



**FISCAL YEAR 2024
UNIFIED PLANNING WORK PROGRAM (UPWP)**

**HOUSTON-GALVESTON TRANSPORTATION
MANAGEMENT AREA**

APPROVED BY THE TRANSPORTATION POLICY COUNCIL ON:
September 8, 2023

The preparation of this report has been financed in part through grant(s) from the Federal Highway Administration and Federal Transit Administration, U.S. Department of Transportation, under the State Planning and Research Program, Section 505 [or Metropolitan Planning Program, Section 104(f)] of Title 23, U.S. Code. The contents of this report do not necessarily reflect the official views or policy of the U.S. Department of Transportation.



Resolution

NO. UPWP 2024-00

ADOPTING THE 2024 UNIFIED PLANNING WORK PROGRAM FOR TRANSPORTATION PLANNING BY THE TRANSPORTATION POLICY COUNCIL FOR THE HOUSTON-GALVESTON TRANSPORTATION MANAGEMENT AREA AND CERTIFYING COMPLIANCE WITH FEDERAL PLANNING REQUIREMENTS.

WHEREAS, the Houston-Galveston Area Council (H-GAC) is designated as the Metropolitan Planning Organization (MPO) for the Houston-Galveston Transportation Management Area by the Governor of Texas in accordance with federal law, and;

WHEREAS, the Unified Planning Work Program (UPWP) is a federally required document documenting all anticipated transportation and air quality planning activities that the Metropolitan Planning Organization and partner agencies will perform in the 2024 Federal Fiscal Year, and;

WHEREAS, all tasks and work activities described in the UPWP shall be limited to transportation planning and air quality activities affecting the transportation system within the boundaries of the eight-county designated metropolitan planning area, and;

WHEREAS, the 2024 Unified Planning Work Program addresses the needs for planning Administration/Management, Data Development and Maintenance, Short Range Planning, Long Range Planning, and Special Studies and identifies agency responsibilities by work task and anticipated funding requirements, and;

WHEREAS, the Transportation Policy Council certifies its compliance with federal planning requirements as outlined in the introduction of the 2024 Unified Planning Work Program and in accordance with 23 CFR Part 450.334 and 450.220.

NOW, THEREFORE, BE IT RESOLVED BY THE TRANSPORTATION POLICY COUNCIL FOR THE HOUSTON-GALVESTON TRANSPORTATION MANAGEMENT AREA THAT:

- The 2024 Unified Planning Work Program (UPWP) is hereby adopted; and
- Cost overruns of up to 25 percent at the activities task level are allowable, provided that the total as shown in the Funding Summary for the 2024 UPWP are not exceeded.

PASSED AND APPROVED this 8th day of September 2023 at a specially called meeting of the Transportation Policy Council.


Agenda Item 7
TPC Meeting Packet – 8/25/23

APPROVED:


David W. Robinson (Sep 11, 2023 11:51 CDT) 09/11/2023

Hon. David Robinson, Chairman
Transportation Policy Council

ATTEST:


09/11/2023

Hon. Nancy Arnold, Secretary
Transportation Policy Council

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Glossary of Key Terms

Term	Acronym	Description
Automobile		Passenger vehicle (car, truck, or motorcycle) used by a single or multiple occupants. (also called “motor vehicle”)
Conformity (Air Quality)		A federally required analysis of transportation plans such as the RTP and TIP used to demonstrate that funded projects, taken together, will not produce more air pollution than allowed by Texas’ SIP.
Congestion Management Process	CMP	A federally mandated systematic approach to identifying and addressing congestion. It includes data collection, monitoring and measuring of transportation system performance and identifying alternative actions and strategies for particular locations.
Federal Highway Administration	FHWA	The agency of the USDOT that administers federal funding for highways and bridges. Along with the FTA, FHWA oversees the planning process administered by the H-GAC MPO
Federal Transit Administration	FTA	The agency of the USDOT that administers federal funding for public transit. Along with the FHWA, the FTA oversees the planning process administered by the H-GAC MPO.
Infrastructure Investment & Jobs Act	IJA	The nation's principal transportation funding law which was enacted on November 15, 2021, authorizing \$1.2 trillion for transportation and infrastructure spending with \$550 billion going towards new investments and programs.
Metropolitan Planning Organization	MPO	Under federal legislation, MPOs plan all federally funded transportation investments and serve as a forum where local officials, public transportation providers and state agency representatives can cooperatively plan to meet a region's current and future transportation needs.
Multimodal		Multimodal transportation is the movement of people and goods on roadways and other public facilities, including but not limited to, motorists, transit riders, freight carriers, bicyclists and pedestrians, and those with disabilities. Multimodal transportation modes include automobiles (cars and trucks), walking, biking, transit, rail, and freight vehicles.
Performance Measures		Quantitative measures used to assess the functioning of particular facilities or aspects of the transportation system.
Performance-Based Planning and Programming		Performance-based planning and programming is a systematic, goals oriented approach that transportation agencies incorporate in analysis and decision-making. The FAST Act and predecessor legislation require states and MPOs to use PBPP to help achieve desired performance outcomes for the multimodal transportation system.
Planning Funds	TPF	Federal funds provided for planning projects and programs derived from a 1.25 percent set-aside from the federal transportation funding provided to states. TPF funds are the principal revenue source for the H-GAC’s MPO operation and other components of the UPWP.
Regional Transportation Plan	RTP	The federally mandated long-range transportation plan for the region. It sets out a vision for development of the transportation system over the next 20 years and serves as an investment guide for the region. The RTP is produced by the MPO every four years.

Houston-Galveston Area Council Unified Planning Work Program

Term	Acronym	Description
Single Occupancy Vehicle	SOV	Refers to motor vehicles occupied by the driver only.
Texas Department of Transportation	TxDOT	The state agency responsible for maintenance, construction, and operation of state and interstate highways.
Title VI		Title VI, 42 U.S.C. § 2000d et seq., was enacted as part of the Civil Rights Act of 1964. It prohibits discrimination on the basis of race, color, or national origin in any program or activity that receives Federal funds or financial assistance.
Transportation Demand Management	TDM	Actions to reduce transportation demand, such as telecommuting, ridesharing, transit service improvements, commuter incentives, access management, and parking management.
Transportation Improvement Program	TIP	A four-year, fiscally constrained agenda of improvement projects drawn from the RTP. To be eligible for federal funds, proposed projects must be approved by the Transportation Policy Council for inclusion in the TIP. Updated every two years.
Unified Planning Work Program	UPWP	Summarizes the transportation planning activities of the H-GAC MPO staff, the subregions and other transportation agencies in the region. Updated annually or biannually.
United States Department of Transportation	USDOT	The federal agency that develops and coordinates policies pertaining to the national transportation system. It includes the FHWA and the FTA.
United States Environmental Protection Agency	USEPA	A cabinet-level federal regulatory agency that leads the nation's environmental science, research, education and assessment efforts.
Urbanized Area	UA or UZA	Delineated by the U.S. Census Bureau, a continuously built-up area with a population of 50,000 or more. FHWA allows state DOTs to adjust Census UAs outward, as per 23 CFR 470.105.

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2024 UNIFIED PLANNING WORK PROGRAM

INTRODUCTION

The Unified Planning Work Program (UPWP) is developed by the Houston-Galveston Area Council (H-GAC) Metropolitan Planning Organization (MPO) and documents metropolitan transportation planning activities performed with federal transportation funds and other planning activities that are regionally significant. This UPWP documents the metropolitan planning requirements, planning priorities facing the Houston-Galveston metropolitan area, and transportation planning activities and related tasks to be accomplished during Fiscal Year 2024 (October 1, 2023 to September 30, 2024). The UPWP is developed by H-GAC in cooperation with Federal and State agencies, local governments and transit operators.

The Houston Galveston Area Council (H-GAC) and its Transportation Policy Council (TPC) has served as the Metropolitan Planning Organization (MPO) for the Houston Transportation Management Area (TMA) since 1974, and was most recently redesignated in this role in 1988. The Houston TMA consists of Harris County and seven surrounding counties of Montgomery, Liberty, Chambers, Galveston, Brazoria, Fort Bend, and Waller. The TPC provides policy guidance and overall coordination of the transportation planning activities within the region. The TPC consists of 28 members including cities in the TMA with population of over 50,000, counties, two Texas Department of Transportation (TxDOT) Districts, the Metropolitan Transit Authority of Harris County (METRO), one at-large member appointed by the H-GAC Board of Directors representing Harris County or designated city, and one position each representing H-GAC, Other Transportation Interests, and the Gulf Coast Rail District. Each of the 28 Members has an alternate who is also a voting member in the absence of their voting primary representative.

The H-GAC MPO follows the Fixing America's Surface Transportation Act's (FAST Act) final planning rules for Metropolitan Planning Processes and the Metropolitan Transportation Plan (MTP) which became effective on May 27, 2018.

The MPO also follows additional planning guidance provided by the United States Department of Transportation to implement the 2021 Infrastructure Investment and Jobs Act (IIJA), which established new metropolitan transportation planning requirements. Regulations implementing IIJA require Metropolitan Planning Organizations and state Departments of Transportation to establish performance measures and set performance targets for each of the seven national goal areas to provide a means to ensure efficient investment of federal transportation funds, increase accountability and transparency, and improve investment decision-making. The national goal areas and a discussion of how the H-GAC addresses them is provided further in this chapter.

IJA significantly expands the amount of federal funding that will be allocated to metropolitan areas and states, and this increase in funding is accompanied by new federal guidance on outcomes that will eventually be promulgated in federal regulations. These new regulations are expected to address safety, resiliency, climate change, and other concerns broadly identified in the legislation. The new regulations are expected in the next 2-3 years and will be incorporated into H-GAC's planning processes as part of future updates to the UPWP and implemented through the planning activities of the MPO.

PURPOSE

The **2024 Unified Planning Work Program** (UPWP) describes the transportation plans and programs and the transportation-related air quality planning activities that will be conducted during Fiscal Year 2024 regardless of funding sources or agencies conducting these activities. Through the development of the UPWP, changes in regional transportation planning priorities are identified. In addition, the role of the Houston-Galveston Metropolitan Planning Organization (MPO) for the Houston-Galveston Transportation Management Area (TMA) is documented.

The process of operating, maintaining, and improving the region's surface transportation system is complex and demands ongoing regional planning efforts. Many of the activities described in this document support the collaborative and coordinated decision-making process between state and local government agencies, transportation providers, shippers, and carriers of goods, and the residents of the region. Through the cooperation of these stakeholders, the products of these planning efforts will provide the region with greater mobility benefits. The following five tasks document the transportation planning activities in the TMA in 2024:

- **Task I – Administration and Management** describes the administrative support activities such as financial management, contract management, public outreach, and the general management of the MPO.
- **Task II – Data Development and Maintenance** describes the collection, maintenance, and analysis of transportation data. These activities include the development of socio-economic forecasts and travel demand models to determine where future transportation investments should be considered.
- **Task III – Short-Range Planning** addresses planning for activities taking place within a three to ten-year timeframe, including the Transportation Improvement Program (TIP), the Ten-Year Transportation Plan, as well as transit feasibility studies, and operations planning. Task III also includes transportation-related air quality planning activities.
- **Task IV – Metropolitan Transportation Plan** describes long-range planning for development and maintenance of a Regional Transportation Plan (RTP), which includes all regional and subregional long-range planning activities, reflecting the needs-based planning activities of urban, suburban, and rural communities. These activities include identifying and addressing transportation needs in high-growth areas.

- **Task V – Special Studies** includes special one-time planning activities, including major corridor studies/analyses and support of tourism and transportation resiliency planning activities. Task V also includes ongoing maintenance of the Regional Intelligent Transportation System (ITS), as well as efforts to improve traffic safety in the region and evacuation planning. Task V incorporates activities involving H-GAC’s Livable Centers program.

MPO PLANNING CORE FUNCTIONS

Federal guidance outlines core functions that an MPO must perform, and the Unified Planning Work Program identifies how the H-GAC MPO will meet these functions:

1. Establish and manage a fair and impartial setting for effective regional decision-making in the metropolitan area and conduct a cooperative, continuous, and comprehensive planning process that involves all stakeholders.
2. Develop transportation improvement options and use data and planning methods to evaluate whether those options support criteria and system performance targets. These planning studies are included in Tasks 2 to 5 of the UPWP.
3. Develop and update a long-range transportation plan for the metropolitan area covering a planning horizon of at least 20 years. H-GAC calls this the “Regional Transportation Plan” or RTP. These plans are intended to identify and implement a vision for how the region will develop and provide a transportation system to meet needs for the next 20 years and beyond. Figure 1 shows how the current H-GAC Regional Transportation Plan identifies future investments based on mobility needs along corridors and within major areas of the region. These plans are prepared using performance measures and targets.
4. Develop a short-range program of priority transportation improvements drawn from the long-range transportation plan. MPOs create the TIP with spending, regulating, operating, management, and financial tools. The TIP represents immediate priority actions to achieve the area’s goals and associated system performance targets.
5. Identify performance measure targets and monitor whether implemented projects are achieving targets. MPOs coordinate with state and public transportation operators to establish performance targets that address performance measures, as set forth in Federal law, related to surface transportation and public transportation. MPOs prepare plans that include performance targets addressing performance measures and standards. When updating the plan, MPOs also assess current system performance to understand progress in meeting performance targets.
6. Involve the general public and other affected constituencies related to the essential decision-making elements listed above.

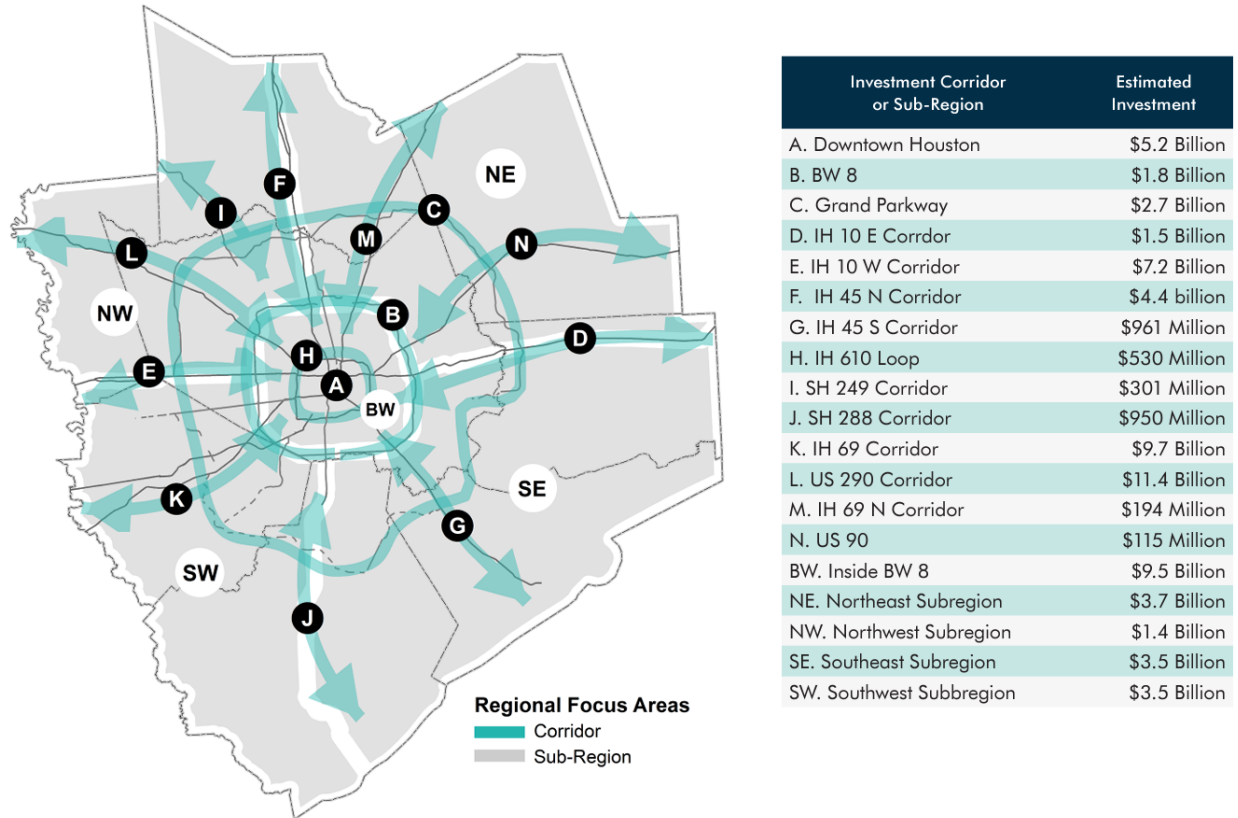


Figure 1: H-GAC's 2045 RTP Update Regional Focus Corridors and Subregions, with Total Identified Investments

With the April 2023 adoption of the 2024 Regional Transportation Plan Update, that document now plays a more significant role in identifying and completing the MPO's required planning activities. The H-GAC MPO organizes its work around the long-range transportation plan (RTP), however, the required four-year update cycle of the RTP does not always align with ongoing long-term planning activities undertaken by H-GAC. Some planning activities, particularly special studies, initiated within the 4-year RTP update cycle will continue beyond the adoption date of the RTP and must be more fully integrated in future plans via RTP amendments and updates. It is not possible to accurately predict all amendment and update cycles over an extended period of time for a variety of reasons beyond the ability of the MPO to control. Exhibit 1 provides a basic framework for milestone activities to be initiated and/or completed in 2024 under this Work Program, as well as a preliminary "look ahead" for the next four years. Exhibit 2 then provides a summary of how the RTP now incorporates most regular or special planning activities and identifies expected update schedules for all elements.

Exhibit 1: Milestone Tasks and Activities (2023-2027)

Milestone Tasks and Activities	Calendar Year*				
	2023	2024	2025	2026	2027
EVERY YEAR					
Update safety performance targets	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Review transit performance targets	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Conduct TIP/RTP administrative modifications and amendments	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Publish annual listing of obligated projects	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Develop annual agency budget for UPWP	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Undertake studies supporting the MPO process	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Update TPC and TAC membership and officers	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
EVERY TWO YEARS					
Develop Unified Planning Work Program (UPWP)		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
Update infrastructure condition performance targets		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
Update system performance targets		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
Conduct Project Solicitation and Selection Process	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
Conduct 2-year-cycle TIP update		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
Conduct TIP-related Air Quality Conformity		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
EVERY FOUR YEARS					
Review congestion management process		<input checked="" type="checkbox"/>			
Adopt TIP/RTP update	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
Conduct TIP/RTP-related Air Quality Conformity	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
Hold TMA planning certification review			<input checked="" type="checkbox"/>		
EVERY TEN YEARS					
Approve urbanized area boundary	<input checked="" type="checkbox"/>				
Approve metropolitan planning area boundary	<input checked="" type="checkbox"/>				
Complete functional classification review		<input checked="" type="checkbox"/>			
Update planning process Memoranda of Agreement				<input checked="" type="checkbox"/>	
PERIODIC (AS NECESSARY)					
Review and update MPO bylaws (TPC, TAC, subcommittees)			<input checked="" type="checkbox"/>		
Update DBE goal			<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
Update Title VI / LEP plan		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
Conduct Out-of-Cycle Air Quality Conformity	<input checked="" type="checkbox"/>				
Update public participation plan (last 2021)			<input checked="" type="checkbox"/>		

* All MPO planning activities beyond 2024 are tentative and provided for general information only. Subject to change.

Exhibit 2: Regional Transportation Plan Elements and Expected Updates

Element	Regional Transportation Plan Element	Last Update	2024	2025	2026	2027
RTP	Vision, Goals, Objectives, Summaries	2023		<input checked="" type="checkbox"/>		
Appendix A	Project List	2023	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
Appendix B	Fiscal Constraint	2023				<input checked="" type="checkbox"/>
Appendix C	Federal Requirements	2023		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
Appendix D	Transportation Improvement Program	2022	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
Appendix E	10-Year Plan	2022	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
Appendix F	Illustrative List	NEW	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
Appendix G	Corridor Summaries	2023		<input checked="" type="checkbox"/>		
Appendix H	Demographic and Modeling Maps	2023		<input checked="" type="checkbox"/>		
Appendix I	Public Outreach	2021				
Appendix J	Public Comments and Responses	2023				
Appendix K	Glossary and Definitions	2023				
Appendix L	Air Quality Conformity	2023	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
Appendix M	Regional Safety Plan	2018	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
Appendix N	Congestion Management Process	2021	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
Appendix O	Performance Measures	Annual	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Appendix P	Regional Goods Movement	2023			<input checked="" type="checkbox"/>	
Appendix Q	Transportation Systems and Management Operations Plan and Information Transportation System Plan	NEW	<input checked="" type="checkbox"/>			
Appendix R	Regional Thoroughfare Plan	2022	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
Appendix S	Subregional and Livable Centers Planning	Ongoing	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Appendix T	Active Transportation Plan	2019		<input checked="" type="checkbox"/>		
Appendix U	Regionally Coordinated Transportation Plan	2022			<input checked="" type="checkbox"/>	
Appendix V	High Capacity Transit	2020	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Appendix W	Complete Streets	NEW	<input checked="" type="checkbox"/>			
Appendix X	Congestion Mitigation and Air Quality Plan and Electric Vehicle Charging Plan	NEW	<input checked="" type="checkbox"/>			
Appendix Y	Emerging Technologies Plan	NEW		<input checked="" type="checkbox"/>		
Appendix Z	Aviation Facilities	NEW			<input checked="" type="checkbox"/>	
Appendix AA	Ferry Operations	NEW			<input checked="" type="checkbox"/>	
Appendix BB	Parking Management	NEW			<input checked="" type="checkbox"/>	
Appendix CC	Resiliency	2020	<input checked="" type="checkbox"/>			
Appendix DD	Regional Hurricane Evacuation Plan	Annual	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Appendix EE	Natural and Cultural Resources	2015		<input checked="" type="checkbox"/>		
Appendix FF	Environmental Justice and Title VI and Equity	2022		<input checked="" type="checkbox"/>		
Appendix GG	Travel and Tourism	NEW		<input checked="" type="checkbox"/>		

* All RTP Element updates beyond 2024 are tentative and provided for general information only. Subject to change.

