

# Chapter 1

## INTRODUCTION

*“In the year 2045, our region will have an integrated multimodal transportation system, achieved through coordinated public and private investments, that supports a desirable quality of life, enhanced economic vitality and increased safety, access and mobility.”*

### HOUSTON-GALVESTON AREA COUNCIL

The Houston-Galveston Area Council (H-GAC) is the designated Metropolitan Planning Organization (MPO) for a diverse eight-county region that includes Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties. This area is concurrently recognized as the Transportation Management Area (TMA) for the upper Texas Gulf Coast region (Figure 1-1).

H-GAC’s mission is to plan for the orderly growth and development of the region, working in concert with multiple planning partners. This mission involves building region-wide consensus on improving transportation, promoting smart growth, protecting the environment, enhancing the economy, and fostering equity. As the MPO, H-GAC is responsible for developing the region's transportation policies and oversees the planning and programming of transportation infrastructure investments. In light of the expected growth of the region, this planning function will be critical to improving mobility, managing congestion, promoting regional development, and enhancing the quality of life of residents of the area.



Figure 1-1: Eight-County Planning Region

### THE LONG RANGE PLAN

The Regional Transportation Plan (RTP) is a strategic planning document that articulates the MPO’s vision and goals for a desired future transportation network and the strategies to achieve them. Updated every four years, the plan outlines a financially constrained transportation investment program that is based on the unique needs and characteristics of the MPO region. The 2045 RTP is an update to its predecessor – 2040 RTP. The updated plan identifies multimodal transportation improvement strategies that further the region’s transportation vision and goals, which will be executed over a twenty five-year planning horizon.

The 2045 RTP is shaped primarily by federal legislation. Federal transportation authorizations establish the essential contours of the regional transportation plan and specify several planning factors that must be addressed by the MPO. The 2045 RTP is also shaped by the public input obtained through the public outreach events that were held throughout the planning region, as well as the public comments submitted

by concerned citizens. The plan sets targets, incorporates performance measures, and monitors and documents the progress made in several analytical areas that include asset management, congestion, system performance, safety, and environmental sustainability. The 2045 RTP will prioritize the major transportation investments that will be implemented through the year 2045. The recommended investments total approximately \$132 billion in 2018 dollars and include more than 950 individual projects.

## FEDERAL LEGISLATIVE BACKGROUND

Since their creation by the Federal-Aid Highway Act of 1962, the role and relevance of the MPO in the transportation planning process has continued to evolve. Planning requirements and expectations are expressed in the successive surface transportation funding and authorization bills.

The “Moving Ahead for Progress in the 21st Century” (MAP-21) Act of 2012 focused on streamlining the country’s surface transportation programs and established performance-based metrics for many facets of the transportation system. Map-21 instituted the following transportation emphasis areas:

- **Safety**  
To achieve a significant reduction in traffic fatalities and serious injuries on all public roads;
- **Infrastructure Condition**  
To maintain the highway and bridge infrastructure asset system in a state of good repair;
- **System Reliability**  
To improve the efficiency of the surface transportation system;
- **Congestion and Air Quality**  
To achieve a significant reduction in congestion on the National Highway System and improve the quality of the air;
- **Economic Vitality**  
To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development;
- **Environmental Sustainability**  
To enhance the performance of the transportation system while protecting and enhancing the natural environment; and
- **Reduced Project Delivery Delays**  
To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burden and improving work practices at the agencies.

## Recent Federal Transportation Bills

- 1991 - Intermodal Surface Transportation Efficiency Act (ISTEA)
- 1998 - Transportation Equity Act for the 21st Century (TEA-21)
- 2005 - Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)
- 2012 – Moving Ahead for Progress in the 21st Century (MAP-21)
- 2015 – Fixing America’s Surface Transportation Act (FAST Act)

In 2015, Congress passed the “Fixing America’s Surface Transportation Act” (FAST Act), which is the current surface transportation funding and authorization bill. The FAST Act funds surface transportation programs through 2020 and builds on the mandates of MAP-21 and other previous transportation authorization bills. The FAST Act provides funding for critical transportation projects that address congestion, freight movement, and the maintenance of transportation infrastructure. It also introduces programmatic changes designed to streamline the approval process and accelerate the delivery of transportation projects.

The FAST Act adds several new planning requirements for the MPO to address in their transportation plans. These include travel and tourism, resiliency and reliability of the transportation system, and reducing or mitigating stormwater impacts on surface transportation (See Table 1-1). These new planning factors are incorporated into 2045 RTP and discussed in later sections of the plan.

