past investments through the federal American Recovery and Reinvestment Act and State bond programs enabled TxDOT to make many needed improvements. Despite passage of Proposition 1 in November 2014, the State's future ability to maintain the condition of its current roadway system remains uncertain.



583 MILLION
PASSENGER
MILES BY TRANSIT
Source: National Transit Database 2013



310 MILLION
SHORT TONS
OF PORT CARGO
Source: U.S. Army Corps of Engineers 2013



52 MILLION
AIRPORT
PASSENGERS
Source: Houston Airport System 2014



Congestion Mitigation

PLANNING TIME INDEX
80th Percentile
(Late one day a week)

1.84

↔ **No Change**
Baseline year in 2011
Source: Texas A&M Transportation Institute 2012

BUS ON-TIME PERFORMANCE
METRO Local Bus/Park & Ride Bus
(Percent of bus trips)

71.6%

↓ **1.4%** in 2014
73% in 2013
Source: METRO 2014

CONGESTION MITIGATION

Travel on the roadway system increased slightly to an estimated 155 million miles per week day. This corresponds to growth trends in population and employment which added more than 128,000 people and 97,500 jobs.

Measuring system reliability, the Planning Time Index (PTI) estimates how much extra time travelers need to make a normal trip. The most recent PTI for the region is 1.84 which means that once a week, a trip that normally takes 30 minutes may take up to 55 minutes.

Transit ridership in the region experienced 8% growth with 583 million passenger miles of travel in 2013. Bus on-time performance is down slightly to 71.6%.

ECONOMIC COMPETITIVENESS

Two indicators of economic competitiveness are truck congestion and commute split. Truck congestion measures the annual cost

Economic Competitiveness

TRUCK CONGESTION
Annual Cost
(In \$millions)

\$646M

↑ **2%** in 2011
\$635 million in 2010
Source: Texas A&M Transportation Institute 2012

COMMUTE SPLIT
Use of Alternative Transportation
(Percent of regional commuters)

20.4%

↔ **No Change** in 2013
20.8% in 2012
Source: American Community Survey 2013

of fuel and travel delay for moving goods within the region. The most recent cost of truck congestion is \$646 million per year.

Commute split measures the region's use of alternative modes of transportation to work, such as transit, biking, walking and telework. The most recent data indicates 20% of the region's commuters use alternative transportation at least one day per week. Bicycling has become a more attractive option for commuters. In 2014 the regional bicycle network added 75 miles, and the transport of bicycles on buses increased 50%.

NATURAL AND CULTURAL RESOURCES

The Houston-Galveston region continues to reduce vehicle emissions through its air quality programs, funding and promoting alternative transportation such as carpool, vanpool and telework. H-GAC also supports replacement of older diesel engines with new, cleaner engines and alternative fuels.

Natural and Cultural Resources

AIR QUALITY
NOx Emission Reductions
(In tons per year)

358.2

↑ **4%** in 2014
345.3 tons in 2013
Source: H-GAC 2014

AIR QUALITY
Ozone Level
(In parts per billion)

80

↓ **8%** in 2014
87 ppb in 2013
Source: H-GAC 2014

In 2014 these programs reduced a combined 358.2 tons of NOx, and the region's three-year average of the ozone level has dropped by 8% to 80 parts per billion (ppb). However, this is above the current national air quality standard of 75 ppb.