The metropolitan planning process specific to identifying transportation (roadway, transit, freight, ped-bike, etc.) projects for implementation consists of four primary phases: system planning, project refinement, identifying project finance, and project programming. System planning is a primary function of the MPO, and as such, the H-GAC MPO takes the lead in the development of the Regional Transportation Plan (RTP). As projects contained in the RTP undergo more detailed analyses, transportation providers in the region assume leadership roles for specific projects, as applicable, with support from the MPO. As projects advance in planning and development, the MPO and agencies identify revenue sources to expeditiously implement viable transportation projects. Once project funding has been identified, the MPO, in carrying out another primary responsibility, reassumes the lead in the planning process and includes the projects in the 10-year plan and Transportation Improvement Program.

REQUIRED PLANNING CONSIDERATIONS

The Fixing America's Surface Transportation (FAST) Act and subsequent reauthorizations of federal surface transportation programs requires the consideration of 10 factors in the metropolitan and statewide planning processes listed in 23 USC 134(h). The list below illustrates how the MPO addresses these factors:

- 1. Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency**
 - *The Regional Transportation Plan (RTP) focuses on strategic corridor plans that will improve the movement of people and goods within and through the region (Subtask 4.1).*
 - *The MPO supports transit service activities that foster urban redevelopment and improve access around transit stations (Subtasks 3.2, 4.4, and 5.7).*
 - *The MPO supports activities of the Greater Houston Freight Committee to better incorporate private sector freight user perspectives into the transportation planning process (Subtask 4.2).*

- 2. Increase the safety of the transportation system for motorized and non-motorized users**
 - *The TIP provides funding for improved bicycling & pedestrian facilities (Subtask 3.1 and 4.5).*
 - *The MPO will lead the regional development of a Safe Streets and Roads for All (SS4A) grant (Subtask 5.1).*

- *The RTP focuses on identification of crash hot spots and strategies to reduce crashes (Subtask 4.1 and 5.1).*
 - *The MPO convenes the Transportation Safety Committee to address transportation safety in the region and engages in various safety-related initiatives (Subtask 5.1).*
- 3. Increase the security of the transportation system for motorized and non-motorized users**
- *The TIP provides funding for improved lighting in and around transit centers (Subtask 3.2).*
 - *The RTP supports connections at port entrances and exits that facilitate enhanced security (Subtask 4.1).*
 - *The MPO participates in emergency preparedness and evacuation activities initiated by state and local governments (Subtask 5.2)*
- 4. Increase the accessibility and mobility of people and for freight**
- *The TIP project selection criteria assign benefits to projects that: a) support/improve port operations, b) remove bottlenecks & fill gaps on the existing system that inhibit the movement of people and goods, and c) provide improved access between activity centers (Subtask 3.1).*
 - *The RTP focuses on strategic corridor plans that will improve the movement of people and goods within and through the region (Subtask 4.1).*
 - *The Congestion Management Process (CMP) ensures that new transportation investments will maintain or improve overall mobility for all users (Subtask 5.2).*
- 5. Protect and enhance the environment, promote energy conservation, improve quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns**
- *The MPO engages in Sub-regional Planning initiatives designed to link local land use goals with transportation investments (Subtask 4.2).*
 - *The MPO develops geographic information system (GIS) layers of regional environmental assets (Subtask 2.2).*
 - *The MPO Air Quality planning supports all regional efforts to comply with federal air quality standards, while seeking to preserve the region's transportation needs and vitality (Subtask 3.3)*
- 6. Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight**
- *The Livable Centers initiative is designed to improve access and connectivity to and around transit stations (Subtask 5.3).*

- *The TIP and RTP support projects such as intermodal terminals that link a variety of modes in one station (Subtasks 3.1 and 4.1).*
- *The MPO supports regional vanpooling, carpooling and telework initiatives (Subtask 5.2, 3.2. and 4.4).*
- *The TIP provides funding for transit implementations and studies (Subtask 3.1).*
- *Local Active Transportation Studies is designed to improve various means of active transportation such as biking and walking (subtask 4.5).*

7. Promote efficient system management and operation

- *The Congestion Management Process (CMP) focuses on identifying non-added capacity alternatives that will improve traffic flow and safety for motorists (Subtask 5.2).*
- *The RTP includes an expanded managed lane system to derive improved efficiency from new capacity projects (Subtask 4.1).*
- *The TIP provides funding for expansion of traffic management systems throughout the region (Subtask 3.1).*
- *Operations efforts, such as Intelligent Transportation Systems (ITS) Planning and Incident Management, promote lower-cost, non-added capacity alternatives for improving traffic flow (Subtask 5.2).*

8. Emphasize the preservation of the existing transportation system

- *The selection of projects to include in the TIP or RTP requires consideration of long-term operations and maintenance costs (Subtask 3.1).*
- *Intelligent Transportation Systems (ITS) Planning and the development of Incident Management activities address alternatives that maximize the efficiency of the current system (Subtask 5.2).*
- *The MPO works with the state to identify major reconstruction needs over the life of the plan (Subtask 3.1).*

9. Improve the resiliency and reliability of the transportation system and reduce or mitigate storm water impacts of surface transportation

- *The MPO works with regional stakeholders to collect and analyze information to improve resiliency and reliability of the transportation system and reduce or mitigate storm water impacts on surface transportation (Subtask 5.1).*

10. Enhance travel and tourism

- *The MPO coordinates with representatives in the tourism industry to further understand tourism industry trends and needs related to transportation infrastructure and planning (Subtask 4.1).*

- *The MPO coordinates with representatives in the private transportation operators, tour bus operators and intercity bus operators to further understand industry trends and needs related to transportation infrastructure and planning (Subtask 5.1 and 3.2).*
- *The Livable Centers program supports the development of walkable, mixed-use places that utilize multi-modal travel choices and improve accessibility for regional residents and visitors (Subtask 5.3).*

Federal transportation legislation has placed an increased emphasis on performance-based planning and programming in order to increase accountability and transparency in regard to transportation investments. This includes the requirement that MPOs establish performance measures in conjunction with the following seven national goals outlined in U.S.C. 23 Sec 150(b):

1. **Safety** - Achieve a significant reduction in traffic fatalities and serious injuries on all public roads.
2. **Infrastructure condition** - Maintain the highway infrastructure asset system in a state of good repair.
3. **Congestion reduction** - Achieve a significant reduction in congestion on the National Highway System.
4. **System reliability** - Improve the efficiency of the surface transportation system.
5. **Freight movement and economic vitality** - Improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.
6. **Environmental sustainability** - Enhance the performance of the transportation system while protecting and enhancing the natural environment.
7. **Reduced project delivery delays** - 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 burdens and improving agencies' work practices.

H-GAC, through an annual performance management process, reviewing and implementing the Regional Transportation Plan, and conducting thoroughfare and corridor planning, reviews and reassess performance measures to reflect the seven national goals and strategies to attain them.

MPOs are required to develop a public involvement process that provides complete information, timely notification, and public access to the planning process. H-GAC developed and adopted its Public Participation Plan (PPP) in 2007, which was updated in November 2012, July 2017, and January 2021. The intent of the PPP is to create a transportation planning process that is accessible, inclusive, and proactive. The plan is designed to educate and inform the public about transportation and related air quality issues, and to provide the public with

opportunities to contribute their ideas and opinions in a meaningful way early and often throughout the planning process.

DEFINITION OF SERVICE AREA

The Houston-Galveston Area Council has been designated by the Governor of Texas to serve as the Metropolitan Planning Organization (MPO) for transportation planning in the urbanized region that consists of Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller counties. This eight-county TMA includes an estimated 7.2 million people. The TMA includes four U.S. Census-designated urbanized areas with populations greater than 50,000 (the Houston Urbanized Area, the Texas City/La Marque Urbanized Area, The Woodlands Urbanized Area, and the Angleton/Lake Jackson Urbanized Area), **Appendix B** contains a map of the Houston-Galveston TMA.

ORGANIZATION and STAKEHOLDERS

The Transportation Policy Council (TPC) is the policy-making board for the MPO. Its twenty-eight (28) voting members are responsible for the development and approval of transportation plans and programs within the TMA. Membership on the TPC consists of chief elected officials and their designated alternates from the ten major cities (over 50,000 in population) and each of the eight counties within the TMA. In addition, Harris County or designated city have a representative appointed by the H-GAC Board of Directors on the TPC Membership. The H-GAC Board of Directors also appoints one member to the TPC to represent regional concerns. The TPC appoints one representative for “Other Transportation Interests” that would otherwise not be formally represented. The Texas Department of Transportation (TxDOT) has two representatives, one from each of their two districts in the TMA and the Metropolitan Transit Authority of Harris County (METRO) has one representative. Current TPC membership is listed in **Appendix A**.

The TPC created a standing Transportation Advisory Committee (TAC) to assist with the technical aspects related to the development of the RTP; the TIP; the Regional Bicycle and Pedestrian Plan; major corridor studies; and other transportation programs and plans. Its membership consists of forty-four (44) transportation planning and air quality experts from agencies throughout the TMA, as well as representatives from various advocacy groups with an interest in transportation decisions. The TAC exists to assure that transportation-planning decisions are considered in their broadest context. The TAC currently has established six (6) subcommittees to assist with specific program activities. These are: Regional Transportation Plan (RTP) Subcommittee, Transportation Improvement Program (TIP) Subcommittee, Transportation Air Quality Subcommittee, Regional Transit Coordination Subcommittee, Transportation Systems and Management Operations (TSMO) subcommittee, and the Pedestrian and Bicyclist Subcommittee. Current TAC membership can also be found in **Appendix A**.

In 1991, the Regional Air Quality Planning Committee (RAQPAC) was specifically created to work with H-GAC staff and other governmental agencies on coordination of regional air quality

programs to meet federal clean air standards and to advise the H-GAC Board of Directors and the TPC on air quality policy. This committee is composed of members representing a variety of public agencies, private industry, business, local health organizations, and citizen and environmental groups.

In 2005, the TPC renamed the Transportation Safety Committee (previously the Regional Safety Council) which is established to provide recommendations for improving transportation safety in our region. Its membership consists of professionals with backgrounds in transportation, law enforcement, emergency medical service, injury prevention, public health, trucking, railroads, insurance, shipping, safety advocacy, and safety research.

In 2016, the TPC created the Greater Houston Freight Committee to better incorporate private sector freight user perspectives into the transportation planning process. The Committee, with co-chairs appointed by the TPC, seeks to accomplish this through regular open meeting highlighting relevant industry trends and needs. The Committee identified a locally significant freight roadway network, recommended investment in critical facilities associated with a boom in petrochemical manufacturing and coordinated with Texas Freight Advisory Committee in the updating of the State Freight Mobility Plan.

PLANNING ISSUES AND EMPHASIS AREAS

Through development and implementation of this Work Program and approval of various MPO plans and studies, the Transportation Policy Council identifies the region's key planning issues.

Addressing Growth and Change – The MPO completed an update of the Regional Transportation Plan (RTP) in FY 2023. Addressing the Houston-Galveston region's rapid growth was a key focus area for the update, with consideration of the growth in regional travel activity and the related infrastructure needed to improve regional multimodal mobility underlying many of the RTP's goals and objectives. These included identifying differing preferences and expectations for the transportation that vary within the region, addressing the connection between transportation and land use, ongoing incorporation of regional transit needs and opportunities, environmental considerations and implications for project development, an enhanced congestion management system, and an emphasis on the development of performance measures to ascertain benefits from the region's transportation projects.

Safety Planning – Despite decades of effort to improve transportation safety, the trends across safety performance measures continue to move in the wrong direction. The H-GAC is making a growing effort to more directly and effectively address transportation safety and begin to reverse these trends. H-GAC is beginning to incorporate the FHWA's recommended Safe Systems approach, which generally shifts the focus of safety efforts from the traditional approach of reducing all crashes towards one that focuses on reducing crashes that result in fatalities and serious injuries. H-GAC assesses safety data as it is provided to determine the problem areas in terms of traffic safety. Staff will move towards a future (2025) revision of the regional safety plan based on the data assessments and provide potential countermeasures

for consideration. H-GAC provides technical support on traffic safety issues, including the support of various outreach initiatives to promote safer driving.

Freight Planning – Freight facilities and services are strongly linked to regional economic competitiveness and quality of life and, from a transportation perspective, freight shipments continue to grow steadily across all modes. Planning for freight is also an effective means of addressing safety, security, environmental, and air quality issues. A major objective of the freight program is to initiate and sustain meaningful outreach to the local freight community and to build awareness and expertise among planners and the general public. A freight advisory committee is the focal point of this effort. The Regional Goods Movement Study was initiated in 2021 and will be completed in 2024; it established strategies to improve goods movement for the deep-water ports in the region. Implementation of the Regional Goods Movement Study will start during this UPWP.

Air Quality Planning - Air quality planning efforts are aimed at finding control strategies and policies to ensure that on-road mobile sources in the eight-county Houston-Galveston-Brazoria nonattainment area comply with federal pollution standards and State Implementation Plan (SIP) requirements. Activities include engaging with regional business/industry leaders, environmental organizations, federal, state, and local governments to develop/review clean air strategies, aiding in the implementation of SIP strategies through demonstration projects and contractual programs.

Livable Centers – H-GAC provides outreach, training, and technical assistance to local governments and private developers to help achieve an improved connection between development patterns and the transportation system. H-GAC's Livable Centers program provides local governments with opportunities to assess new strategies and utilize best practices in land use/transportation coordination. The Livable Centers program helps to create quality, mixed-use places that provide multi-modal transportation options through studies and implementation projects.

Bicycle and Pedestrian Planning – H-GAC supports the implementation of the Transportation Policy Council's adopted pedestrian and bicycle policy goals and recommended actions. This includes maintenance of the Active Transportation Plan, the development of a supplemental long-range plans in conjunction with the RTP, provision of technical support to local governments, and the hosting of training sessions for best practices.

Planning Emphasis Areas

In addition to the H-GAC-identified planning issues described above, the U.S. Department of Transportation regularly issues Planning Emphasis Areas (PEAs) that are required to be identified and addressed within the UPWP.

In 2014, the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) jointly issued their first set of three Planning Emphasis Areas to be addressed in the Unified Planning Work Program (UPWP). Subsequently, in December 2021, FHWA and FTA issued eight updated Planning Emphasis Areas (PEAs).

2014 FHWA/FTA-Issued Planning Emphasis Areas
<i>Transition to Performance-Based Planning and Programming</i>
<i>Regional Models of Cooperation</i>
<i>Ladders of Opportunity – Access to Essential Services</i>
2021 FHWA/FTA-Issued Planning Emphasis Areas
<i>Tackling the Climate Crisis – Transition to a Clean Energy, Resilient Future</i>
<i>Equity and Justice40 in Transportation Planning</i>
<i>Complete Streets</i>
<i>Public Involvement</i>
<i>Strategic Highway Network/Dept of Defense Coordination</i>
<i>Federal Land Management Agency Coordination</i>
<i>Planning and Environment Linkages</i>
<i>Data in Transportation Planning</i>

The table below describes each Planning Emphasis Area and illustrates how the MPO’s UPWP addresses them:

2014 Planning Emphasis Areas

2014 FHWA/FTA Planning Emphasis Areas	
Transition to Performance-Based Planning and Programming (2014 Emphasis Area)	
<i>Emphasis Area Description</i>	<i>Work Program Subtasks Addressing Emphasis Area</i>
Further develop performance management approach to transportation planning and programming. Performance-based planning and programming includes using transportation performance measures, setting targets, reporting performance, and programming transportation investments directed toward the achievement of transportation system performance outcomes. Appropriate UPWP work tasks could include working with local planning partners to identify how to implement performance-based planning provisions such as collecting performance data, selecting and reporting performance targets for the Metropolitan Area, and reporting actual system performance related to those targets. The MPOs might also explore the option to use scenario planning to develop their Metropolitan Transportation Plan.	<ul style="list-style-type: none"> • Subtask 5.1 – Staff conducts an annual assessment of crash statistics to assess the regional crash experience and utilize the information for planning efforts to improve regional traffic safety. • Subtask 4.1 - The update of the Regional Transportation Plan (RTP) continues to assess potential performance measures, which will be utilized in project selection criteria and project prioritization to link RTP goals and objectives. • Subtask 4.2 - Calls for the development of freight performance measures to gauge system conditions and use, evaluate transportation programs and projects, and help decision-makers to allocate limited resources. • Subtask 5.2 – The Congestion Management Process calls for tracking and updating of congestion indices, which will play a role in assessing system performance and for project prioritization in the RTP process.
Ensure a Regional Approach to Transportation Planning by Promoting Cooperation and Coordination across Transit Agency, MPO and State Boundaries (2014 Emphasis Area)	
<i>Emphasis Area Description</i>	<i>Work Program Subtasks Addressing Emphasis Area</i>
To improve the effectiveness of transportation	<ul style="list-style-type: none"> • The Houston-Galveston MPO has representation

<p>decision making, state Departments of Transportation, MPOs, and providers of public transportation are encouraged to think beyond traditional borders and adopt a coordinated approach to transportation planning. A coordinated approach supports common goals and capitalizes on opportunities related to project delivery, congestion management, safety, freight, livability, and commerce across boundaries. Improved multi-jurisdictional coordination by state Departments of Transportation, MPOs, providers of public transportation, and Rural Planning Organizations can reduce project delivery times and enhance the efficient use of resources, particularly in urbanized areas that are served by multiple MPOs. The MPOs can revisit their Metropolitan Area planning agreements to ensure that there are effective processes for cross-jurisdictional communication among state Departments of Transportation, MPOs, and providers of public transportation to improve collaboration, policy implementation, technology use, and performance management. State Departments of Transportation and MPOs can explore the opportunity to partner with Rural Planning Organizations to conduct transportation planning in nonmetropolitan areas.</p>	<p>from TxDOT’s Beaumont District, which covers the Beaumont MPO, as well as two counties within the Houston-Galveston MPO.</p> <ul style="list-style-type: none"> • Subtask 3.4 – Evacuation Planning activities include the planning and coordination of regional evacuation activities. • Subtask 3.3 – H-GAC Air Quality Program staff meet with their MPO counterparts from other regions to share information on regional air quality programs, including vehicle replacement and commute alternative programs.
<p>Ladders of Opportunity – Access to Essential Services (2014 Emphasis Area)</p>	
<p><i>Emphasis Area Description</i></p>	<p><i>Work Program Subtasks Addressing Emphasis Area</i></p>
<p>State Departments of Transportation, MPOs, and providers of public transportation, as part of the transportation planning process, are encouraged to identify transportation connectivity gaps in accessing essential services.</p> <p>Essential services include employment, health care, schools/education, and recreation. Suggested UPWP work tasks include developing and implementing analytical methods to identify gaps in the connectivity of the transportation system and developing infrastructure and operational solutions that provide the public, especially the traditionally underserved populations, with adequate access to essential services. Other effective work tasks could include evaluating the effectiveness of public participation plans for engaging transportation disadvantaged communities in the transportation decision-making process; updating the Section 5310 Coordinated Human Service Public Transportation plans; assessing the safety and condition of pedestrian and bicycle facilities; and evaluating compliance with the Americans with Disabilities Act, particularly around schools, concentrations of</p>	<ul style="list-style-type: none"> • Subtask 3.2 - Short-Range Transit Planning activities include the planning and coordination of public transportation projects that operate in underserved areas of the region, and provide service to low-income, physically and mentally challenged, and elderly populations that may not have access to an automobile. • Subtask 4.1 - The RTP addresses the incorporation of Environmental Justice to identify socially and economically disadvantaged areas of the region, their proximity to jobs, and access to transit options. • Subtask 4.5 - Bicycle/Pedestrian System Planning addresses non-motorized options of travel, including the identification of facilities and proposed improvements to facilities to allow those users safe access to their destinations.

disadvantaged populations, social services, medical, and transit facilities.	
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2021 Planning Emphasis Areas