THIS SPACE INTENTIONALLY BLANK

FAST Act Requirement	FAST Act Provision	Issues Addressed in 2045 RTP	Where Addressed
Public Participation	23 CFR 450.316(a)	H-GAC's Public Participation Plan (PPP) was updated in 2017 to expand the list of stakeholders to be engaged in transportation planning process.	<ul style="list-style-type: none"> <li>• PPP</li> <li>• Public Involvement</li> </ul>
Consultation and Cooperation	23 CFR 450.316(b)	2045 RTP was developed with continued consultation and cooperation with state and local officials and takes into consideration the planning activities of other agencies and organizations within the MPO region.	<ul style="list-style-type: none"> <li>• Public Involvement</li> <li>• Disaster Preparedness</li> <li>• Tourism</li> </ul>
Resiliency and Reliability	23 CFR 450.206(a)(9)	2045 RTP incorporates an assessment of the vulnerability of transportation assets to extreme weather events and identifies initiatives to improve resiliency and increase the reliability of the regional transportation system.	<ul style="list-style-type: none"> <li>• Resiliency</li> <li>• Resiliency (Appendix J)</li> <li>• Performance Measures</li> </ul>
Stormwater Impacts	23 CFR 450.206(a)(9)	2045 RTP identifies roadways susceptible to impact by stormwater and includes a choice of projects and strategies aimed at mitigating these impacts.	<ul style="list-style-type: none"> <li>• Resiliency</li> <li>• Resiliency (Appendix J)</li> </ul>
Travel and Tourism	23 CFR 450.206(a)(10)	2045 RTP includes a review of opportunities to engage in recreational travel and tourism in the planning region and considers strategies to promote growth in this transportation sector.	<ul style="list-style-type: none"> <li>• Travel and Tourism (Appendix M)</li> <li>• PPP</li> </ul>
Disaster Preparedness	23 CFR 450.316(b)	2045 RTP identifies local emergency management operations serving the Houston-Galveston metropolitan region and details the designated hurricane evacuation routes and Zip-Zone Map.	<ul style="list-style-type: none"> <li>• Disaster Preparedness</li> </ul>
Intercity Buses	23 CFR 450.216(b) & 23 CFR 324(f)(2)	2045 RTP examines the existing intercity bus services in the region and identifies opportunities to expand these services and grow additional routes and operations.	<ul style="list-style-type: none"> <li>• Intercity Buses (Appendix L)</li> </ul>
Performance Measures	23 CFR 450.324(f)(3)	2045 RTP includes the federal performance measures linked to the vision, goals, and project prioritization of RTP 2045, and establishes targets for each performance measure applicable to the MPO region.	<ul style="list-style-type: none"> <li>• PM System Evaluation Report (Appendix P)</li> </ul>
System Evaluation Report	23 CFR 450.324(f)(4)	2045 RTP documents the condition and performance of the transportation system with respect to the federally required performance targets.	<ul style="list-style-type: none"> <li>• PM System Evaluation Report (Appendix P)</li> </ul>

Table 1-1: Major Requirements of the FAST Act Addressed in 2045 RTP

## **THE PLANNING PROCESS**

2045 RTP is the product of a continuing, comprehensive, and cooperative planning effort, involving the state, local government entities, and private stakeholders. The plan must be approved and adopted by the Transportation Policy Council (TPC), a 28-member body composed of local elected officials, ranking officials of public agencies, and the state. The TPC is the policy board for the MPO and provides policy guidance and overall coordination for the multimodal transportation planning efforts of the MPO.

The TPC is advised by the Technical Advisory Committee (TAC), which is generally responsible for conducting any required programmatic analyses. The TAC reviews and evaluates H-GAC's transportation planning proposals and submits its recommendations to the TPC. A special 2045 RTP sub-committee was convened out of the TAC membership to assist H-GAC staff in the development of fundamental RTP assumptions and methodologies, and to ensure that recommended projects and activities supported the vision, goals, and objectives of the plan.

## **PUBLIC PARTICIPATION**

Public participation is an essential part of the planning process and must engage all segments of the population to ensure that planning decisions reflect the range of regional values and desires. In developing the 2045 RTP, H-GAC followed the guidelines of its Public Participation Plan (PPP). In all, H-GAC hosted over 20 public meetings focused on the development of the plan and received over 1,200 public comments from interested citizens and stakeholders. The public participation program is more fully described in Chapter 7 of this document.

THIS SPACE INTENTIONALLY BLANK