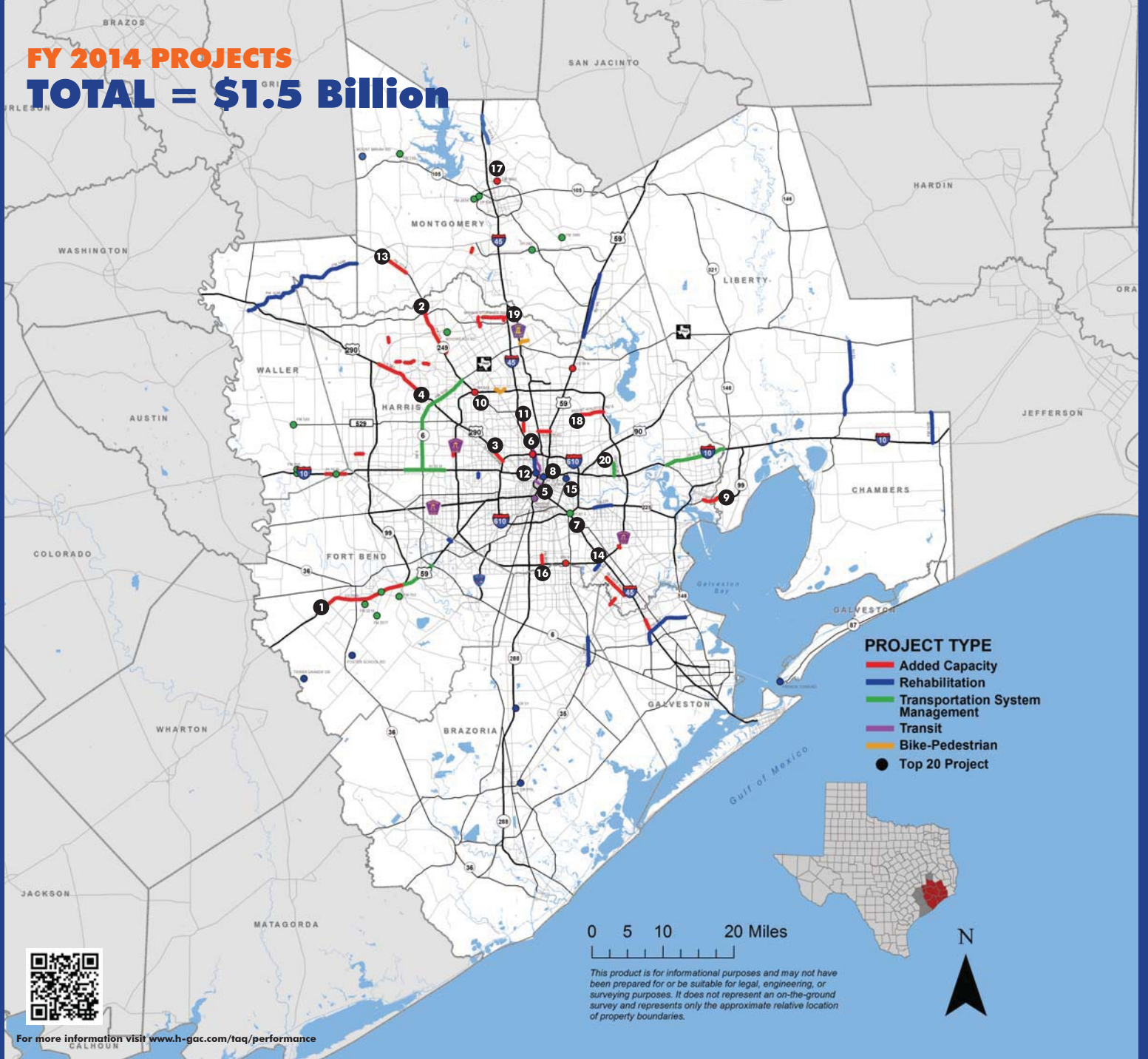
SUMMARY

The 2040 RTP provides a framework for the region's future. A safe, efficient and reliable transportation system is critical to maintain the region's economic success and overall quality of life. This report provides only a snapshot of the performance information available. For additional transportation system performance measures, visit www.h-gac.com/taq/

LEGEND

- GREEN** - Positive effect
- RED** - Negative effect
- GRAY** - No discernible effect
- ↑ Net Increase
- ↓ Net Decrease
- ↔ No or Slight Net Change