2021 FHWA/FTA Planning Emphasis Areas	
Tackling the Climate Crisis – Transition to a Clean Energy, Resilient Future (2021 Emphasis Area)	
<i>Emphasis Area Description</i>	<i>Work Program Subtasks Addressing Emphasis Area</i>
<p>Federal Highway Administration (FHWA) divisions and Federal Transit Administration (FTA) regional offices should work with State departments of transportation (State DOT), metropolitan planning organizations (MPO), and providers of public transportation to ensure that our transportation plans and infrastructure investments help achieve the national greenhouse gas reduction goals of 50-52 percent below 2005 levels by 2030, and net-zero emissions by 2050, and increase resilience to extreme weather events and other disasters resulting from the increasing effects of climate change. Field offices should encourage State DOTs and MPOs to use the transportation planning process to accelerate the transition toward electric and other alternative fueled vehicles, plan for a sustainable infrastructure system that works for all users, and undertake actions to prepare for and adapt to the impacts of climate change. Appropriate Unified Planning Work Program work tasks could include identifying the barriers to and opportunities for deployment of fueling and charging infrastructure; evaluating opportunities to reduce greenhouse gas emissions by reducing single-occupancy vehicle trips and increasing access to public transportation, shift to lower emission modes of transportation; and identifying transportation system vulnerabilities to climate change impacts and evaluating potential solutions. We encourage you to visit FHWA’s Sustainable Transportation or FTA’s Transit and Sustainability Webpages for more information.</p> <p>(See EO 14008 on “Tackling the Climate Crisis at Home and Abroad,” EO 13990 on “Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis.” EO 14030 on “Climate-Related Financial Risk,” See also FHWA Order 5520 “Transportation System Preparedness and Resilience to Extreme Weather Events,” FTA’s “Hazard Mitigation Cost Effectiveness Tool,” FTA’s “Emergency Relief Manual,” and “TCRP Document 70: Improving the Resilience of Transit Systems Threatened by Natural Disasters”)</p>	<ul style="list-style-type: none"> • Subtask 3.3: Air Quality Planning includes activities to engage with peer agencies to identify effective strategies to reduce criteria pollutants, which generally have concurrent reductions in greenhouse gases. Subtask 3.3 also includes a greenhouse gas inventory for the TMA that can be used to identify focused strategies for GHG reductions from the transportation sector. • Subtask 2.1: Maintenance and enhancement of the regional travel model enables the estimation of greenhouse gas and other air quality pollutants for various demographic and transportation infrastructure scenarios. The Regional Dynamic Traffic Assignment Model and other regional travel model support projects also provide capabilities in measuring resilience for natural disasters and simulation tools for development of response plans. • Subtask 3.1: The transportation programming process considers the reduction of air quality emissions and resiliency within the transportation system in the project selection process. • Subtask 4.1: The long-range transportation plan for the region includes plans for applying appropriate solutions for different stakeholders and geographies of the region. These activities include identifying and addressing transportation needs in high-growth areas, planning adequate roadway capacity for automobile travel, efforts to improve movement of freight, mass transit opportunities, planning for regional bicycle and pedestrian needs, addressing impacts and outcomes of the transportation planning process, and developing subregional transportation plans to address the interests and needs of local agencies. • Subtask 5.3: H-GAC serves as the host agency for Houston Clean Cities, which works to advance adoption of alternative fuels and other energy conservation technologies (e.g., idle reduction). Substantial work is underway related to transportation electrification across both public and private fleets, planning for infrastructure to support zero-emission vehicles, and advancing consumer awareness of electric vehicles, and developing infrastructure for electric vehicles.

	<ul style="list-style-type: none"> Subtask 3.2, 4.4, and 5.2: As a designated recipient of FTA grant funds for the urbanized areas, general responsibilities of H-GAC include program administration, implementation, and oversight of subgrantees and increased access to public transportation through the Commuter Transit Pilot Program.
Equity and Justice40 in Transportation Planning (2021 Emphasis Area)	
<i>Emphasis Area Description</i>	<i>Work Program Subtasks Addressing Emphasis Area</i>
<p>FHWA Division and FTA regional offices should work with State DOTs, MPOs, and providers of public transportation to advance racial equity and support for underserved and disadvantaged communities. This will help ensure public involvement in the planning process and that plans and strategies reflect various perspectives, concerns, and priorities from impacted areas. We encourage the use of strategies that: (1) improve infrastructure for nonmotorized travel, public transportation access, and increased public transportation service in underserved communities; (2) plan for the safety of all road users, particularly those on arterials, through infrastructure improvements and advanced speed management; (3) reduce single-occupancy vehicle travel and associated air pollution in communities near high-volume corridors; (4) offer reduced public transportation fares as appropriate; (5) target demand-response service towards communities with higher concentrations of older adults and those with poor access to essential services; and (6) consider equitable and sustainable practices while developing transit-oriented development, including affordable housing strategies and consideration of environmental justice populations.</p> <p>Executive Order 13985 (Advancing Racial Equity and Support for Underserved Communities) defines the term “equity” as the consistent and systematic fair, just, and impartial treatment of all individuals, including individuals who belong to underserved communities that have been denied such treatment, such as Black, Latino, and Indigenous and Native American persons, Asian Americans and Pacific Islanders and other persons of color; members of religious minorities; lesbian, gay, bisexual, transgender, and queer (LGBTQ+) persons; persons with disabilities; persons who live in rural areas; and persons otherwise adversely affected by persistent poverty or inequality. The term “underserved communities” refers to populations sharing a</p>	<ul style="list-style-type: none"> Subtask 1.2: Notices of public meetings are provided throughout the entire H-GAC area, including in traditionally underserved areas. Public meeting materials are translated. The public can participate in person, virtually, or via telephone for public meetings and materials will be mailed to anyone without internet access. A new effort is reaching out to community-based organizations that serve underserved communities to host the MPO to provide a program of education on the transportation planning process, as well as a listening session to hear transportation needs from community members. These needs will then be considered in the planning process. An interactive mapping tool, Bang The Table, available in English and Spanish, allows residents to place a pin and explain transportation concerns. Key documents are translated into Spanish and other languages as necessary. Subtask 2.1: Socio-economic modeling and data is inclusive of variables used in the evaluation of environmental justice such as income and worker status. This subtask also includes the enhancement of the analytical tools to include transit service modeling, which may help enhance service in underserved and disadvantaged communities. Subtask 3.1: The Transportation Policy Council has considered equity and held special consideration of/for environmental justice communities in project selection for many years. For example, project selection criteria often include implementing projects in traditionally underserved communities, increasing public transportation and filling in other service gaps in underserved areas, and improving infrastructure that benefits historically underserved populations. Subtask 3.2 and 4.4: Short- and long-range public transportation planning includes the development of goals, policies, and strategies to develop transit options for the transportation needs of the disadvantaged, including low-income populations, seniors, and individuals with disabilities, to increase

<p>particular characteristic, as well as geographic communities, that have been systematically denied a full opportunity to participate in aspects of economic, social, and civic life, as exemplified by the list in the preceding definition of “equity.” In addition, Executive Order 14008 and M-21-28 provides a whole-of-government approach to advancing environmental justice by stating that 40 percent of federal investments flow to disadvantaged communities. FHWA division and FTA regional offices should work with State DOTs, MPOs, and providers of public transportation to review current and new metropolitan transportation plans to advance federal investments to disadvantaged communities.</p> <p>To accomplish both initiatives, our joint planning processes should support State and MPO goals for economic opportunity in disadvantaged communities that have been historically marginalized and overburdened by pollution and underinvestment in housing, transportation, water and wastewater infrastructure, recreation, and health care.</p>	<ul style="list-style-type: none"> opportunities and access to public transportation. Subtask 4.1: The long-range transportation plan for the region includes plans for applying appropriate solutions for different stakeholders and geographies of the region. These activities include identifying and addressing transportation needs in high-growth areas, planning adequate roadway capacity for automobile travel, efforts to improve movement of freight, mass transit opportunities, planning for regional bicycle and pedestrian needs, addressing impacts and outcomes of the transportation planning process, and developing subregional transportation plans to address the interests and needs of local agencies. Subtask 5.2: The Travel Demand Management Program develops projects in collaboration with local partners to introduce or enhance transit services across the region, specifically aimed towards areas with limited or no access to public transportation. Also, the equitable transit fare program develops projects with transit partners to reduce public transportation fares for low-income populations accessing employment opportunities.
<p>Complete Streets (2021 Emphasis Area)</p>	
<p><i>Emphasis Area Description (From FHWA/FTA)</i></p>	<p><i>Work Program Subtasks Addressing Emphasis Area</i></p>
<p>FHWA division and FTA regional offices should work with State DOTs, MPOs, and providers of public transportation to review current policies, rules, and procedures to determine their impact on safety for all road users. This effort should work to include provisions for safety in future transportation infrastructure, particularly those outside automobiles.</p> <p>A Complete Street is safe, and feels safe, for everyone using the street. FHWA and FTA seek to help federal aid recipients plan, develop, and operate streets and networks that prioritize safety, comfort, and access to destinations for people who use the street network, including pedestrians, bicyclists, transit riders, micro- mobility users, freight delivery services, and motorists. The goal is to provide an equitable and safe transportation network for travelers of all ages and abilities, including those from marginalized communities facing historic disinvestment. This vision is not achieved through a one-size-fits-all solution – each Complete Street is unique and developed to best serve its community context and its primary role in the network.</p>	<ul style="list-style-type: none"> Subtask 5.7: This subtask includes “Complete Streets Planning” that will specifically address this PEA and implement the IJJA requirement for development of a Complete Streets Plan. Additionally, corridor plans and special studies are designed to study a specific issue or corridor and allow for a comprehensive assessment of general transportation needs within an area prior to examining system alternatives, in an effort to provide appropriate balance of modal options in the area. Subtask 5.3: Livable Centers studies provide an evaluation of multimodal transportation needs within a specific geographic area. Context-sensitive solutions are identified and typically include strategies and recommendations that are compatible with Complete Streets. Subtask 4.1: The long-range transportation plan for the region includes extensive plans for a multimodal approach, including general recommendations for context-sensitive Complete Streets throughout the region. Subtask 4.2 Multimodal transportation plans develop and evaluate investments that are reasonable alternative strategies for addressing the transportation demands and congestion at a

<p>Per the National Highway Traffic Safety Administration’s 2019 data, 62 percent of the motor vehicle crashes that resulted in pedestrian fatalities took place on arterials. Arterials tend to be designed for vehicle movement rather than mobility for nonmotorized users and often lack convenient and safe crossing opportunities. They can function as barriers to a safe travel network for road users outside of vehicles.</p> <p>To be considered complete, these roads should include safe pedestrian facilities, safe transit stops (if present), and safe crossing opportunities on an interval necessary for accessing destinations. A safe and complete network for bicycles can also be achieved through a safe and comfortable bicycle facility located on the roadway, adjacent to the road, or on a nearby parallel corridor. Jurisdictions will be encouraged to prioritize safety improvements and speed management on arterials that are essential to creating complete travel networks for those without access to single-occupancy vehicles.</p>	<p>corridor or subarea level of the Metropolitan Planning area and make specific recommendations for their funding and implementation.</p>
<p>Public Involvement (2021 Emphasis Area)</p>	
<p><i>Emphasis Area Description (From FHWA/FTA)</i></p>	<p><i>Work Program Subtasks Addressing Emphasis Area</i></p>
<p>Early, effective, and continuous public involvement brings diverse viewpoints into the decision-making process. FHWA division and FTA regional offices should encourage MPOs, State DOTs, and providers of public transportation to increase meaningful public involvement in transportation planning by integrating Virtual Public Involvement (VPI) tools into the overall public involvement approach while ensuring continued public participation by individuals without access to computers and mobile devices. The use of VPI broadens the reach of information to the public and makes participation more convenient and affordable to greater numbers of people. Virtual tools provide increased transparency and access to transportation planning activities and decision-making processes. Many virtual tools also provide information in visual and interactive formats that enhance public and stakeholder understanding of proposed plans, programs, and projects. Increasing participation earlier in the process can reduce project delays and lower staff time and costs. More information on VPI is available here.</p>	<ul style="list-style-type: none"> • Subtask 1.2 commits the H-GAC to extensive and meaningful opportunities for public outreach and public improvement. Notices of public meetings are provided throughout the entire H-GAC area, including in traditionally underserved areas. Public meeting materials are translated. The public can participate in person, virtually, or via telephone for public meetings and materials will be mailed to anyone without internet access. A new effort is reaching out to community-based organizations that serve underserved communities to host the MPO to provide a program of education on the transportation planning process, as well as a listening session to hear transportation needs from community members. These needs will then be considered in the planning process. An interactive mapping tool, Bang The Table, available in English and Spanish, allows residents to place a pin and explain transportation concerns. Key documents are translated into Spanish and other languages as necessary. • The MPO’s provision of a 3-C planning process (continuous, collaborative, and comprehensive) includes meaningful public outreach activities in the development of the UPWP, Transportation Improvement Program, Regional Transportation

	Plan, subregional plans, corridor plans, active transportation plans, Livable Centers plans, and other MPO-led planning activities.
Strategic Highway Network (STRAHNET)/US Department of Defense (DOD) Coordination (2021 Emphasis Area)	
<i>Emphasis Area Description (From FHWA/FTA)</i>	<i>Work Program Subtasks Addressing Emphasis Area</i>
<p>FHWA division and FTA regional offices should encourage MPOs and State DOTs to coordinate with representatives from DOD in the transportation planning and project programming process on infrastructure and connectivity needs for STRAHNET routes and other public roads that connect to DOD facilities. According to the Declaration of Policy in 23 U.S.C. 101(b)(1), it is in the national interest to accelerate construction of the federal-aid highway system, including the Dwight D. Eisenhower National System of Interstate and Defense Highways, because many of the highways (or portions of the highways) are inadequate to meet the needs of national and civil defense. The DOD’s facilities include military bases, ports, and depots. The road networks that provide access and connections to these facilities are essential to national security. The 64,200-mile STRAHNET system consists of public highways that provide access, continuity, and emergency transportation of personnel and equipment in times of peace and war. It includes the entire 48,482 miles of the Dwight D. Eisenhower National System of Interstate and Defense Highways and 14,000 miles of other non- Interstate public highways on the National Highway System. The STRAHNET also contains approximately 1,800 miles of connector routes linking more than 200 military installations and ports to the primary highway system. The DOD’s facilities are also often major employers in a region, generating substantial volumes of commuter and freight traffic on the transportation network and around entry points to the military facilities. Stakeholders are encouraged to review the STRAHNET maps and recent Power Project Platform (PPP) studies. These can be a useful resource in the State and MPO areas covered by these route analyses.</p>	<ul style="list-style-type: none"> • Subtask 1.1: Engagement with stakeholders includes participation in DOD-sponsored studies related to force mobilization using highways, railroads, and ports in the Houston-Galveston region. • Subtask 2.1: The Travel Demand Modeling and support for regional models includes development of capabilities for connectivity of various transportation networks. TxDOT and the roadway system managed by local cities are seamlessly included in travel model network development and maintenance and used by the regional travel model. This inclusion enables the analysts to provide reports and planning activities that includes all interested parties. • Subtask 4.1: The Federal Functional Classification System is the system by which roads are grouped into functional systems according to the type of service and the amount of traffic the facility carries. H-GAC staff continually monitors this system for the Houston-Galveston TMA to ensure that roadways serving DOD installations are accurately classified. Federal Function Classification System status is interrelated to both the National Highway System and STRAHNET.
Federal Land Management Agency (FMLA) Coordination (2021 Emphasis Area)	
<i>Emphasis Area Description (From FHWA/FTA)</i>	<i>Work Program Subtasks Addressing Emphasis Area</i>
<p>FHWA division and FTA regional offices should encourage MPOs and State DOTs to coordinate with FLMAs in the transportation planning and project programming process on infrastructure and</p>	<ul style="list-style-type: none"> • Subtask 3.1 (TIP), 4.1 (RTP), 4.2, and 5.7: FLMAs are included in stakeholder engagement and consultation activities, and are provided with specific opportunities for individual meetings and

<p>connectivity needs related to access routes and other public roads and transportation services that connect to federal lands. Through joint coordination, the State DOTs, MPOs, Tribal Governments, FLMAs, and local agencies should focus on integration of their transportation planning activities and develop cross-cutting State and MPO long-range transportation plans, programs, and corridor studies, as well as the Office of Federal Lands Highway’s developed transportation plans and programs. Agencies should explore opportunities to leverage transportation funding to support access and transportation needs of FLMAs before transportation projects are programmed in the Transportation Improvement Program (TIP) and Statewide Transportation Improvement Program (STIP). Each State must consider the concerns of FLMAs that have jurisdiction over land within the boundaries of the State (23 CFR 450.208(a)(3)). MPOs must appropriately involve FLMAs in the development of the metropolitan transportation plan and the TIP (23 CFR 450.316(d)). Additionally, the Tribal Transportation Program, Federal Lands Transportation Program, and the Federal Lands Access Program TIPs must be included in the STIP, directly or by reference, after FHWA approval in accordance with 23 U.S.C. 201(c) (23 CFR 450.218(e)).</p>	<p>providing comments on plans as they are developed.</p> <ul style="list-style-type: none"> • Additional development of responsive programs will occur during 2024 to ensure that this PEA is fully addressed.
<p>Planning and Environment Linkage (2021 Emphasis Area)</p>	
<p><i>Emphasis Area Description (From FHWA/FTA)</i></p>	<p><i>Work Program Subtasks Addressing Emphasis Area</i></p>
<p>FHWA division and FTA regional offices should encourage State DOTs, MPOs, and public transportation agencies to implement PEL as part of the transportation planning and environmental review processes. The use of PEL is a collaborative and integrated approach to transportation decision making that considers environmental, community, and economic goals early in the transportation planning process, and uses the information, analysis, and products developed during planning to inform the environmental review process. PEL leads to interagency relationship building among planning, resource, and regulatory agencies in the early stages of planning to inform and improve project delivery timeframes, including minimizing duplication and creating one cohesive flow of information. This results in transportation programs and projects that serve the community’s transportation needs more effectively while avoiding and minimizing the impacts on human and natural resources. More information on PEL is available here.</p>	<ul style="list-style-type: none"> • Subtask 1.1: Engagement with stakeholders includes staff participation in TxDOT-sponsored Planning and Environment Linkage (PEL) studies considering new projects or investment on major transportation facilities in the Houston-Galveston region. • Across all core MPO planning activities (i.e., Subtasks 3.1, 3.2, 3.3, 4.1, 4.2, 4.4, 4.5, 5.2, and 5.7), in accordance with the federal metropolitan planning rule, Planning and Environment Linkages (PEL) are supported when viable and requested. This may include developing a framework for early planning stage consideration of environmental, community, and economic goals, and then advancing those goals into all subsequent project development stages to affect construction and mitigation, approaches to address interagency relationship building, inclusive communication/interaction, and encourage the effective reduction and mitigation of human/natural environmental impacts are

	<p>conducted under this initiative.</p> <ul style="list-style-type: none"> • Subtask 2.1: Regional Travel Model Support provides the analytical connection between planning and environmental studies. • Subtask 2.2 Transportation Data Development: Staff maintains traffic and travel datasets that are used as input to support environmental planning. This project also includes coordination between state and federal sources of data to avoid duplicate purchase and data management efforts.
Data in Transportation Planning (2021 Emphasis Area)	
<i>Emphasis Area Description (From FHWA/FTA)</i>	<i>Work Program Subtasks Addressing Emphasis Area</i>
<p>To address the emerging topic areas of data sharing, needs, and analytics, FHWA division and FTA regional offices should encourage State DOTs, MPOs, and providers of public transportation to incorporate data sharing and consideration into the transportation planning process, because data assets have value across multiple programs. Data sharing principles and data management can be used for a variety of issues, such as freight, bike and pedestrian planning, equity analyses, managing curb space, performance management, travel time reliability, connected and autonomous vehicles, mobility services, and safety. Developing and advancing data sharing principles allows for efficient use of resources and improved policy and decision making at the State, MPO, regional, and local levels for all parties.</p>	<ul style="list-style-type: none"> • Task 2 directly addresses most aspects of this PEA. With increasing amounts of data available to support transportation planning activities, tasks related to evaluating, curating, downloading, processing, manipulating, and disseminating data to internal and external stakeholders are all essential. Finding relationships between new and existing datasets is key as well, as the value of data is enhanced when it can be examined along with other data in a cohesive, holistic way. Within this subtask, work is ongoing to create a comprehensive data management system for the MPO that will make many of these tasks easier. • Subtask 2.1: Improvement and maintenance of the Travel Demand Model and associated tools provides a common platform to integrate data and the forecast in a consistent manner. These products provide a standardized system of communication on this emphasis area. • Subtask 2.2: This project includes the cleanup and management of traffic count and speed data, as well as maintenance of websites, to disseminate the data. • Subtask 2.3: Improvement and maintenance of the land use and demographic data, in addition to other related data products in this subtask, support this PEA. • Subtask 3.1: Through the region’s selection of planning support programs for inclusion in the TIP, sufficient resources are allocated to data collection and studies, projects, and programs that utilize the collected data to improve the transportation system in the region. • Subtask 3.3: All air quality data H-GAC receives from federal agencies and monitoring systems is provided on the MPO’s air quality planning web page. • Subtasks 3.2 and 4.4: Oversight of federally required transit performance measures support

	<p>data sharing efforts and ensures that data is incorporated into the planning process.</p> <ul style="list-style-type: none"> • Subtask 5.2: Performance measures are included in project management and program oversight for federal formula and discretionary funds for public transportation. Measures for both operations and capital grants are used in the planning process to maximize program outcomes with available funding. Real-time traffic data are utilized for optimizing the region’s traffic management center and incident management programs. • Subtask 5.4: H-GAC is preparing to initiate targeted projects related to emerging transportation technologies that will make use of the data and knowledge ecosystem surrounding the development and implementation of connected vehicle technology, open-source travel data, artificial intelligence, and other new technologies.
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PRIVATE SECTOR INVOLVEMENT

The private sector is encouraged, to the maximum extent feasible, to participate in the H-GAC’s metropolitan transportation and air quality planning process, and the region’s private sector is actively involved in planning efforts outlined in the 2024 UPWP. The private sector participates in H-GAC’s transportation policy structure. Industry interests and business groups have representatives serving on the Transportation Advisory Committee, the Regional Air Quality Planning Committee, the Regional Safety Council, the Greater Houston Freight Committee, and their respective subcommittees. In addition, H-GAC utilizes private sector contractors and consultants to execute many of its planning responsibilities; this relationship both helps ensure that the MPO’s work is completed, but also provides a regular opportunity for the private sector to add perspective and expertise to the execution of this UPWP.

Private businesses also serve on steering committees, which provide guidance for various transportation-related plans & studies. Transportation Management Organizations (TMOs) also provide opportunities for private sector involvement related to ridesharing, vanpooling, and other trip reduction activities. H-GAC provided start-up funds for many area TMOs, which assist employers in implementing transportation demand management (TDM) strategies.

H-GAC staff continues to provide technical assistance to private and public transit and para-transit operators in the planning and delivery of expanded transit services in coordination with METRO and other regional public transportation providers. Staff will continue to work through the FTA 5307 and FTA 5311 programs to expand the public transportation services through public/private partnership agreements.

TASK I Administration and Management

The purposes of the activities listed under Task I are to provide administrative support to the transportation planning process for the eight-county Houston-Galveston Transportation Management Area (TMA), to facilitate interagency cooperation and coordination, and facilitate effective communication and engagement with stakeholders and the community.

Task Objectives:

The following key objectives summarize the main activities that the MPO will undertake to complete the requirements of Task One during the term of this Unified Planning Work Program:

- Administer and maintain operations of the MPO
- Manage contracts and agreements
- Maintain financial records
- Maintain the federal certification of the Houston-Galveston Transportation Management Area's transportation planning process.
- Administer and manage planning support services contracts.
- Provide technical assistance to local governments
- Provide technical assistance to the TPC
- Provide analysis of State and federal laws, regulations, and legislation
- Provide MPO comments to federal and state agencies
- Examine impacts of inflation on MPO activities
- Track legislative and rule-making activities
- Support public information exchange and education programs
- ensure an open planning process that supports early and continued public involvement
- Utilize online engagement tools/platforms/software
- Solicit public comments
- Provide live-streaming of Transportation Policy Committee meetings
- Update Language Assistance Plan
- Provide public information on regional transportation issues
- Support public outreach activities
- Create graphics and other visualizations
- Provide stakeholder outreach support
- Develop partnerships with community organizations
- Conduct a hurricane preparedness public outreach campaign

Expected Products:

The following list of products are expected to be developed and produced during the term of this Unified Planning Work Program:

- Meeting agendas, meeting notices, meeting minutes and agenda items, and background materials for TPC and TAC meetings.
- Billing submissions and the filing of billing/invoicing documentation.

- Completed and managed contracts and agreements using the Agiloft contract system.
- The Annual Performance and Expenditure Report (APER).
- Historical data, publications, and map warehousing/archive libraries, along with an online-query system for public research and access to historical information.
- Maintained documentation for audit and informational purposes.
- Training and educational materials for staff and consultants on MPO regulations and requirements.
- Computer distribution, inventory, meeting set ups, software, product assessments, and purchasing.
- Various databases that support programs (DBE and Buy America) and management of the MPO.
- Technical assistance documents and presentations to the TPC, TAC, and other committees and subcommittees.
- Meeting materials, meeting notices, meeting records and/or minutes for TPC, TAC, and other committees and subcommittees.
- Annual orientation and training workshops for members of TPC, TAC, and other associated committees and subcommittees.
- Timely reports and updates to TPC on legislative affairs and rule-makings.
- MPO comments to federal and state agencies regarding proposed rules as part of the rule-making process.
- Published legal notices, press releases and advertisements, public meeting arrangements, slideshow presentations, and educational materials for distribution at the meetings.
- In-person, hybrid, and virtual meetings for TPC and TAC and other subcommittees. Provide meeting live streaming when required or appropriate.
- Updated Language Assistance Plan.

Previous and Continuing Work:

- Worked on consultant and pass-through contracts for awarded planning projects and programs.
- Prepared meeting agendas, meeting notices, minutes and agenda item background materials for TPC and TAC meetings during the 2022-2023 fiscal years, as well as annual workshops for TPC and TAC members.
- Maintained the 2022-2023 UPWP with amendments during the two-year period to reflect changes and additions to included projects and activities.
- Distributed the MPO Transportation e-newsletter monthly “Region View”.
- Participated in meetings of the Association of Metropolitan Planning Organizations (AMPO), Texas Metropolitan Planning Organizations (TEMPO), American Planning Association, National Association of Regional Councils (NARC), Texas Association of Regional Councils (TARC), Transportation Research Board (TRB), American Association

of State Highway and Transportation Officials (AASHTO), ITS Texas and other transportation planning organizations.

- Completed the APER for years 2021 and 2022.
- Supported daily operations for the MPO in the areas of public outreach, program administration, office management, grant management, computer systems management, and quality control.
- Offered technical support to staff for computer distribution, inventory, meeting set ups, software, product assessments, and purchasing.
- Contract implementation, management, and compliance.
- Day to day operations of the MPO, including the fiscal management, contracts, handling of personnel matters, and the procurement of equipment and supplies required for operations.
- Creating and implementing virtual meetings during the COVID-19 pandemic to continue important meetings such as TAC and TPC using various meeting platforms.
- Publicized public meetings and public comment periods for MPO programs, projects, plans, and studies, the public outreach program utilized various communication tactics that included legal notices, social media postings, website postings, community calendar and event postings, social media advertising, digital advertising, news releases, flyers, e-mail marketing, presentations, letters, information kits, and direct mail.
- Coordinated public meetings and received public comments.
- Conducted the annual Zip Zone Map Campaign that educated residents in the zip zone map area codes on which zip zone they live in and how to prepare for an evacuation. The Together Against the Weather campaign also ran in fiscal years 2022-2023 and educated residents, stakeholders, community organizations, and local governments on how to prepare for hurricane season during the COVID-19 pandemic.
- Continued to maintain a community contact and stakeholder list (through Constant Contact) for distribution of public meeting information and materials during fiscal years 2022-2023.

Subtask 1.1 Program Support/Unified Planning Work Program

This subtask includes all administrative support for the MPO planning program in general, including the financial management of the MPO's operations, contract management, departmental reporting, the provision of technical assistance to member agencies, and participation in state and national organizations involved in transportation planning and development.

Subtask 1.1 also includes the development and maintenance of the Unified Planning Work Program (UPWP), which describes the transportation plans and programs and the transportation-related air quality planning activities conducted during the fiscal year(s) regardless of funding sources or agencies conducting these activities.

Subtask 1.1.a – Administration and Program Support

Staff Contact: Allie Isbell

All activities will be funded by Transportation Planning Funds (TPF) unless noted otherwise.

Objectives:

- A. **Administer and maintain operations of the MPO**, including the fiscal management, contracts, handling of personnel matters, and the procurement of equipment and supplies required for operations.
- B. **Manage contracts and agreements** between the MPO and participating agencies or subcontractors. Support contract implementation, management, and compliance.
- C. **Maintain financial records** for departmental contracts and ensure payment of invoices.
- D. **Maintain the federal certification** of the Houston-Galveston Transportation Management Area's transportation planning process, related requirements associated with the budgeting and expenditures of Federal, State, and local funding, including the Annual Performance & Expenditure Report (APER), and meeting requirements for the Disadvantaged Business Enterprise goal development and reporting, Buy America requirements, and self-certification assurances.
- E. **Administer and manage planning support services contracts**. Develop and oversee all aspects of contracts with consultants to provide staff and planning support services to implement UPWP activities, including developing and approving work assignments, providing day-to-day management of staff extension consultants, assigning tasks, and conducting other activities necessary to effectively utilize staff extension and task order assignments to ensure that the UPWP is implemented.
- F. **Participate in planning-related organizations**. Conduct non-lobbying participation in the Association of Metropolitan Planning Organizations (AMPO), Texas Metropolitan Planning Organizations (TEMPO), National Association of Regional Councils (NARC), American Planning Association, Texas Association of Regional Councils (TARC), Transportation Research Board (TRB), American Association of State Highway and

Transportation Officials (AASHTO), ITS America, ITS Texas, and other organizations that enhance the planning process. This may include agency memberships in these organizations (individual memberships are not a reimbursable expense).

- G. **Attend, participate in, or present at transportation-related conferences, training sessions and meetings** at the local, regional, state, and national levels for professional development and to enhance implementation of activities listed in this UPWP and the MPO planning processes. (Out of state travel using TPF funds requires pre-approval from TxDOT.)
- H. **Maintain historical data, publications, and map warehousing/archive libraries**, along with an online-query system for public research and access to historical information.
- I. **Departmental procurements and acquisitions.** Conduct the acquisition of supplies, services, software, equipment, maintenance, and staff training necessary to support MPO operations and facilitate transportation and related air quality planning activities.
- J. **Software and equipment procurement.** Conduct acquisition of equipment and software, with prior FHWA approval for those procurements with a threshold of \$5,000.00 or more per unit cost.
- K. **Provide DBE support to the MPO** through data collection, reporting, compliance, and education.
- L. **Provide support of Buy America provisions** to MPO staff and consultants.
- M. **Engage in transportation planning-related travel**, administration works to retain prior State and Federal Approval for all travel taking place out-of-state; ensuring all procedures are followed.
- N. **Coordinate meeting logistics.** Provide food and non-alcoholic beverages, pending TxDOT approval, at selected meetings and events when deemed appropriate.

Expected Products:

- A. Meeting agendas, meeting notices, meeting minutes and agenda items, and background materials for TPC and TAC meetings.
- B. Billing submissions and the filing of billing/invoicing documentation.
- C. Completed and managed contracts and agreements using the Agiloft contract system.
- D. The Annual Performance and Expenditure Report (APER).
- E. Historical data, publications, and map warehousing/archive libraries, along with an online-query system for public research and access to historical information.
- F. Maintained documentation for audit and informational purposes.
- G. Training and educational materials for staff and consultants on MPO regulations and requirements.
- H. Computer distribution, inventory, meeting set ups, software, product assessments, and purchasing.
- I. Various databases that support programs (DBE and Buy America) and management of the MPO.

1.1.b – Unified Planning Work Program Development

The MPO will develop, monitor, and coordinate the Unified Planning Work Program (UPWP) to ensure that the region’s transportation and metropolitan planning needs and priorities are identified and addressed. The MPO will also develop amendments to the UPWP during the term of the UPWP that address new issues or requirements, new planning needs, new planning efforts by partners, and enhance implementation of UPWP tasks.

Staff Contact: Craig Raborn

All activities will be funded by Transportation Planning Funds (TPF) unless noted otherwise.

Objectives:

- A. **Maintain the 2024 Unified Planning Work Program (UPWP)**, reflecting current plans, programs, and regional priorities, by amendments approved by the TPC, TxDOT, FHWA, and FTA.
- B. **Track and report implementation of the 2024 UPWP.** Based on implementation, provide report and recommendation to the Transportation Policy Council for developing the 2025 UPWP as a one-year or a two-year document.
- C. **Develop and adopt the 2025 UPWP** per schedule determined by staff in coordination with other transportation partnering agencies.

Expected Products:

- A. Amendments to the UPWP.
- B. Mid-year implementation report on 2024 UPWP, including one-year or two-year recommendation for next UPWP.
- C. The developed and approved UPWP every two years.

1.1.c – Public Policy and Governmental Affairs

Staff Contact: Craig Raborn

All activities will be funded by Transportation Planning Funds (TPF) unless noted otherwise.

Objectives:

- A. **Provide technical assistance to local governments**, public agencies, other qualified grant sponsors, and staff regarding federal grant applications, transportation planning activities, and transportation management issues. Grant coordination and support activities may include tracking grant opportunities, grant writing for local agency applications, coordinating discretionary grant applications from the region, preparing data for applications, identifying potential projects and regional prioritization, and other activities that may increase successful grant applications from local stakeholders or the Metropolitan Planning Organization.
- B. **Provide technical assistance to the TPC**, the TAC, and other associated committees

and subcommittees. Technical assistance includes preparing meeting materials, meeting notices, maintaining meeting records, an annual training workshop for the respective members, and other assistance as directed.

- C. **Provide analysis of State and federal laws, regulations, and legislation** for TPC and TAC members, and local government officials to aid them in the application of regional transportation policy strategies.
- D. **Provide MPO comments to federal and state agencies** regarding proposed rules as part of the rule-making process.
- E. **Organize seminars, peer exchanges, and peer reviews** as necessary to facilitate communication between MPOs, federal, state, and local agencies.
- F. **Develop briefings and printed materials for policymakers** on federal and state issues relevant to the regional transportation planning process.
- G. **Examine impacts of inflation on MPO activities** and programs, project costs, and long-range planning opportunities.
- H. **Acquire legal defense/advice** with prior State and Federal approval for conformity determinations and other issues as determined to be necessary and reasonable to carry out the metropolitan planning process per 23 CFR 450 Subpart C, Metropolitan Transportation Planning and Programming, and consistent with 23 CFR 420.113. *(Local funds may be utilized in instances where federal funds are not eligible.)*
- I. **Track legislative and rule-making activities.** Monitor federal, state, and local legislative and rule-making activities that may have an impact on MPO operations. Without engaging in lobbying activities, provide information as needed, including public or solicited comments, to assist in any legislative or rule-making activities that may have an impact on MPO operations. A consultant may be utilized to monitor legislative and rule-making activities. *(Local funds may be utilized in instances where federal funds are not eligible.)*

Expected Products:

- A. Technical assistance documents and presentations to the TPC, TAC, and other committees and subcommittees.
- B. Meeting materials, meeting notices, meeting records and/or minutes for TPC, TAC, and other committees and subcommittees.
- C. Annual orientation and training workshops for members of TPC, TAC, and other associated committees and subcommittees.
- D. Timely reports and updates to TPC on legislative affairs and rule-makings.
- E. MPO comments to federal and state agencies regarding proposed rules as part of the rule-making process.

Subtask 1.2 Public Involvement and Outreach

MPO staff engages in an ongoing, inclusive, and active public involvement process for transportation planning. The goals and objectives of the public involvement process are described in the Public Participation Plan, with the primary objective to provide timely, accurate, and complete information to the public on important transportation issues and solicit feedback as appropriate. Fulfilling this objective requires the continuous development of visualization techniques, educational materials, transportation websites, newsletters, and other public outreach activities.

1.2.a – Public Involvement

Staff Contact: Allie Isbell

All activities will be funded by Transportation Planning Funds (TPF) unless noted otherwise.

Objectives:

- A. **Support public information exchange and education programs** that increase public interest and participation in ongoing transportation and air quality planning activities.
- B. Follow the public involvement guidelines outlined in the Public Participation Plan to **ensure an open planning process that supports early and continued public involvement**, timely public notices, and full public access to information regarding key transportation decisions.
- C. **Utilize online engagement tools/platforms/software**, including surveys and/or polling, for various projects within the region to increase residents' participation.
- D. **Solicit public comments** on transportation programs, projects, and policies and to respond to public comment in a timely fashion.
- E. **Provide live-streaming of Transportation Policy Committee meetings** and other meetings and events as determined. (A consultant or software vendor may be utilized.)
- F. **Update Language Assistance Plan**, including conducting public outreach to gather input and feedback from non-English speaking residents of the region.

Expected Products:

- A. Published legal notices, press releases and advertisements, public meeting arrangements, slideshow presentations, and educational materials for distribution at the meetings.
- B. In-person, hybrid, and virtual meetings for TPC and TAC and other subcommittees. Provide meeting live streaming when required or appropriate.
- C. Updated Language Assistance Plan.

1.2.b – Public and Stakeholder Outreach

Staff Contact: Craig Raborn

All activities will be funded by Transportation Planning Funds (TPF) unless noted otherwise.

Objectives:

- A. **Provide public information on regional transportation issues** through a multitude of outreach activities including public meetings, television, radio, digital and social media, and print.
- B. **Support public outreach activities** and provide administrative support for public meetings that correspond with current and future transportation projects, plans, and studies by publishing legal notices, press releases and advertisements, conducting public meeting arrangements, slideshow presentation and production, and development of educational materials for distribution at the meetings.
- C. **Create graphics and other visualization** components to deliver information to interested parties through digital media communications including websites, webinars, social media, video and audio technologies, and photography. Develop and maintain listservs and community contact lists to ensure adequate distribution and notices of public meetings and materials to interested parties.
- D. **Provide stakeholder outreach support** including printed materials for policymakers on federal and state issues relevant to the regional transportation planning process.
- E. **Develop and implement a Brown Bag Lunch Series** which provides staff and member jurisdictions a forum on education in transportation trends and topics, emerging technologies, and key transportation planning issues facing the industry.
- F. **Develop partnerships with community organizations** to provide public information on regional transportation issues, projects, and studies.
- G. **Conduct a hurricane preparedness public outreach campaign** to promote the Together Against the Weather program and the Zip Zone maps developed under Subtask 3.4.

Expected Products:

- A. Educational and outreach materials that include graphics and other visualization components to deliver information to interested parties through digital media communications including websites, webinars, social media, video and audio technologies, and photography.
- B. Listservs and community contact lists for distribution of materials.
- C. Various outreach campaigns to address needs in the region.
- D. Provide public outreach for annual Zip Zone Campaign.

Task I Funding Table

Task I: ADMINISTRATION AND MANAGEMENT - FUNDING SUMMARY

Subtask	Activity	Responsible Agency	Transportation Planning Funds (TPF) ¹	Other Federal Funds ²	FTA Section 5307 Funds	Local ³	TOTAL FUNDS
			FY 2024	FY 2024	FY 2024	FY 2024	FY2024
1.1	Program Support/Unified Planning Work Program	H-GAC	\$6,275,000	\$0	\$0	\$0	\$6,275,000
1.2	Public Involvement and Outreach	H-GAC	\$310,000	\$0	\$0	\$0	\$310,000
	TOTAL		\$6,585,000	\$0	\$0	\$0	\$6,585,000

Note 1: TPF includes both FHWA PL-112 and FTA Section 5303 Funds. TxDOT will apply transportation development credits sufficient to provide the match for TPF. As the credits reflect neither cash nor work hours, they are not reflected in the funding tables.

Note 2: "Other Federal Funds" may include Surface Transportation Block Grant (default), Congestion Mitigation and Air Quality ("C"), or Discretionary Grant Funds ("G")

Note 3: "Local" funds include any local contributions, but also may include non-transportation Federal funds provided to H-GAC or partner agencies.

Task One Activities or Projects with Consultant Spending

TASK / Sub-Task	ACTIVITY OR PROJECT NAME	LISTING TYPE	ACTIVITY TYPE	STATUS (as of UPWP adoption)	FUNDING
1 / 1.1.a	Planning Support Services	New	Consultant	In Development	TPF
1 / 1.1.c	Legislative and Regulation Tracking Services	New	Consultant/Service	Initiate in FY2024	TPF
1 / 1.2.b	Translation Services (Multiple)	Ongoing	Consultant/Service	Ongoing; contracts may be updated	TPF

TASK II Data Development and Maintenance

The purposes of the activities listed under this subtask are to collect, maintain, update, and utilize the basic data, models, and tools required for executing the planning activities described in this document.

Staff Contact: Jochen Floesser, Director

All activities will be funded by Transportation Planning Funds (TPF) unless noted otherwise.

Objectives:

- To develop and maintain travel demand modeling tools and explore advanced practice modeling methods that enhance the region's capabilities for regional, sub-regional, and corridor planning activities and analysis. (Subtask 2.1a)
- Provide transportation modeling support for regional and sub-regional transportation planning studies, programs, and projects. (Subtask 2.1b)
- To participate in data collection efforts in the region (H-GAC initiatives or in support of other transportation agencies) to advance the sharing of roadway inventory data and candidate roadway project information between various transportation agencies. (Subtask 2.2a)
- To maintain a regional database clearinghouse on H-GAC's web site to provide access to data generated by the various transportation agencies. (Subtask 2.2a)
- To collect, process, and analyze demographic, socioeconomic, and land use data for the development and implementation of regional transportation plans and systems. (Subtask 2.3a)
- Improve and enhance the existing operational version of the demographic, economic and land use forecasting model. (Subtask 2.3b)
- To develop and maintain interactive web mapping tools and applications in support of regional transportation plans, programs, and projects. (Subtask 2.3c)
- Provide informational services and analytical support to regional transportation agencies, local governments, and their consultants in support of regional transportation planning activities and studies. (Subtask 2.3c)

Expected Products:

Expected products of Task II include a wide variety of technical reports and documentation summarizing the findings of various transportation planning efforts and data analysis, activities such as committee meetings, and reports summarizing implementation of activities undertaken by the MPO that relate to or may influence transportation planning. A comprehensive list and description of the likely products from each subtask are included in each subtask description.