FY 2014 PROJECTS TOTAL = \$1.5 Billion



The Top 20 Projects in the Houston-Galveston Region in FY 2014

STREET	FROM	TO	PROJECT DESCRIPTION	TOTAL
1 US 59 S	Spur 10	FM 2759	Widen freeway to 8 mainlanes with HOV lanes and frontage roads from FM 2759 to FM 762. Widen to 6-lane rural freeway with frontage roads from FM 762 to Spur 10.	\$244,540,000
2 SH 249	Brown Rd.	Spring Cypress Rd.	Construct 6-Lane Tollway (Phase 2).	\$170,842,000
3 IH 610/US 290	W. 34th St.	On IH 610	Reconstruct US 290/IH 610 interchange with direct connectors.	\$150,797,145
4 US 290	Mason Rd.	Telge Rd.	Widen freeway to 8 main lanes with reversible managed lanes, auxiliary lanes and frontage roads.	\$136,600,000
5 METRO Rail Southeast Corridor*	IH 45 at Capital St	Palm Center	METRO Solutions Southeast Corridor light rail.	\$93,648,057
6 METRO Rail North Corridor*	Northline Mall	UH Downtown	METRO Solutions North Corridor light rail.	\$93,648,057
7 IH 45 S	At IH 610 E		Construct direct connectors to IH 610.	\$71,706,720
8 IH 10 E	Elysian St.	Brooks St.	Replace bridge and approaches.	\$34,518,250
9 SH 99	BS 146-E	FM 1405	Segment I-2: construct 2-lane frontage roads.	\$30,213,220
10 SH 249	At BW 8		Construct direct connector.	\$25,000,000
11 Northline Dr.	Canino E	Parker E	Acquire right-of-way, engineer and construct 4-lane road.	\$18,038,000
12 IH 45 N	At White Oak Bayou		Replace bridge and approaches.	\$18,000,000
13 FM 1774	W. Lost Creek Blvd.	FM 149	Widen to 4-lane divided rural road.	\$17,000,000
14 Hughes Rd.	BW 8	Houston City Limits	Reconstruct existing 4-lane road.	\$16,006,000
15 US 90A	U.P.R.R. Basin Yard	U.P.R.R. Basin Yard	Replace two bridges.	\$14,000,000
16 FM 865	Almeda Genoa Rd.	BW 8	Widen road to 4 lanes.	\$13,852,440
17 FM 3083	At U.P.R.R.		Construct grade separation.	\$13,500,000
18 Mount Houston Rd. E.	Mesa Rd.	BW 8	Widen road to 4 lanes.	\$13,100,000
19 Spring Stuebner Rd.	Rhodes Rd.	IH 45	Widen road to 4 lanes from Falvel Rd. to IH 45. Construct 4-lane road from Rhodes Rd. to Falvel Rd.	\$12,800,000
20 Freeport St.	IH 10	Uvalde Rd.	Reconstruct 2-lane road with center left turn lane.	\$12,700,000
Top 20 Total:				\$1,200,509,889

*FY 2014 full funding grant agreement allocation under Federal Transit Administration. The North Line opened December 2013. The Southeast Line scheduled to open in spring 2015.



Despite the recent drop in oil prices, the region's economy continues to generate substantial growth in employment, population and trade. As a result, travel across all modes of transportation has increased. In 2014, new transportation investment in our region's highway and transit infrastructure was only \$1.4 billion. However, this follows a record of almost \$4 billion of new transportation projects (led by work on US 290 and SH 99) in 2013.

This document reflects the most recent information about the state of our transportation system and summarizes key performance measures for each of the stated goals in the 2040 Regional Transportation Plan. In the report, you will find information on safety, the condition of transportation infrastructure, highway congestion and its impact on moving goods within our region. Lastly, H-GAC continues to track our progress toward reducing emissions from motor vehicles and achieving national clean air standards.

Some of the highlights in this report include:

SAFETY – The number and rate of vehicle crashes reported continues to grow. Reducing the rate of vehicle crashes (including high impact crashes such as truck rollovers) is a key objective for the Regional Transportation Plan as incidents are major contributors to regional congestion, transportation costs, vehicle emissions and decreased travel time reliability.

MANAGEMENT – Conditions have not dramatically changed over this reporting period. However, investment in new transit buses in recent years has reduced the bus mechanical failures, improving transit reliability.

LOCAL TRANSPORTATION INVESTMENT – Local transportation investment in 2014 played a prominent role in major projects off of the state network, including Northline Drive, Hughes Road, Mount Houston Road, and Freepport Street.

PEDESTRIAN AND BICYCLE PROJECTS – Over 70 miles of bicycle/pedestrian trails began construction in 2014. METRO recorded a 50% increase in the number of passengers accessing its services via bicycle use.

In addition to the data contained in this document, please visit www.h-gac.com/taq/performance for a more extensive list of performance measures.

Alan C. Clark
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Houston-Galveston Area Council

\$5.7 B



**ANNUAL
COST OF CRASHES**

Source: TxDOT, H-GAC 2014

17,885



SERIOUS INJURIES

Source: TxDOT, H-GAC 2014

4,578



**COMMERCIAL
VEHICLE CRASHES**

Source: TxDOT, H-GAC 2014



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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