Previous and Continuing Work:

- Continued the enhancement of the GIS capabilities that support Cube Voyager modeling software through customized menus, macros, and programs to perform some repetitive tasks of the 4-step modeling processes.
- Worked with METRO on conducting regional Origin-Destination On-board Transit Survey with the support of other regional partners.
- Working with City of Houston on Commercial Airports (IAH and Williams Hobby) Ground Access Survey.
- Updating the regional travel demand model incorporating updated modeling practices and theories, and new travel survey data.
- Coordinated with Texas A&M Transportation Institute (TTI) and CJ Hensch & Associates to conduct traffic data collections used to refine the Cube Cargo Truck Tour-Based Model
- Coordinated with Eastern Research Group Inc. (ERG) on updating the Spatial Emissions Estimator Tool for MOVES3
- Continued the enhancement of mapping and plotting techniques for the display and evaluation of transportation tasks using Geographic Information System (GIS).
- Continued travel demand modeling support to various regional and sub-regional transportation studies and projects.
- Continued modeling supports for conformity, and various corridor studies within the region using GIS and Cube Voyager GIS functionalities.
- Utilized GIS to support planning activities of the agency to provide technical support and assistance to member agencies; will continue support as needed.
- Conducted traffic speed and count collection on the freeway system to validate travel demand models; will continue activity as needed.
- Continued GIS and modeling support for the regional conformity analysis through added capacity projects development, highway and transit networks development and coding, and the modeling of the various required scenario year.
- Continued monitoring releases of aggregate socioeconomic data from federal and state agencies and other public and private sources. Maintenance and updates on relevant databases with the provided socioeconomic information as needed.
- Continued collecting and processing planned development projects and plats from multiple sources and integrated with the forecast model data and the Regional Land Use Information System.
- Continue to maintain and update databases such as the model Buildings and model Parcels base year data.
- Continued updates to the population, employment and land use forecast model as needed.
- Developed the new base year 2020 synthetic household population using the Decennial Census 2020 redistricting data and the 2016-2020 US Census American community survey data.
- An interactive web report was published analyzing the impacts of the COVID-19 pandemic on local businesses and their employees.

- Provided data and technical assistance on various transportation projects including Regional Transportation Plan, Travel Demand Management, Regionally Coordinated Transportation Plan, Pearland Transit Study, Subregional studies and Livable Centers program.
- Web mapping tools were developed and enhanced which provided quick and easy access to socioeconomic data and assisted in regional planning activities. Some of the new applications include Regional Equity Tool, 2020 Census Redistricting Data Tool, Regional Origin-Destination Dashboard using Streetlight data, 2022 Future of Work Survey, and Federal Railroad Administration Public At-Grade Railroad Crossing application.

Subtask 2.1. – Travel Demand Modeling

This subtask involves the continued development, enhancement, and maintenance of the MPO’s transportation models in support of transportation planning activities within the H-GAC MPO region. The models encompass regional travel demand models, dynamic meso- and microscopic simulation models, transportation data analysis tools, and other relevant methods. It also involves providing travel demand modeling support for transportation planning activities.

2.1.a – Transportation model development and maintenance

This subtask involves the continued development, enhancement, and maintenance of the MPO’s transportation models in support of transportation planning activities within the H-GAC MPO region. The models encompass regional travel demand models, dynamic meso- and microscopic simulation models, transportation data analysis tools, and other relevant methods.

Staff Contact: Heng Wang

All activities will be funded by Transportation Planning Funds (TPF) unless noted otherwise.

Objectives:

- A. **Update the regional travel demand model** incorporating updated modeling practices and theories, and new travel survey data.
- B. **Procure and utilize various meso- and microscopic simulation modeling software platforms** to provide technical support for regional transportation sub-area and corridor planning studies. The software is utilized to perform the following functions:
 - Model individual vehicles (by type) and pedestrians traveling through a network of freeways, streets, and intersections.
 - Provide travel and delay times, vehicular queues, and other measures of effectiveness.

- Optimize, simulate, and animate signalized and unsignalized intersections.
- C. **Perform the air quality conformity calculations** for the National Ambient Air Quality Standards based on updates or amendments to the transportation plans. Also, calculate emission reductions from CMAQ-funded projects to be used as transportation emission reduction measures for the conformity determination.
- D. **Consultant services will be utilized to assist in the Travel demand model development.** The services include:
 - Update the Travel Demand Model platform (from Bentley Voyager Cube 6 to Cube 2023).
 - Provide model support with the processing and implementation of the travel data collected through various surveys and other means for the enhancement of the H-GAC regional travel demand and forecasting models.
 - Provide Non-motorized trip model development support.
 - Utilize location-based data for model development and maintenance.
 - Staff support for special generator sub model to enhance the H-GAC regional travel demand and forecasting model.

Expected Products:

- A. Transportation model validations and data outputs based on revised freeway traffic counts and speed data.
- B. Regional travel models that incorporate updated modeling practices and new travel survey data.
- C. Air quality Conformity model outputs based on updates or amendments to the transportation plans.

Previous and Continuing Work:

- Continued the enhancement of the GIS capabilities that support Cube Voyager modeling software through customized menus, macros, and programs to perform some repetitive tasks of the 4-step modeling processes.
- Updating the regional activity-based model incorporating updated modeling practices and theories, and new travel survey data.
- Coordinated with Eastern Research Group Inc. (ERG) on updating the Spatial Emissions Estimator Tool for MOVES3

2.1.b – Transportation modeling support

This subtask involves providing travel demand modeling support for transportation planning activities. It also includes developing dynamic traffic simulations for sub-regional studies.

Staff Contact: Heng Wang

All activities will be funded by Transportation Planning Funds (TPF) unless noted otherwise.

Objectives:

- A. **Transportation modeling support for transportation planning activities** to include: regional transportation plan, call for projects, project prioritization, city and county thoroughfare plans, congestion management study, travel demand management study, multimodal study, transit-oriented development (TOD) study, traffic impact study, transportation safety study, access management study, air quality conformity, transportation planning and environment linkages study (PEL), environmental study, evacuation study, corridor planning study, subregional mobility study, feasibility study, scenario planning study, travel pattern study, interstate access justification report (IAJR) traffic projection forecast, toll revenue study, project benefit cost analysis, economic impact analysis, active transportation study, livable center study, and related activities.
- B. **Provide technical and analytical support** to regional transportation agencies, local governments, and their consultants in support of regional transportation planning activities and studies.

Expected Products:

- A. Traffic simulations in support of regional transportation planning activities and studies.
- B. Travel demand modeling support to regional and sub-regional transportation planning studies, projects, and programs.

Previous and Continuing Work:

- Continued modeling supports for conformity, and various corridor studies within the region using GIS and Cube Voyager GIS functionalities.
- Continued GIS and modeling support for the regional conformity analysis through added capacity projects development, highway and transit networks development and coding, and the modeling of the various required scenario year.
- Continued travel demand modeling support to various regional and sub-regional transportation studies and projects.

Subtask 2.2 – Transportation Data Development and GIS Support

This subtask includes Geographic Information System (GIS) based mapping, maintenance, and analysis. Data development, maintenance, and training activities associated with transportation-related data.

2.2a –Transportation Data and GIS support

This subtask includes Geographic Information System (GIS) based mapping, maintenance, and analysis. Data development, maintenance, and training activities associated with transportation-related data.

Staff Contact: Heng Wang

All activities will be funded by Transportation Planning Funds (TPF) unless noted otherwise.

Objectives:

- A. **Maintain, refine, and enhance the data required to operate the travel demand models**, including the road network, segment nodes, and traffic analysis zones (TAZ) for current-year and various forecasted networks.
- B. **Coordinate and conduct travel surveys and traffic data collections** to update, validate, and calibrate travel demand models. Traffic data includes count, speed, mode split, and travel patterns.
- C. **Provide cartographic materials** in support of regional transportation planning activities and studies.
- D. **Develop emission inventories for criteria pollutants** to be included in the air quality state implementation plans for the region. Develop emission inventories for greenhouse gasses for all sources in the region, identifying primary sectors that contribute the most to greenhouse gas emissions.

Expected Products:

- A. Cartographic, tabular, and other informative material in support of public outreach and environmental justice programs.
- B. Regional transportation network, traffic counts, and transportation databases/geodatabases

Previous and Continuing Work:

- Coordinated with Texas A&M Transportation Institute (TTI) and CJ Hensch & Associates to conduct traffic data collections used to refine the Cube Cargo Truck Tour-Based Model
- Continued the enhancement of mapping and plotting techniques for the display and evaluation of transportation tasks using Geographic Information System (GIS).
- Utilized GIS to support planning activities of the agency to provide technical support and assistance to member agencies; will continue support as needed.
- Conducted traffic speed and count collection on the freeway system to validate travel demand models; will continue activity as needed.

- Continued GIS and modeling support for the regional conformity analysis through added capacity projects development, highway and transit networks development and coding, and the modeling of the various required scenario year.
- Worked with METRO on conducting regional Origin-Destination On-board Transit Survey with the support of other regional partners.
- Working with City of Houston on Commercial Airports (IAH and Williams Hobby) Ground Access Survey.

Subtask 2.3 – Socioeconomic Data and Models

Ongoing development of socioeconomic data and socioeconomic forecasting models, along with informational services and analytical support of Transportation planning activities and studies.

2.3a – Socioeconomic Data

This subtask includes collecting, processing and managing socioeconomic, demographic and real estate data from various local, state and federal sources.

Staff Contact: Sungmin Lee

All activities will be funded by Transportation Planning Funds (TPF) unless noted otherwise.

Objectives:

- A. Monitor aggregate socioeconomic data from federal and state agencies**, and other public and private sources. Incorporate, update, and maintain H-GAC databases.
- B. Research, obtain, and process information in the region to include location, timing, and details of planned development projects.** Maintain and update databases as needed.
- C. Research, obtain, process, and synthesize disaggregate regional data to include information on parcels, buildings, businesses, and households.** Maintain and update databases as needed.

Expected Products:

- A. Socioeconomic databases and forecast models to support transportation planning and modeling activities.**
- B. Announced and planned real estate development events geodatabase.**

Previous and Continuing Work:

- Continued monitoring releases of aggregate socioeconomic data from federal and state agencies and other public and private sources. Maintenance and updates on relevant databases with the provided socioeconomic information as needed.

- Continued collecting and processing planned development projects and plats from multiple sources and integrated with the forecast model data and the Regional Land Use Information System.
- Continue to maintain and update databases such as the model Buildings and model Parcels base year data.

2.3b – Socioeconomic Models

This subtask includes managing operational version of the demographic, economic and land use forecast model. It also includes providing modeling support to regional and sub-regional transportation planning studies.

Staff Contact: Pramod Sambidi

All activities will be funded by Transportation Planning Funds (TPF) unless noted otherwise.

Objectives:

- A. Maintain and run the existing operational version of the demographic, economic and land use forecasting model.**
- B. Improve and enhance the model’s reliability** through scheduled updates of population, employment, and land use forecasts.
- C. Develop scenario-based regional integrated “land use-transportation”, small-area population, and employment forecasts** for transportation planning purposes.

Expected Products:

- A. Updates of population, employment, and land use forecast data for long range transportation planning.
- B. Demographic forecast data in support of regional and sub-regional transportation planning activities and studies.

Previous and Continuing Work:

- Continued updates to the population, employment and land use forecast model as needed.
- Developed the new base year 2020 synthetic household population using the Decennial Census 2020 redistricting data and the 2016-2020 US Census American community survey data.

2.3c – Information Services and Analytical Support

This subtask includes developing and enhancing web-based mapping applications/tools in support of transportation planning activities. It also includes providing technical and analytical support to various transportation programs.

Staff Contact: Sungmin Lee

All activities will be funded by Transportation Planning Funds (TPF) unless noted otherwise.

Objectives:

- A. **Improve and enhance the existing web-based mapping and database query applications** allowing easy access to socioeconomic data by transportation partners and public.
- B. **Develop new web mapping applications** in support of transportation planning activities.
- C. **Provide informational services and analytical support to regional transportation agencies**, local governments, and their consultants in support of regional transportation planning activities and studies.

Expected Products:

- A. Web mapping applications and tools to assist in regional transportation planning activities.
- B. Technical and analytical support for various transportation planning activities, programs, and projects.

Previous and Continuing Work:

- An interactive web report was published analyzing the impacts of the COVID-19 pandemic on local businesses and their employees.
- Web mapping tools were developed and enhanced which provided quick and easy access to socioeconomic data and assisted in regional planning activities. Some of the new applications include Regional Equity Tool, 2020 Census Redistricting Data Tool, Regional Origin-Destination Dashboard using Streetlight data, 2022 Future of Work Survey, and Federal Railroad Administration Public At-Grade Railroad Crossing application.
- Provided data and technical assistance on various transportation projects including Regional Transportation Plan, Travel Demand Management, Regionally Coordinated Transportation Plan, Pearland Transit Study, Subregional studies and Livable Centers program.

Task II Funding Table

Task II: DATA DEVELOPMENT AND MAINTENANCE - FUNDING SUMMARY

Subtask	Activity	Responsible Agency	Transportation Planning Funds (TPF) ¹	Other Federal Funds ²	FTA Section 5307 Funds	Local ³	TOTAL FUNDS
			FY 2024	FY 2024	FY 2024	FY 2024	
2.1	Travel Demand Modeling	H-GAC	\$1,690,000	\$1,700,000	\$0	\$0	\$3,390,000
2.2	Transportation Data Development and GIS Support	H-GAC	\$225,000	\$670,000	\$0	\$0	\$895,000
2.3	Socioeconomic Data and Models	H-GAC	\$1,080,000	\$600,000	\$0	\$0	\$1,680,000
			\$2,995,000	\$2,970,000	\$0	\$0	\$5,965,000

Note 1: TPF includes both FHWA PL-112 and FTA Section 5303 Funds. TxDOT will apply transportation development credits sufficient to provide the match for TPF. As the credits reflect neither cash nor work hours, they are not reflected in the funding tables.

Note 2: "Other Federal Funds" may include Surface Transportation Block Grant (default), Congestion Mitigation and Air Quality ("C"), or Discretionary Grant Funds ("G")

Note 3: "Local" funds include any local contributions, but also may include non-transportation Federal funds provided to H-GAC or partner agencies.

Task Two Activities or Projects with Consultant Spending

TASK / Sub-Task	ACTIVITY OR PROJECT NAME	LISTING TYPE	ACTIVITY TYPE	STATUS (as of UPWP adoption)	FUNDING
2 / 2.2.a	Regional Travel Surveys	Carryover	Consultant	Currently Underway	Other - FHWA
2 / 2.1.a	Travel Demand Model updates, validation, and calibration	Carryover	Consultant/Service	Ongoing; contracts may be updated	Other - FHWA
2 / 2.1.a	Activity-Based Model enhancement support	New	Consultant	Initiate in FY2024	Other - FHWA
2 / 2.1.a	On-Call modeling support (Multiple)	Carryover	Consultant	Ongoing; contracts may be updated	TPF

TASK III Short Range Planning

Short-range planning efforts will be focused on the continued coordination and development of Transportation Improvement Program (TIP) and 10-year project list, implementation of the Transportation Policy Council's Project Selection Process, transit operations planning, air quality planning and transportation conformity, and evacuation planning for hurricanes and other major disruptions.

Task Objectives:

The following key objectives summarize the main activities that the MPO will undertake to complete the requirements of Task Three during the term of this Unified Planning Work Program:

- Develop and maintain the Transportation Improvement program
- Analyze proposed amendments to the current TIP for air quality conformity implications, financial impact, and other regional impacts
- Develop and maintain a 10-year program of transportation projects
- Re-assess and modify the project selection process including submission requirements, readiness determination, timing, benefit-cost analysis, and project evaluation criteria.
- Analyze projects submitted in the project selection process and evaluate them for consistency with the regional transportation plan.
- Conduct meetings and workshops for the local project sponsors to advise them on the project selection requirements.
- Staff will coordinate with TxDOT regarding statewide project evaluation and selection processes.
- Develop a new online project information database to allow for enhanced project tracking, access by member agencies, and a public facing website to provide project information.
- Provide technical support for the existing database system.
- Update the 2022-2026 Regionally Coordinated Transportation Plan (RCTP)
- Provide planning and coordination support to the region for recommendations resulting from the RCTP, including but not limited to, Mobility Links, Regional Bus, Regional Fare Integration, and Regional Trip Planner. (TPF and 5304)
- Plan and develop a transit information system and best practices guide to address information gaps identified in the Regional Public Transportation Coordination Plan by making it easier for people to learn about the transit and transportation options available to them and the information they need to use those services. (TPF and 5304)
- Support coordination between human services and public transportation agencies to address the gaps and recommendations in the RCTP. (TPF and 5304)
- Support planning projects performed by transit providers using FTA 5307 funds
- Provide coordination and planning support for transit recommendations resulting from

regional plans, and requirements related to federal funding programs including, but not limited to FTA 5307, 5310, and 5311 formula funding.

- Collect data and coordinate with regional transit agencies to develop targets for Transit Asset Management. These targets and their related plans help ensure transit remains reliable, safe and accessible.
- Provide support to H-GAC advisory committees and subcommittees such as the Regional Air Quality Planning Committee (RAQPAC) and Transportation Air Quality Subcommittee
- Annually update air quality focused public reports including the Air Quality Initiatives Report and the PM2.5 Advance Path Forward Plan. Post final reports to the H-GAC website and report the results to state and federal partners as needed.
- Develop, coordinate, and participate in responses to state and federal air quality plans and new regulations affecting the region.
- Support the development of materials for the Texas State Implementation Plan
- Review the current state of emission calculation methodologies
- Work with conformity consultation partners to prepare for, develop, and publish materials to support conformity determinations throughout the process.
- Develop and coordinate transportation conformity analyses for the Houston-Galveston-Brazoria nonattainment area as needed.
- Understand the current state of emissions reductions methodologies used by MPOs
- Develop carbon reduction program strategies for inclusion into the Regional Transportation Plan.
- Develop a preliminary and a detailed regional greenhouse gas (GHG) inventory for the 8-county region. [Carryover activity]
- Identify and assess expected effectiveness of emission reduction strategies, programs, and options
- Identify and assess potential projects for the federal Carbon Reduction Program or other applicable funding sources.
- Prepare for any new federal or state requirements to report, track, develop projections, or develop targets or performance measures
- Produce and maintain Hurricane Evacuation Maps for the Region.
- Produce and maintain Hurricane Evacuation Zone Map known as Hurricane Evacuation Zip-Zone Map.
- Public Education on Hurricane Preparedness.
- Coordinate with State and Local governments before, during and after hurricane evacuations.

Expected Products:

Expected products of Task III include a wide variety of technical reports and documentation summarizing the findings of various transportation planning efforts, activities such as public meetings and committee meetings, and reports summarizing implementation of activities

undertaken by the MPO that relate to or may influence transportation planning. A comprehensive list and description of the likely products from each subtask are included in each subtask description.

Previous and Continuing Work:

- Completed the development of 2023-2026 Transportation Improvement Program (TIP) and submitted to the Texas Department of Transportation for inclusion in the Statewide Transportation Improvement Program (STIP).
- Analyzed and processed over 350 amendments to the 2023-2026 TIP and 10 -year plan.
- Coordinated with the TxDOT and FHWA staff monthly to address TIP amendments, STIP exceptions, and various other TIP-related concerns.
- Opened the project selection process in July 2022 by soliciting statements of interest from potential project sponsors in the region.
- Finalized the Regional Goods Movement investment category project selection criteria and began project scoring.
- Held a training session for project sponsors on the benefit-cost analysis portion of the project selection process.
- Continue development of the investment category evaluation criteria.
- Consultant completed updates to the current project tracking database system (TELUS).
- Updated the 2017-2021 Regionally Coordinated Transportation Plan to produce the 2022-2026 Plan.
- Launched the Mobility Links Database and continue refinement of its features and provider inventory.
- Staffed the Mobility Management (formerly Mobility Links) workgroup of the Regional Transit Coordination Subcommittee to begin improving regional mobility management efforts.
- Established a Paratransit and Non-Emergency Medical Workgroup to improve regionally coordinated public and human services transportation.
- Established and supported the Regional Transit Connectivity workgroup to develop a memorandum of understanding, interlocal agreement language, and program funding need to begin the seamless fare project.
- Provided analysis and recommendations to transit agencies receiving FTA formula funds including but not limited to (5307, 5310, and 5311)
- Collected data and coordinated with regional transit agencies to develop targets for Public Transportation Agency Safety Measures. These measures help ensure safety for employees and riders of public transit. Results are coordinated within the MPO for reporting to the Federal Highway Administration.

- Collected data and coordinated with regional transit agencies to develop targets for Transit Asset Management. These targets and their related plans help ensure transit remains reliable, safe and accessible. Results are coordinated within the MPO for reporting to the Federal Highway Administration.
- Provided ongoing support to the Regional Air Quality Planning Advisory Committee (RAQPAC) and the Transportation Air Quality subcommittee.
- Provided air quality information and support to internal and external stakeholders, in a variety of instances. This included presentations to the H-GAC Board of Directors and other internal committees and subcommittees as well as at external technical meetings and other workshops.
- Provided technical air quality support to new and ongoing H-GAC and MPO projects including development of transportation performance measures, the transit pilot project selection process, the TIP selection process, and the agency's Commute Solutions efforts among others.
- Completed and published the 2018 Air Quality Initiatives Report.
- Completed and published the 2021 and 2022 editions of the PM2.5 Advance Path Forward report.
- Completed a conformity determination in 2022 to support amendments to the 2045 Regional Transportation Plan (RTP), the 2021-2024 Transportation Improvement Program (TIP).
- Completed a conformity determination in 2023 to support 2045 Update RTP.
- CMAQ Performance Plan, Baseline Performance Period Report (2022-2025)
- Produced annual Hurricane Evacuation Route Map for the region.
- Produced annual Hurricane Evacuation Zip Zone Map for the region.
- Produced a Public Outreach Campaign for the 2021 and 2022 Hurricane Seasons on Hurricane Preparedness and Together Against the Weather.
- Provide support to local government agencies on Hurricane Evacuation Map.

Subtask 3.1: Transportation Project Programming

As the MPO, H-GAC is responsible for the coordination and programming of federal and state transportation funds allocated to the region with the state, providers of public transportation and local governments. In addition, H-GAC plans and programs include all regionally significant transportation investments, regardless of funding source. All tasks will be funded by Transportation Planning Funds (TPF) unless it is noted otherwise.

Subtask 3.1.a – Transportation Improvement Program

The Transportation Improvement Program (TIP) is a cooperatively developed, four-year program outlining transit, highway, and traffic improvements, as well as other transportation- and air quality-related activities within the MPO planning area. The purpose of the TIP is to inform the public regarding the commitment of funds to implement transportation improvement projects, including those selected by the TPC. The TIP must be consistent with the Regional Transportation Plan, conform to adopted vehicle emissions reduction targets, and be financially constrained within reasonable estimates of federal, state, and local revenues for the four-year time frame.

Staff Contact: Adam Beckom

All activities will be funded by Transportation Planning Funds (TPF) unless noted otherwise.

Objectives:

- A. Develop and maintain the Transportation Improvement program.
- B. **Analyze proposed amendments to the current TIP** for transportation air quality conformity implications, financial impact, and administrative impacts to ensure consistency of the TIP with federal and state requirements and minimal risk to regional funding allocations.
- C. Develop and maintain a 10-year program of transportation projects.

Expected Products:

- A. Develop the 2025-2028 Transportation Improvement Program for the Houston-Galveston metropolitan planning area that is consistent with the regional transportation plan.
- B. Timely amendments to the 2023-2026 TIP presented to the TAC and TPC and submitted to the STIP as needed.

Subtask 3.1.b – Project Evaluation and Prioritization

The MPO works with the state and project sponsors to consider project funding requests using evaluation criteria developed through the coordinated planning process. This includes consideration of project benefits using quantitative analysis and qualitative factors, anticipated project costs, and the suitability and readiness of projects to be successfully delivered under federal and state requirements.

Staff Contact: Adam Beckom

All activities will be funded by Transportation Planning Funds (TPF) unless noted otherwise.

Objectives:

- A. Re-assess and modify the project selection process including submission requirements, readiness determination, timing, benefit-cost analysis, and project evaluation criteria.
- B. Analyze projects submitted in the project selection process and evaluate them for consistency with the regional transportation plan.
- C. Conduct meetings and workshops for the local project sponsors to advise them on the project selection requirements.
- D. Staff will coordinate with TxDOT regarding statewide project evaluation and selection processes.
- E. A consultant will be used to assist with the development of a benefit-cost analysis tool.

Expected Products:

- A. Complete the initial project selection process to select transportation projects for construction, project development and planning activities.
- B. Hold training workshops and individual meetings with project sponsors to assist with the project selection process.
- C. A benefit-cost analysis tool that will be used for ongoing project selection activities.

Subtask 3.1.c – Project Information and Transparency

As the MPO, H-GAC maintains a database of project information to support production of TIP, Ten-Year Plan and RTP documentation and to track the progress of projects from planning to implementation.

Staff Contact: Adam Beckom

All activities will be funded by Transportation Planning Funds (TPF) unless noted otherwise.

Objectives:

- A. A consultant will be used to develop a new online project information database to allow for enhanced project tracking, access by member agencies, and a public facing website to provide project information.
- B. A consultant will be used to provide technical support for the existing database system.

Expected Products:

- A. A new public facing database and tracking system that allows the tracking of projects from planning to implementation. And provides reporting for TIP amendments, STIP submittals, and other annual reports (e.g., Annual Project Listing).

Subtask 3.2: Planning Support for Transit Service Implementation

The MPO provides a forum for coordination between the providers of public transportation within the region and the development of new and expanded transit services. These short-term focused efforts assist transit providers and local government partners in their implementation of priorities established in the Regional Transportation Plan and other regional transit planning products. This subtask includes the identification of eligible planning activities performed by transit providers using Urbanized Area (5307) federal transit formula funds.

Subtask 3.2.a – Transit Coordinated Planning

The purpose of transit and human service coordinated planning is to provide more efficient and effective public transportation services, especially for priority populations including seniors (65 and older), persons with disabilities, persons with low incomes, veterans, youth, and others. This effort includes developing, adopting, implementing, and updating a coordinated public transit/human services plan as well as assessing progress of activities called for in the plan. The coordinated plan provides strategies for meeting the public's transportation needs and prioritizes transportation services for funding and implementation. Consultants may be utilized to conduct the objectives below.

Staff Contact: Sanford Klanfer

All activities will be funded by Transportation Planning Funds (TPF) unless noted otherwise.

Objectives:

- A. **Update the 2022-2026 Regionally Coordinated Transportation Plan (RCTP)** to continue to identify, analyze needs, gaps, and inefficiencies in regional human service and public transportation to refine recommendations for improvements and better coordination. (TPF and FTA 5304)
- B. **Provide planning and coordination support to the region for recommendations resulting from the RCTP**, including but not limited to, Mobility Links, Regional Bus, Regional Fare Integration, and Regional Trip Planner. (TPF and 5304)
- C. **Plan and develop a transit information system and best practices guide** to address information gaps identified in the Regional Public Transportation Coordination Plan by making it easier for people to learn about the transit and transportation options available to them and the information they need to use those services. (TPF and 5304)
- D. **Support coordination between human services and public transportation agencies** to address the gaps and recommendations in the RCTP. (TPF and 5304)

Expected Products:

- A. Regional Transit Coordination Subcommittee, related workgroups, and associated meeting agendas and minutes
- B. Transit Information Study Report and Best Practices Guide
- C. General Transit Feed Specification Workbooks
- D. Mobility Links Database

- E. Provider Summit Meeting, related agenda and materials.

Subtask 3.2.b – Regional Transit Agency Coordination

The MPO supports designated recipients of FTA formula funds in their annual development of programs of projects. Staff serves as a resource for evaluation of projects for distribution of funding and assists, as needed, on planning efforts.

Staff Contact: Thomas Gray

All activities will be funded by Transportation Planning Funds (TPF) unless noted otherwise.

Objectives:

- A. **Support planning projects performed by transit providers using FTA 5307 funds.**
Eligible project activities include, but are not limited to, system planning, project planning and preliminary engineering, maintenance plans, asset management plans, safety plans, and management and operation studies. The table in Subtask 5.7.e lists and describes ongoing and special projects (e.g. special planning studies, major data collection/surveys, planning for specific capital projects, etc.) funded by FTA 5307 for the following partners:
 - Gulf Coast Transit District
 - The City of Conroe
 - Harris County Transit
 - Fort Bend Transit
 - The Woodlands Township
- B. **Provide coordination and planning support for transit recommendations** resulting from regional plans, and requirements related to federal funding programs including, but not limited to FTA 5307, 5310, and 5311 formula funding.
- C. Collect data and **coordinate with regional transit agencies to develop targets for Transit Asset Management.** These targets and their related plans help ensure transit remains reliable, safe and accessible.

Expected Products:

- A. Scoring for 5307 and 5310 applications
- B. Transit Asset Management Targets

Subtask 3.3: Air Quality Planning

Air Quality Planning supports all regional efforts to comply with federal air quality standards, while seeking to preserve the region's transportation needs and economic vitality. The MPO works closely with federal, state, and local officials, planning and regulatory agencies, and area stakeholders to develop on-road mobile emission budgets and emission reduction strategies to demonstrate attainment, model transportation conformity, and monitor and track TCMs, SIP weight of evidence measures, and VMEPs. Some of these measures when needed are

included in the on-road emission inventories for the Reasonable Further Progress State Implementation Plan (SIP) and for the Attainment Demonstration SIP. H-GAC provides support and guidance for regional congestion mitigation and air quality improvement programs for compliance with the SIP and federal clean air requirements. All tasks will be funded by Transportation Planning Funds (TPF) unless it is noted otherwise.

Subtask 3.3.a – Air Quality Planning

Air Quality Planning supports all regional efforts to comply with federal air quality standards, while seeking to preserve the region’s transportation needs and economic vitality. The MPO works closely with federal, state, and local officials, planning and regulatory agencies, and area stakeholders to develop on-road mobile emission budgets and emission reduction strategies to demonstrate attainment, and monitor and track TCMs, SIP weight of evidence measures, and VMEPs. Some of these measures when needed are included in the on-road emission inventories for the Reasonable Further Progress State Implementation Plan (SIP) and for the Attainment Demonstration SIP. H-GAC provides support and guidance for regional congestion mitigation and air quality improvement programs for compliance with the SIP and federal clean air requirements.

Staff Contact: Andrew DeCandis

All activities will be funded by Transportation Planning Funds (TPF) unless noted otherwise.

Objectives:

- A. **Provide support to H-GAC advisory committees and subcommittees** such as the Regional Air Quality Planning Committee (RAQPAC) and Transportation Air Quality Subcommittee. Provide information and research regarding current regional air quality issues and make recommendations to committee members, the H-GAC Board of Directors, and the Transportation Policy Council as necessary.
- B. **Provide coordination, participation, and expertise** to local and statewide air quality planning committees.
- C. **Annually update air quality focused public reports** including the Air Quality Initiatives Report and the PM2.5 Advance Path Forward Plan. Post final reports to the H-GAC website and report the results to state and federal partners as needed.
- D. **Host or provide training, technical workshops, and public outreach** for air quality-related topics. Training may include technical training on new EPA emissions models and federal air quality standards. Public outreach activities such as podcasts, webinars, workshops, and newsletters, will be conducted to educate stakeholders and the public on regional air quality issues.
- E. **Develop, coordinate, and participate in responses to state and federal air quality plans and new regulations** affecting the region. Examine legal and sanction ramifications regarding different standards for the region.
- F. **Support the development of materials for the Texas State Implementation Plan** as warranted to address plans to meet federal air quality standards. This could include

working directly in dialog with staff from the Texas Commission on Environmental Quality (TCEQ) as well as with H-GAC advisory committees and subcommittees to develop and advise on local project selection.

- G. **Review the current state of emission calculation methodologies** available for use by MPOs to assess and report on CMAQ funded project emission reductions. Work with staff and advisory committee members to develop a technical report and recommend appropriate methodologies for all types of CMAQ-funded projects. (Consultant may be utilized)

Expected Products:

- A. Meeting agendas, meeting notices, meeting minutes and agenda items, and background materials for RAQPAC and TAQ subcommittee meetings.
- B. Completed air quality reports:
 - Air Quality Initiatives Report
 - PM2.5 Advance Path Forward Plan
- C. If requested, provide information and analyses to TCEQ to support the development of State Implementation Plans to comply with the National Ambient Air Quality Standards.

Subtask 3.3.b – Air Quality Conformity

As part of requirements under the Clean Air Act H-GAC is required to develop a regional transportation conformity determination on the current Regional Transportation Plan (RTP) and Transportation Improvement Program (TIP). This conformity determination is approved by the Transportation Policy Council prior to submitting recommendations to the US Department of Transportation for independent review and a final federal-level conformity determination. This process is mandated for nonattainment areas such as the 8-county TMA region and ensures the continued availability of federal transportation projects, programs, and policies consistent with regional air quality goals.

Staff Contact: Andrew DeCandis

All activities will be funded by Transportation Planning Funds (TPF) unless noted otherwise.

Objectives:

- A. **Exchange knowledge and conformity status** with other MPOs and statewide stakeholders on a regular basis.
- B. **Work with conformity consultation partners** to prepare for, develop, and publish materials to support conformity determinations throughout the process.
- C. **Coordinate with Data Analytics & Research Department staff** to ensure satisfactory development and delivery of air quality modeling results.
- D. **Develop and coordinate transportation conformity analyses** for the Houston-Galveston-Brazoria nonattainment area as needed.

Expected Products:

- A. Meeting agendas, meeting notices, meeting minutes and agenda items, and background materials for meetings of the conformity consultation partners.
- B. Presentations to statewide and regional stakeholders/committees such as TAC and TPC.
- C. Documentation associated with regional transportation conformity determinations. This includes the development of a pre-analysis consensus plan prior to the start of the conformity process as well as the development of final products including conformity documentation and executive summary as well as appendices.

Sub-Task 3.3.c: Emissions Reductions Planning

The Houston-Galveston region has been in nonattainment for the National Ambient Air Quality Standard for ozone since the standard's inception. To ensure that the region makes progress towards meeting this standard and other pollutants of concern, it is necessary to track, study, and develop policies and control strategies to reduce emissions within the 8-county region.

Staff Contact: Pharr Andrews

All activities will be funded by Transportation Planning Funds (TPF) unless noted otherwise.

Objectives:

- A. **Understand the current state of emissions reductions methodologies used by MPOs** to assess and report on CMAQ and CRP funded projects. Based on these findings, work with staff and advisory committee members will be done to determine the most appropriate methodology for all types of CMAQ-funded and CRP-funded projects. An assessment spreadsheet tool will be developed to assess prospective projects. [Carryover] (Consultant may be utilized)
- B. **Develop carbon reduction program strategies** for inclusion into the Regional Transportation Plan. These strategies should be compatible and consistent with carbon reduction strategies developed by the Texas Department of Transportation.
- C. **Develop a preliminary and a detailed regional greenhouse gas (GHG) inventory** for the 8-county region. These will include efforts to identify the primary sectors that contribute regionally to GHG emissions as well as a total inventory for the region by sector. The inventories may be utilized for reporting purposes, and to evaluate, select, and prioritize emissions reduction measures, programs, and projects. A summary report of these findings will be developed and distributed. [Carryover] (Consultant may be utilized)
- D. **Identify and assess expected effectiveness of emission reduction strategies, programs, and options** (including criteria pollutants and GHG reductions); identify benefits and co-benefits of emissions reductions; and identify and provide support for opportunities to link emissions reductions to economic and workforce development in the 8-county region. (Consultant may be utilized)
- E. **Coordinate and support transportation-related elements for the region's EPA Climate Pollution Reduction Grant** within the 8-county TMA region. Work with regional partners to convene regular stakeholder meetings as part of public participation and outreach

efforts. The MPO will administer the overall grant and coordinate implementation between participating agencies, partners, and other stakeholders.

- F. **Identify and assess potential projects for the federal Carbon Reduction Program** or other applicable funding sources. (Consultant may be utilized)
- G. **Prepare for any new federal or state requirements to report, track, develop projections, or develop targets or performance measures** for emissions reductions. Work within H-GAC to develop targets as needed for existing performance measures. (Consultant may be utilized)

Expected Products:

- A. Meeting agendas, meeting notices, meeting minutes and agenda items, and background materials for project related stakeholder meetings.
- B. Preliminary and detailed regional greenhouse gas (GHG) inventory for the 8-county region
- C. Portions of the Climate Pollution Reduction Grant Preliminary Climate Action Plan focused on transportation.
- D. Regional zero emission vehicle (ZEV) infrastructure plan.
- E. Technical report summarizing air quality emission calculation methods that includes recommendations for regionally preferred methodologies.

Subtask 3.4: Evacuation Planning

The massive evacuation from the Houston metropolitan area in response to Hurricane Rita brought into sharp focus the difficulties in evacuating the metropolitan region efficiently and safely. Past planning activities have focused on traffic operations, communications and logistics. Operational improvements have focused on accident detection and management, changes in transit vehicle routing and scheduling, the elimination of bottlenecks at specific intersections and contra- flow lane operations. Current activities have included improving communications with the public and within the emergency response community. All tasks will be funded by Transportation Planning Funds (TPF) unless it is noted otherwise.

Subtask 3.4.a Regional Evacuation Planning

This subtask supports the Evacuation Planning, Public Outreach for Hurricane Preparedness and coordination with state and local agencies on Hurricane Evacuation.

Staff Contact: David Fink

All activities will be funded by UPWP unless noted otherwise.

Objectives:

- A. Produce and maintain Hurricane Evacuation Maps for the Region.
- B. Produce and maintain Hurricane Evacuation Zone Map known as Hurricane Evacuation Zip-Zone Map.
- C. Public Education on Hurricane Preparedness.

D. Coordinate with State and Local governments before, during and after hurricane evacuations.

- ***Expected Products:***

- A. Update Hurricane Evacuation Route Map for the Region.

- B. Update Hurricane Zip-Zone Map for the region.

- C. Completed a public outreach campaign on hurricane preparedness for hurricane evacuations and information on the Zip Zone Maps Evacuation Zones through social media, radio advertisement, billboards, and other means.

- D. Provide Hurricane Evacuation Route Map and Hurricane Evacuation Zip-Zone Map support to local government agencies.

Task III Funding Table

Task III: SHORT-RANGE PLANNING - FUNDING SUMMARY

Subtask	Activity	Responsible Agency	Transportation Planning Funds (TPF) ¹	Other Federal Funds ²	FTA Section 5307 Funds	Local ³	TOTAL FUNDS
			FY 2024	FY 2024	FY 2024	FY 2024	
3.1	Transportation Project Programming	H-GAC	\$650,000	\$300,000	\$0	\$0	\$950,000
3.2	Planning Support for Transit Service Implementation	H-GAC	\$296,000	\$0	\$250,000	\$0	\$546,000
3.3	Air Quality Planning	H-GAC	\$1,160,000	\$0	\$0	\$0	\$1,160,000
3.4	Evacuation Planning	H-GAC	\$75,000	\$0	\$0	\$0	\$75,000
	TOTAL		\$2,181,000	\$300,000	\$250,000	\$0	\$2,731,000

Note 1: TPF includes both FHWA PL-112 and FTA Section 5303 Funds. TxDOT will apply transportation development credits sufficient to provide the match for TPF. As the credits reflect neither cash nor work hours, they are not reflected in the funding tables.

Note 2: "Other Federal Funds" may include Surface Transportation Block Grant (default), Congestion Mitigation and Air Quality ("C"), or Discretionary Grant Funds ("G")

Note 3: "Local" funds include any local contributions, but also may include non-transportation Federal funds provided to H-GAC or partner agencies.

Task Three Activities or Projects with Consultant Spending

TASK / Sub-Task	ACTIVITY OR PROJECT NAME	LISTING TYPE	ACTIVITY TYPE	STATUS (as of UPWP adoption)	FUNDING
3 / 3.1.b	Call for Projects (Active Transportation-specific support)	Carryover	Consultant	Initiate in FY2024	TPF
3 / 3.1.b	Call for Projects Review Consultant	Carryover	Consultant	Initiate in FY2024	TPF
3 / 3.1.c	Project Selection Process and Programming Database	Carryover	Consultant/Service	In Development	TPF
3 / 3.2.a	Transit Information Study (Coordinated Plan)	Carryover	Consultant or Staff	In Development	Other - FTA
3 / 3.2.b	Regional Fare Plan (METRO)	Carryover	Partner Activity	Currently Underway	TPF
3 / 3.3.a	Air Quality (Health Impacts of Air Quality)	Carryover	Consultant or Staff	Initiate in FY2024	TPF
3 / 3.3.c	GHG inventory and Related Planning (Multiple)	Carryover/New	Consultant or Staff	In Development	TPF

Task Three Activities or Projects with Pass-Thru Spending

TASK / Sub-Task	ACTIVITY OR PROJECT NAME	LISTING TYPE	ACTIVITY TYPE	STATUS (as of UPWP adoption)	FUNDING
3 / 3.2.b	Regional Fare Plan (METRO)	Carryover	Partner Activity	Currently Underway	TPF
3 / 3.4.a	Hurricane Zip Zone Campaign	Ongoing	Pass-Thru	Annual Activity	TPF

TASK IV Metropolitan Transportation Plan

The work elements contained in Task IV describe long-range planning for development and maintenance of a Regional Transportation Plan (RTP), which includes all regional and subregional long-range planning activities, reflecting the needs-based planning activities of urban, suburban, and rural communities. These activities include identifying and addressing transportation needs in high-growth areas.

Task Objectives:

The following key objectives summarize the main activities that the MPO will undertake to complete the requirements of Task Three during the term of this Unified Planning Work Program:

- RTP Subcommittee support and facilitation (Subtask 4.1.a)
- Amend the RTP as necessary (Subtask 4.1.a)
- Establish a process to add projects to the RTP (Subtask 4.1.a)
- Determine methodology to create a needs analysis base map (Subtask 4.1.a)
- Develop and maintain an RTP Future Project List (Subtask 4.1.a)
- Analyze and gather data points from current financial reports to develop projections (Subtask 4.1.b)
- Provide planning assistance to TxDOT and local governments for pre-environmental and environmental analyses related to proposed projects. (Subtask 4.1.c)
- Maintain the Eco-Logical Environmental Screening tool. (Subtask 4.1.c)
- Serve as a resource for planning partners, counties, subrecipients, etc. in meeting Title VI, Environmental Justice (EJ) requirements. (Subtask 4.1.c)
- Conduct planning to support environmental justice strategies (Subtask 4.1.c)
- Coordinate with the State and local governments to update thoroughfare plans (Subtask 4.2.a)
- Conduct consultant contract management and oversight activities for active thoroughfare studies (Subtask 4.2.a)
- Encourage plan implementation (Subtask 4.2.a)
- Support state level planning efforts as needed. (Subtask 4.2.b)
- Support and facilitate local level collaboration such as the Greater Houston Freight Committee and the Houston Area Rail Transformation (HART) Working Group. (Subtask 4.2.b)
- Develop a regional freight clearing house and database (Subtask 4.2.b)
- Develop and conduct a freight educational outreach effort (Subtask 4.2.b)
- Monitor and update the Critical Urban Freight Corridors and work with partners to identify deficiencies on the network and potential projects. (Subtask 4.2.b)

- Develop sub-regional local area plans with continued emphasis on multimodal system analyses, alternative land use, and transportation system development scenarios, safety, and security related projects, goods movement, and regional public transportation need. (Subtask 4.2.c)
- Initiate 2-3 mobility studies over the next fiscal year (Subtask 4.2.c)
- Initiate the North Houston Communities Transportation Priorities Plan (Subtask 4.2.c)
- Gather and analyze data, determine trends, and develop performance measure targets across all the required federal performance areas. (Subtask 4.3.a)
- Coordinate with TxDOT, local governments, and providers of public transportation to collect data for evaluating and setting regional target values. (Subtask 4.3.a)
- Coordinate with the statewide performance measure work group on best practices for developing and monitoring system performance. (Subtask 4.3.a)
- Update the Performance Measures webpage and scorecards (Subtask 4.3.a)
- Conduct feasibility studies to support recommendations from the High Capacity Transit Plan (Subtask 4.4.a)
- Provide planning support to refine and expand transit in the region (Subtask 4.4.a)
- Collect and maintain transit data (ridership, service network) to support regional planning efforts. (Subtask 4.4.a)
- Utilize Online engagement tools/platforms/software (Multiple Subtasks)
- Conduct and complete a transit needs assessment and feasibility study of the City of Pearland. (Subtask 4.4.b)
- Conduct a transit needs assessment of the City of Dayton. (Subtask 4.4.b)
- Update the regional active transportation plan (Subtask 4.5.a)
- Create a toolbox of best practices for designing, funding, and building active transportation infrastructure. (Subtask 4.5.a)
- Conduct a needs assessment and feasibility study for a regional bicycle highway system. (Subtask 4.5.a)
- Provide planning support for implementation of SRTS best practices in the region.
- Provide technical support for regional, local area, corridor, and site specific SRTS plans. (Subtask 4.5.a)
- Collect and share data related to active transportation activity. (Subtask 4.5.b)
- Maintain, purchase, and install bike and pedestrian counters. (Subtask 4.5.b)
- Update the Regional Bikeways and Regional Sidewalk maps and associated GIS layers. (Subtask 4.5.b)
- Conduct the Buffalo Bayou East Concept Study. (Subtask 4.5.c)
- Develop a Master Trails Plan for the City of Friendswood. (Subtask 4.5.c)
- Develop a Bicycle-Pedestrian Safety Plan for the Bay Area. (Subtask 4.5.c)
- Conduct a study of Memorial Drive in the Energy Corridor District. (Subtask 4.5.c)
- Provide support and coordination for regional bike month activities. (Subtask 4.5.d)
- Conduct and support the activities of the Pedestrian and Bicycle Subcommittee of the TAC, including related workgroups. (Subtask 4.5.d)

- Encourage increased and safe use of bike and pedestrian infrastructure to improve mobility, access to jobs, quality of life, air quality, and congestion. (Subtask 4.5.d)
- Provide regular trainings on active transportation counters and related data collection and reporting for staff and the community within the region. (Subtask 4.5.d)
- Support active transportation components of regional safety campaigns including safety education for motorists, adult bicyclists, and bicycle safety for children. (Subtask 4.5.d)
- Share resources on best practices for local governments and other transportation agencies (Subtask 4.5.d)

Expected Products:

Expected products of Task IV include a wide variety of technical reports and documentation summarizing the findings of various transportation planning efforts, activities such as public meetings and committee meetings, and reports summarizing implementation of activities undertaken by the MPO that relate to or may influence transportation planning. A comprehensive list and description of the likely products from each subtask are included in each subtask description.

Previous and Continuing Work:

- Completed the 2045 Regional Transportation Plan Update.
- Completed the Air Quality Conformity Determination for the 2045 Regional Transportation Plan Update.
- Updated H-GAC Financial Model used for the 2045 Regional Transportation Plan Update.
- Updated inputs to the financial model used in the final 2045 RTP Update approved by the TPC in April 2023.
- Completed the FY 2022 Work and Accomplishments Report
- Triennial Title VI program update
- Language Assistance Plan update
- Held a Title VI/Environmental Justice event in February 2023 to highlight environmental justice planning and tools.
- Finalized contract agreements with TxDOT, the consultant and interlocal agreements with local sponsors/partners.
- Completed procurement of consultant services for the Chambers County Thoroughfare Plan.
- Continue managing and oversight on the Chambers County Thoroughfare Plan study.

- Completed the 2023 Regional Goods Movement Plan, and initiated plan recommendation implementation.
- Completed the Urban Critical Freight Corridor (UCFC) update.
- Continue Old Sixth Ward/TIRZ Mobility Plan development anticipated for completion in fall 2024.
- Continue Pearland Mobility Plan development anticipated for completion the Fall of 2024.
- Completed Montgomery County Precinct 2 Mobility Plan.
- Completed Liberty County Mobility Plan.
- Completed Southeast Harris County Sub-Regional Plan. The study included portions of the cities of Houston, South Houston, Pasadena, Deer Park, and La Porte.
- Finalized contract agreements with TxDOT and initiated interlocal agreements with local sponsors/partners.
- Completed procurement of consultant services for Old Sixth Ward/TIRZ 13 Mobility Study and Pearland Mobility Study.
- Completed the reporting and target setting for safety, Public Transportation Agency Safety Plan, and pavement/bridge measures.
- Updated system performance measure report in the TIP and RTP documents.
- Updated the performance measures webpage and scorecards.
- Provided analysis and recommendations to improve transportation connections to regional destinations.
- Collected quarterly ridership data.
- Provided quarterly transit ridership reports to support analysis and planning efforts.
- Coordinated with high capacity transit stakeholders to identify priority corridors for further study and initiate the Outer WestPark and Regional Bus High Capacity Transit Corridor Studies.
- Coordinated with local transit service providers to initiate plans for the development of new or expanded transit services in counties adjacent to Harris County including but not limited to; Brazoria, Fort Bend, Galveston, Liberty, Montgomery and Waller Counties (where feasible).
- Coordinated with safety staff to create a regional pedestrian and bicycle safety action plan.
- Shared resources on best practices for local governments and other transportation agencies on topics such as: innovative bicycle/pedestrian policies, programs, and practices related to design and maintenance for pedestrian and bicyclist facilities; improving connectivity; project management; cost estimation; ADA Transition Plans; Vision Zero strategies; Complete Streets policies; first- and last-mile connections to

transit; intelligent transportation systems (ITS) that improve safety for active transportation users; Safe Routes to School strategies; and pedestrian and bicyclist safety generally.

- Completed planning for a multimodal network connectivity pilot project working with the City of Sugar Land and METRO.
- Provided technical assistance to local governments and other transportation agencies to identify bicycle and pedestrian issues, opportunities, needs and barriers, and aid in project planning and conceptual design.
- Conducted consultant contract management and oversight activities for Active Transportation Plans.
- Completed the 2045 Active Transportation Plan
- Worked with local governments and other transportation agencies to improve the accuracy of existing pedestrian and bicycle mapping tools.
- Worked to grow and improve the pedestrian and bicycle counter program.
- Coordinated multiple pedestrian and bicycle counts at locations throughout the TMA.
- Maintained existing counter technology and purchased additional devices as needed.
- Developed a method for accepting and processing regular counter requests that meets the needs of H-GAC and local stakeholders.
- Updated the bike and pedestrian counts reporting website to allow for more timely reporting and real-time assembly of the data at regional permanent counting sites.
- The Spring Branch Trail Study was completed in January 2020 in partnership with the Spring Branch Management District.
- Conducted consultant procurement, contract management and oversight activities for Local Active Transportation Plans.
- Assisted the Commute Solutions program with coordination and outreach for bike month and Biketober engagement activities.
- Worked with a consultant to conduct regular classes for both motorists and bicyclists to spread awareness about safe travel behaviors throughout the region.
- Shared resources on best practices for local governments and other transportation agencies on topics such as: innovative bicycle/pedestrian policies, programs, and practices related to design and maintenance for pedestrian and bicyclist facilities; improving connectivity; project management; cost estimation; ADA Transition Plans; Vision Zero strategies; Complete Streets policies; first- and last-mile connections to transit; intelligent transportation systems (ITS) that improve safety for active transportation users; Safe Routes to School strategies; and pedestrian and bicyclist safety generally.

Subtask 4.1: Regional Transportation Plan and Project Planning

The following subtasks describe the activities related to the Regional Transportation Plan and project planning. All tasks will be funded by Transportation Planning Funds (TPF) unless it is noted otherwise.

Subtask 4.1.a – Regional Transportation Plan (RTP) Development

As the designated MPO for the region, H-GAC is responsible for developing and maintaining a long-range transportation plan that establishes goals and objectives, articulates priority areas of investment, and coordinates local and state efforts to improve the performance of the regional transportation system.

Staff Contact: Anita Hollmann Matijcio

All activities will be funded by Transportation Planning Funds (TPF) unless noted otherwise.

Objectives:

- A. **RTP Subcommittee** support and facilitation.
- B. **Amend the RTP as necessary** by monitoring changes to planning and project assumptions. Survey and poll to be conducted that will be used to support the updating of the RTP. A consultant may be utilized for this task.
- C. **Establish a process to add projects to the RTP** guided by the RTP Subcommittee and aligns with the RTP’s vision, and goals; comply with transportation air quality conformity development with regional air quality goals; and are fiscally constrained per federal requirements.
- D. **Determine methodology to create a needs analysis base map** for identifying needs and evaluating current and future system performance and investment effectiveness of current and future RTP projects as well as identify new opportunities for project development in preparation for next RTP Update, including housing and land use. (A consultant may be utilized for this task.) [NEW]
- E. **Develop and maintain an RTP Future Project List** or an illustrative list of unfunded projects and programs that could be implemented if funding becomes available including recommendations resulting from planning studies, RTP Scenario Planning and Needs Analysis Base Map.

Expected Products:

- A. RTP Evaluation Process that determines how projects are added to the RTP Project list.
- B. Draft Needs Analysis Base Map to evaluate current and future system performance and investment effectiveness.

- C. RTP Future Project List of unfunded projects and programs, including projects identified in planning studies, RTP scenario planning and needs analysis.

Subtask 4.1.b – Financial Planning

The MPO undertakes several efforts to understand federal state and local investment in transportation and to support the development of financially constrained plans and programs. This includes the development of financial models and the study of specific revenue measures and financing strategies to inform regional and local decision-making.

Staff Contact: Adam Beckom

All activities will be funded by Transportation Planning Funds (TPF) unless noted otherwise.

Objectives:

- A. Analyze and gather data points from current financial reports to develop projections for reasonable future revenue streams dedicated to transportation in the region. (A consultant may be utilized for this activity)

Expected Products:

- A. An updated financial model that will be used in the development of the next regional transportation plan.

Subtask 4.1.c – Project Development and Mitigation Planning

The MPO supports the sponsor evaluation of project alternatives during the planning and environmental review stages of project development to ensure consistency with the RTP and consider regional approaches to the mitigation of impacts.

Staff Contact: Adam Beckom

All activities will be funded by Transportation Planning Funds (TPF) unless noted otherwise.

Objectives:

- A. Provide planning assistance to TxDOT and local governments with the development of pre-environmental and environmental analyses related to proposed projects. Support the enhancement of transportation planning and environmental linkages. TPF-funded work will not include any project engineering and design. (A consultant may be utilized for this activity) [TPF and Other]
- B. Maintain the Eco-Logical Environmental Screening tool.
- C. Serve as a resource for planning partners, counties, subrecipients, etc. in meeting Title VI, Environmental Justice (EJ) requirements.

- D. Conduct planning to support strategies identified in the environmental justice planning report and to address transportation issues that disparately affect environmental justice communities.

Expected Products:

- A. Facilitate events or programs that provide educational opportunities for staff, regional planning partners, and the public to educate on environmental justice planning best practices.
- B. Develop the annual Work and Accomplishments Report per Title VI/Environmental Justice requirements.

Subtask 4.2: Multimodal System Planning

The following subtasks address thoroughfare, freight, and sub-regional planning activities. All tasks will be funded by Transportation Planning Funds (TPF) unless it is noted otherwise.

Subtask 4.2.a – Thoroughfare Planning

A Thoroughfare Plan is a long-range plan (0-50+ years) that works to identify and preserve public right-of-way to meet the needs of projected future growth and anticipated transportation-system demands. The Thoroughfare Plan is not a list of road construction projects but rather a guide that assures an adequate future transportation network that works to move people, goods, and services in an optimal and efficient manner through adequate right-of-way dedication. The plan promotes region-wide consistency and continuation of arterial street alignments and function between jurisdictions. The Plan assists local governments with thoroughfare planning coordination on facilities that have inter-jurisdictional and regional significance. Consultant(s) may be utilized to assist with the following studies below.

Staff Contact: Carlene Mullins

All activities will be funded by Transportation Planning Funds (TPF) unless noted otherwise.

Objectives:

- A. **Coordinate with the State and local governments** to update thoroughfare plans which includes a review of existing thoroughfare plans and associated policies. Establish a schedule for regularly updating county-level plans.
- B. **Conduct consultant contract management and oversight** activities for active thoroughfare studies.
- C. **Encourage plan implementation** through recommendation development of active thoroughfare studies as well as local sponsor/partner technical assistance and education-based resources/training. [New]
- D. **Establish and maintain online engagement tools/platforms/software**, including surveys

and/or polling, may be used on various projects within the region to increase regional residents' participation.

Expected Products:

- A.** Updated **Consolidated Regional Thoroughfare Plan** presented to the TPC for approval
- B.** **Establishment of a schedule** for regularly updating County-level Thoroughfare Plans on a regular cycle
- C.** **Major Thoroughfare Planning** education and training material
- D.** Completed **Chambers County Thoroughfare Plan** (currently underway)

Subtask 4.2.b – Freight Planning

The Houston region hosts three class 1 railroads, as well as the 1st, 16th, 20th and 46th ranked ports in the nation, is the nation's 19th busiest air cargo airport and carries over 20,000 trucks per day on its highways. This multimodal freight network is a key enabler for the regions' industries, businesses and residents that rely on the movement of goods and commodities, and the jobs and livelihoods supported by freight movement. The MPO supports the region's economic activity through efficient, safe, connected freight planning, at the same time addressing the externalities associated with freight transportation.

Staff Contact: Sydni Ligon

All activities will be funded by Transportation Planning Funds (TPF) unless noted otherwise.

Objectives:

- A.** **Support state level planning efforts** such as freight parking, freight mobility hubs and other efforts such as the Texas Freight Advisory Committee meetings and other state-level efforts as needed.
- B.** **Support and facilitate local level collaboration** such as the Greater Houston Freight Committee and the Houston Area Rail Transformation (HART) Working Group.
- C.** **Develop a regional freight clearing house and database** that is easily accessible to the public, elected officials, consultants, private industry and other system users to facilitate the exchange and coordination of information. (TPF and STBG)
- D.** **Develop and conduct a freight educational outreach effort** to encourage regional coordination and implementation of Regional Goods Movement Plan recommendations including the engagement shippers, intermodal interests, freight stakeholders including, but not limited to, the public through quarterly meetings of the Greater Houston Freight Committee. A consultant may be utilized to complete this task. (TPF and STBG)
- E.** **Monitor and update the Critical Urban Freight Corridors** and work with partners to identify deficiencies on the network and potential projects.

Expected Products:

- A. **Freight Planning Data Clearing House & Dashboard** to facilitate freight information exchange and access including facilitating updates to the critical urban freight corridor network.
- B. **Education-based training materials & best practices** for future local partner training and coordination including, but not limited, to distribution through the Greater Houston Freight Committee.

Subtask 4.2.c – Sub-regional Planning

Sub-regional planning projects provide local partners an opportunity to study a location in their jurisdiction, or sub-region of H-GAC’s MPO, to achieve a locally conceived transportation plan(s) that includes a vision, goals, and recommendations with an emphasis on implementation. These projects include data collection, analysis of the existing transportation network and land uses, stakeholder and public outreach, transportation modeling, scenario development, and development of recommendations for subareas to guide future transportation infrastructure investment. Recommendations include projects, programs and policies which inform potential project list considerations for the Regional Transportation Plan, future Capital Improvement Programs and other funding opportunities as defined by associated plan implementation chapters. Consultant(s) may be utilized to assist with the following studies below.

Staff Contact: Carlene Mullins

All activities will be funded by Transportation Planning Funds (TPF) unless noted otherwise.

Objectives:

- A. **Develop sub-regional local area plans** with continued emphasis on multimodal system analyses, alternative land use, and transportation system development scenarios, safety, and security related projects, goods movement, and regional public transportation need.
- B. **Conduct consultant contract management** and oversight activities for active sub-regional studies. (TPF and STBG)
- C. **Initiate mobility studies** over the next fiscal year in which a consultant may be utilized that include: (TPF and STBG)
 - i. Old Sixth Ward/TIRZ 13 Mobility Study
 - ii. Pearland Mobility Study
- D. **Initiate NHCTPP**, or the North Houston Communities Transportation Priorities Plan. (TPF and STBG)
- E. **Conduct outreach** including online engagement tools/platforms/software, including surveys and/or polling, may be used on various projects within the region to increase regional residents’ participation.
- F. Review recommendations from previous plans or studies to assess eligibility and

competitiveness for discretionary grant programs. Review may include analysis of new factors for consideration and updating evaluations and rankings. (Consultants may be utilized.) [NEW]

- G. **Provide technical and planning assistance** with the development of H-GAC lead plans and planning-level initiatives or serves in support of regional sponsor/partner initiatives. [NEW]

Expected Products:

- A. Regular progress reports for all ongoing Subregional studies
- B. No sub-regional planning studies are expected to be complete by September 30, 2024.

Subtask 4.3: Transportation Performance Measures

Transportation Performance Management (TPM) is a strategic approach that uses system information to inform investment and policy decision to achieve adopted performance goals. TPM allows H-GAC to gauge system conditions and use, evaluate transportation programs and projects and help decision-makers allocate limited resources more effectively. All tasks will be funded by Transportation Planning Funds (TPF) unless it is noted otherwise.

Subtask 4.3.a – Performance Measures and Targets

Transportation Performance Management (TPM) is a strategic approach that uses system information to inform investment and policy decisions and achieve adopted performance goals. The MPO has the responsibility of setting targets for improving the performance of the transportation system, monitoring the conditions, reporting on the progress of achieving targets, and adjusting targets, as needed. The federal performance measures include safety, the asset management of pavement, bridges, and public transportation, personal and freight travel reliability, congestion, air quality, and public transportation safety for the purpose of maintaining a State of Good Repair and for improving the condition, efficiency, and safety of the transportation system.

Staff Contact: Adam Beckom

All activities will be funded by Transportation Planning Funds (TPF) unless noted otherwise.

Objectives:

- A. Gather and analyze data, determine trends, and develop performance measure targets across all the required federal performance areas.
- B. Coordinate with TxDOT, local governments, and providers of public transportation to collect data for evaluating and setting regional target values.
- C. Coordinate with the statewide performance measure work group on best practices for developing and monitoring system performance.
- D. Develop performance measure reports to be included in the Transportation Improvement Program and the Regional Transportation Plan
- E. Update the Performance Measures webpage and scorecards for reporting progress of

the transportation system and for the purposes of engaging and informing the public.

Expected Products:

- A. New federal performance measure targets for Transit Asset Management, safety, and the System Performance (PM3) measures.
- B. Updated system performance reports to be included in the TIP and RTP.
- C. Updated performance measures webpage and scorecards.

Subtask 4.4: Transit Planning

This subtask will focus on continued transportation planning for people movement; specifically, to coordinate and increase access to transit and shared transportation modes in the region and to better manage the demand for when, where, how and if we travel. This area focuses on public transportation (transit) as well as carpool, vanpool and telework. Activities in this subtask include existing condition assessments, review and coordination among local transportation plans, technical assistance, capacity building tools and activities, coordination with subcommittees, development of recommendations, implementation plans, and performance measures to advance congestion management and shared and active transportation in the region. All tasks will be funded by Transportation Planning Funds (TPF) unless it is noted otherwise.

Subtask 4.4.a – Regional Transit Planning

The MPO will collect data about and provide regional planning support for public transportation in the eight-county transportation management area. This includes long range transit planning and high capacity transit planning. Consultants may be used to execute the objectives below.

Staff Contact: Thomas Gray

All activities will be funded by Transportation Planning Funds (TPF) unless noted otherwise.

Objectives:

- A. Conduct **feasibility studies to support recommendations from the High Capacity Transit Plan**, including but not limited to the studies below: (TPF and STBG)
 - US 90 A High-Capacity Transit Corridor Study
 - Regional Bus Feasibility Study
 - Outer WestPark High Capacity Transit Corridor Study
- B. Provide **planning support to refine and expand transit** to improve quality and connectivity in public transportation in the region.
- C. **Collect and maintain transit data** (ridership, service network) to support regional planning efforts.

- D. **Online engagement tools/platforms/software**, including surveys and/or polling, may be used on various projects within the region to increase regional residents' participation to support this subtask.
- E. Leverage recommendations from the Regional Transit Framework Study and High Capacity Transit Task Force to **develop a long-range plan for regional transit**.

Expected Products:

- A. US 90 A High Capacity Transit Corridor Study Final Report
- B. Regional Bus Feasibility Study Final Report
- C. Outer WestPark High Capacity Transit Corridor Study Final Report
- D. Regional Ridership Reports (conducted on a periodic basis; typically, quarterly)
- E. Regional Transit Network Map
- F. Long Range Transit Plan (Underway; not completed in FY 2024)

Subtask 4.4.b – Local Area Transit Studies

The MPO will work with local governments and nonprofits to provide transit feasibility studies and needs assessments to better understand community readiness for public transit, and to provide guidance to shape planning and implementation of public transit services in local communities. Consultants may be utilized for these planning studies.

Staff Contact: Alan Rodenstein

All activities will be funded by Transportation Planning Funds (TPF) unless noted otherwise.

Objectives:

- A. Conduct and complete a **transit needs assessment and feasibility study of the City of Pearland**. The study will provide a detailed examination of Pearland's transit needs as well as recommendations for service alternatives.
- B. Conduct a **transit needs assessment of the City of Dayton**. This study will provide a detailed examination of Dayton's transit needs and as well as recommendations for service alternatives.
- C. **Online engagement tools/platforms/software**, including surveys and/or polling, may be used on various projects within the planning region to increase regional residents' participation.

Expected Products:

- A. Pearland Study Final Report
- B. Dayton Transit Needs Assessment and Feasibility Study Final Report

Subtask 4.5: Active Transportation

This area focuses on bicycle and pedestrian planning, frequently linking to public transportation. Activities in this subtask include existing condition assessments, review and coordination among local transportation plans, technical assistance, capacity building tools and activities, coordination with subcommittees, development of recommendations, implementation plans, and performance measures to advance congestion management and active transportation in the region. All tasks will be funded by Transportation Planning Funds (TPF) unless it is noted otherwise.

Subtask 4.5.a – Regional Pedestrian and Bicycle Planning

The MPO will provide regional planning support for active transportation in the eight-county transportation management area. This includes but is not limited to planning related to active transportation connected policy, infrastructure, and safety needs. Consultants may be used to execute the objectives below.

Staff Contact: Susan Jaworski

All activities will be funded by Transportation Planning Funds (TPF) unless noted otherwise.

Objectives:

- A. **Update the regional active transportation plan** by analyzing new demographic, safety, travel and traffic data, updates to related transportation plans and public input.
- B. **Create a toolbox** to accompany the regional active transportation plan that shares best practices for designing, funding, and building active transportation infrastructure.
- C. Conduct a **needs assessment and feasibility study for a regional bicycle highway** that results in a plan to support implementation of a regional bike highway in the MPO eight- county region.
- D. Conduct a **literature review and best practices study of Safe Routes to School (SRTS)** including recommendations for the MPO’s role in moving SRTS forward in the region.
- E. Provide **planning support for implementation of SRTS best practices** in the region.
- F. Provide **technical support for regional, local area, corridor, and site specific SRTS plans**.
- G. Provide active transportation **planning support for regional and local transportation studies**, included but not limited to the Pearland Transit Needs Assessment, Pearland Mobility Study, and North Houston Communities Transportation Priorities Plan. (TPF and STBG)
- H. Review recommendations from previous plans or studies to assess eligibility and competitiveness for discretionary grant programs. Review may include analysis of new factors for consideration and updating evaluations and rankings. (Consultants may be utilized.) [NEW]
- I. **Online engagement tools/platforms/software**, including surveys and/or polling, may be used on various projects within the region to increase regional residents’ participation.

Expected Products:

- A. Updated Long Range Regional Active Transportation Plan
- B. Active Transportation Toolbox
- C. Regional Bicycle Highway Final Report and Plan
- D. Safe Routes to Schools Literature Review and MPO Best Practices Final Report

Subtask 4.5.b – Pedestrian/Bicycle Data Collection, Mapping, and Reporting

The MPO will collect and analyze data related to active transportation activity. Work will include collection and analysis of data from mobile and permanent counters, procured or provided sources of big data, local governments and aerial footage as related to sidewalks and bikeway infrastructure. Data collected and analyzed will be used for periodic reporting and map development to support active transportation planning in the region. Consultants may be used to help with the objectives below.

Staff Contact: Chris Whaley

All activities will be funded by Transportation Planning Funds (TPF) unless noted otherwise.

Objectives:

- A. Collect and share data related to active transportation activity in the eight-county region by conducting regular counts throughout the TMA and by developing and maintaining online tools to share related data.
- B. Maintain, purchase, and install bike and pedestrian counters to meet national best practices for data collection for a region of this size.
- C. Update the Regional Bikeways and Regional Sidewalk maps and associated GIS layers.
- D. Extend bike and sidewalk network data to include information about network quality.
- E. Conduct surveys to document resident travel patterns and feedback on active transportation use in the region.
- F. Work with local governments and other transportation agencies to improve the accuracy of existing pedestrian and bicycle mapping tools.

Expected Products:

- A. Counter Data Reports and Dashboards
- B. Updated Bikeways Map and Associated GIS Layers
- C. Updated Sidewalk Layers
- D. Completed Surveys

Subtask 4.5.c – Pedestrian and Bicycle Local Plans

The MPO will conduct local active transportation studies in partnership with government agencies or nonprofits to improve bicycle and pedestrian connectivity and safety in the region. Consultants will be used to carry out the objectives below.

Staff Contact: Susan Jaworski

All activities will be funded by Transportation Planning Funds (TPF) unless noted otherwise.

Objectives:

- A. Conduct **the Buffalo Bayou East Concept Study**. This study will provide recommendations to improve connectivity for active transportation in Second and Fifth Wards in the City of Houston. It will also provide a TOD plan for the Fifth Ward Transit Center. (TPF and STBG)
- B. Develop a **Master Trails Plan for the City of Friendswood**. This study focuses on creating a safe, connected, accessible and equitable trail network within the City of Friendswood. (TPF and STBG)
- C. Develop a **Bicycle-Pedestrian Safety Plan for the Bay Area**. The Plan will examine the existing conditions of bike and pedestrian facilities and produce actionable recommendations to improve bike and pedestrian safety, accessibility, and connectivity in the project area.
- D. Conduct a **study of Memorial Drive in the Energy Corridor District**. This study will identify and analyze multimodal opportunities that create a friendly environment for active transportation within the study area. (TPF and STBG)

Expected Products:

- A. Buffalo Bayou East Concept Study Final Report
- B. City of Friendswood Master Trails Plan
- C. Bay Area Bicycle and Pedestrian Safety Plan
- D. Memorial Drive Bicycle and Pedestrian Study Final Report

Subtask 4.5.d – Pedestrian and Bicycle Outreach

The MPO will conduct outreach to ensure the public is aware of regional resources available and best practices regarding active transportation planning, infrastructure, data collection and safety. Consultants may be used to complete the objectives below.

Staff Contact: Chris Whaley

All activities will be funded by Transportation Planning Funds (TPF) unless noted otherwise.

Objectives:

- A. Provide support and **coordination for regional bike month activities**.
- B. Conduct and **support the activities of the Pedestrian and Bicycle Subcommittee** of the TAC, including related workgroups.
- C. Coordinate with the internal and external agencies to **improve access to bike and pedestrian infrastructure**.
- D. **Encourage increased and safe use of bike and pedestrian infrastructure** to improve mobility, access to jobs, quality of life, air quality, and congestion.
- E. Provide **regular trainings on active transportation counters and related data**

collection and reporting for staff and the community within the region.

- F. Support active transportation components of regional safety campaigns including **safety education for motorists, adult bicyclists, and bicycle safety for children.**
- G. **Share resources on best practices** for local governments and other transportation agencies on topics such as: innovative bicycle/pedestrian policies, programs, and practices related to design and maintenance for pedestrian and bicyclist facilities; improving connectivity; project management; cost estimation; Vision Zero strategies; complete Streets policies; first- and last-mile connections to transit; intelligent transportation systems (ITS) that improve safety for active transportation users; Safe Routes to School strategies; and pedestrian and bicyclist safety generally.

Expected Products:

- A. Active Transportation Safety Education Materials (ex: flyers, bookmarks, pamphlets, attendance, evaluations)
- B. Mobile Counter Training Materials (ex: slides, handouts, videos, attendance, evaluations)

Task IV Funding Table

Task IV: METROPOLITAN TRANSPORTATION PLAN - FUNDING SUMMARY

Subtask	Activity	Responsible Agency	Transportation Planning Funds (TPF) ¹	Other Federal Funds ²	FTA Section 5307 Funds	Local ³	TOTAL FUNDS
			FY 2024	FY 2024	FY 2024	FY 2024	
4.1	Regional Transportation Plan and Project Planning	H-GAC	\$215,000	\$400,000	\$0	\$0	\$615,000
4.2	Multimodal System Planning	H-GAC	\$270,000	\$1,250,000	\$0	\$0	\$1,520,000
4.3	Transportation Performance Management	H-GAC	\$155,000	\$0	\$0	\$0	\$155,000
4.4	Transit Planning	H-GAC	\$150,000	\$800,000 - C	\$0	\$0	\$950,000
4.5	Active Transportation	H-GAC	\$325,000	\$1,425,000	\$0	\$0	\$1,750,000
	TOTAL		\$1,115,000	\$3,875,000	\$0	\$0	\$4,990,000

Note 1: TPF includes both FHWA PL-112 and FTA Section 5303 Funds. TxDOT will apply transportation development credits sufficient to provide the match for TPF. As the credits reflect neither cash nor work hours, they are not reflected in the funding tables.

Note 2: "Other Federal Funds" may include Surface Transportation Block Grant (default), Congestion Mitigation and Air Quality ("C"), or Discretionary Grant Funds ("G")

Note 3: "Local" funds include any local contributions, but also may include non-transportation Federal funds provided to H-GAC or partner agencies.

Houston-Galveston Area Council Unified Planning Work Program

Task Four Activities or Projects with Consultant Spending

TASK / Sub-Task	ACTIVITY OR PROJECT NAME	LISTING TYPE	ACTIVITY TYPE	STATUS (as of UPWP adoption)	FUNDING
4 / 4.1.c	RTP Regional Transportation Vision Survey	Carryover	Consultant	In Development	TPF
4 / 4.2.a	Chambers County - Thoroughfare Plan	Carryover	Consultant	Currently Underway	Other - FHWA
4 / 4.2.b	REGIONAL GOODS MOVEMENT PLAN UPDATE	Carryover	Consultant	Currently Underway	Other - FHWA
4 / 4.2.c	North Houston Community Transportation Priorities Plan	Carryover	Consultant	In Development	Other - FHWA
4 / 4.2.c	TIRZ 13 - First Ward/Old Sixth Ward Mobility Plan	Carryover	Consultant	In Procurement	Other - FHWA
4 / 4.2.c	City of Pearland – Mobility Study	Carryover	Consultant	In Procurement	Other - FHWA
4 / 4.4.a	High Capacity Transit Feasibility Study (Outer West Park)	Carryover	Consultant	In Development	Other - FHWA
4 / 4.4.a	High Capacity Transit Feasibility Study (Regional Bus)	Carryover	Consultant	In Development	Other - FHWA
4 / 4.4.a	Gulf Coast Rail District - US90 Commuter Rail Study	Carryover	Consultant	In Procurement	Other - FTA
4 / 4.2.b	Pearland Transit Study	Carryover	Staff	Underway	TPF
4 / 4.4.b	City of Dayton - Transit System	Carryover	Consultant	In Procurement	Other - FHWA
4 / 4.5.a	Regional Active Transportation Plan	Carryover	Consultant	Initiate in FY2024	Other - FHWA
4 / 4.5.a	Regional Bike Highway Feasibility Study	Carryover	Consultant or Staff	Initiate in FY2024	Other - FHWA
4 / 4.5.a	Regional Safe Routes to Schools Study	Carryover	Consultant or Staff	Initiate in FY2024	Other - FHWA
4 / 4.5.b	Active Transportation Counter Installation and Maintenance	Carryover	Consultant/Service	Ongoing; contracts may be updated	TPF
4 / 4.5.c	Buffalo Bayou Partnership - Bike Ped	Carryover	Consultant	In Procurement	Other - FHWA
4 / 4.5.c	City of Friendswood Trail Plan - Bike Ped	Carryover	Consultant	In Procurement	Other - FHWA
4 / 4.5.c	Harris County Precinct 2 - BAY AREA Bike Ped	Carryover	Consultant	In Procurement	Other - FHWA
4 / 4.5.c	Memorial Drive Bike/Ped Study	Carryover	Consultant	In Development	Other - FHWA

Task Four Activities or Projects with Pass-Thru Spending

TASK / Sub-Task	ACTIVITY OR PROJECT NAME	LISTING TYPE	ACTIVITY TYPE	STATUS (as of UPWP adoption)	FUNDING
4 / 4.5.d	BICYCLE SAFETY EDUCATION	Ongoing	Pass-Thru	Ongoing; contracts may be updated	Other - FHWA

TASK V Special Planning Projects

Metropolitan Planning Organizations have a responsibility to proactively identify and address the region's transportation planning needs and priorities for current and future issues. The work elements contained in Task V include activities designed to confront the Houston-Galveston region's deteriorating transportation safety outcomes, address the region's rapid growth in traffic and congested streets and highways. Activities include safety planning, congestion management planning, transportation demand management, regional traffic incident management and intelligent transportation systems, emerging technologies, developing streets and neighborhoods that improve access to destinations, mobility, and safety. Task V also addresses the development of programs to improve resiliency of the transportation system and air quality. On behalf of local agencies, the MPO conducts special studies of corridors and will begin to assist local project sponsors with the development (design and engineering) of their projects that have been approved by the Transportation Policy Council. Finally, Task V includes a required list and description of regional transportation planning activities that will be undertaken by partner agencies.

Task Objectives:

The following key objectives summarize the main activities that the MPO will undertake to complete the requirements of Task IV during the term of this Unified Planning Work Program:

- Administer the bi-monthly Traffic Safety Committee Meetings.
- Secure contractor to providing lifesaving education and resources to promote child Passenger Safety, and Bicycle and Pedestrian Safety.
- Secure a contractor to provide a peer-to-peer program for teens that focuses solely on traffic safety and addresses all major risks for high school students.
- Secure a contractor to perform intersection safety audits on high crash rate intersections.
- Provide and coordinate training opportunities for local government agencies on transportation safety.
- Develop SS4A safety action plan(s) with local partners.
- Administer and maintain the SS4A Action Plan Grant, including the fiscal management, contracts, handling of personnel matters, and the procurement of equipment and supplies required for operations.
- Establish HSIP Performance Measures and Targets for all public roads in the MPO
- Coordinate with the State and include the safety performance measures and the MPO's safety targets for those measures in the Metropolitan Transportation Plan.
- Integrate the safety goals, objectives, performance measures and targets described in other State safety transportation plans and processes such as applicable portions of the HSIP, including the Strategic Highway Safety Plan.
- Work with internal and external stakeholders to revise and update the region's

congestion management process (CMP)

- Evaluate implementation and impact of the congestion management process.
- Provide detailed analysis for roadway expansion projects to ensure they meet congestion management process requirements prior to their being added to the TIP.
- Coordinate with regional stakeholders to shape regional TDM strategies
- Work with employers, universities, property managers and owners, residential communities and others to develop site based TDM plans and strategies.
- Conduct an evaluation of the regional transportation demand management program
- Administer and maintain the Regional ITS Architecture
- Administer and maintain a Regional Database of ITS Devices and Traffic Signals.
- Administer and maintain the Regional TSMO website tsmo.h-gac.com.
- Hold Quarterly TSMO Subcommittee meetings
- Conduct Monthly Traffic Incident Management Meetings with first responders.
- Administer a freeway quick Clearance program known as Tow and Go™
- Conduct Public Outreach campaign to inform the public about the Tow and Program.
- Administer a freeway service patrol known as Motorist Assistance Program (MAP)
- Administer Commute Solutions, the regional voluntary trip reduction (Travel Demand Management) program
- Conduct the Commuter and Transit Pilot Program.
- Purchase, develop and/or utilize TDM/ridematching platforms or software
- Provide technical assistance and develop tools to advance Livable Centers Program priority projects and initiatives. May include identification of policies, regulations and best management practices that can advance Livable Centers principles.
- Provide liaison assistance to facilitate Livable Centers partnerships to build institutional capacity of local partners including sharing of potential funding sources and partnerships.
- Conduct trainings/workshops and develop support materials to advance coordinated land use implementation strategies.
- Conduct Call for Livable Centers Planning Study Partners
- Administer and manage Livable Centers planning consultant contracts for individual studies.
- Conduct local livable centers studies.
- Incorporate livable centers studies recommendations into livable centers database.
- Review and monitor emerging transportation technologies.
- Develop a regional emerging transportation strategy
- Provide planning support and assistance for local partners related to emerging transportation technologies.
- Review scenarios for adoption of new technologies
- Conduct phase II of the AV Texas Southern University project.

- Liaise with public and private stakeholders on emerging transportation technologies.
- Implement heavy-duty vehicle replacement or engine modification projects
- Implement additional ongoing short-term vehicle replacement projects
- Develop program materials to support future electric vehicle charging efforts
- Work to resolve existing Buy America issues.
- Develop a regional zero emission vehicle (ZEV) infrastructure plan (Subtask 5.5.b)
- Work with regional governmental stakeholders to develop model “EV-Ready” building codes (Subtask 5.5.b)
- Develop in person and virtual events educational events to promote affordable domestic transportation fuels.
- Provide technical assistance and outreach to local fleets to facilitate the acceptance of alternative fuels.
- Support regional corridor infrastructure planning and development activities.
- Organize workshops and/or roundtables focused on Clean Cities-related workforce issues
- Seek PROTECT Discretionary Grant Planning Program in coordination with H-GAC regional partners.
- Develop a region-wide resiliency plan.
- Initiate regional coordination addressing transportation resiliency policy and legislative recommendations.
- Develop an H-GAC regional resiliency website.
- Develop corridor plans with continued emphasis on improving safety.
- Initiate four local-agency-requested corridor studies over the next fiscal year
- Coordinate with local project sponsors and TxDOT to develop transportation projects that support the goals of the regional transportation plan and regional policies. (Subtask 5.7.b)
- Work with consultant to provide project development support for projects identified in the H-GAC project selection process. (Subtask 5.7.b)
- Federal, state, regional and local coordination to increase safe and accessible options for multiple travel modes for people of all ages and abilities.
- Initiate development of IJJA-required Regional Complete Streets Plan. Initial efforts will focus on building policy consensus and identifying current conditions.
- Provide technical assistance, education and training on Complete Streets concepts and principles related to Complete Streets and context-sensitive design.
- Initiate complete streets plan(s) for future land development.
- Conduct TOD planning to improve first-mile and last-mile connections, and to improve economic potential of station areas.
- Undertake TOD Corridor Data Collection and Interactive Web Mapping

- Support local sponsor/partner in TOD planning efforts.
- List all partner-sponsored or conducted regionally-important transportation planning activities, including all federally-funded planning activities.

Expected Products:

Expected products of Task V include a wide variety of technical reports and documentation summarizing the findings of various transportation planning efforts, activities such as public meetings and committee meetings, and reports summarizing implementation of activities undertaken by the MPO that relate to or may influence transportation planning. A comprehensive list and description of the likely products from each subtask are included in each subtask description.

Previous and Continuing Work:

- Performed Intersection Safety Audits and Reports on 58 Intersections.
- Provide training opportunities from Farm&City, FHWA and Federal Railroad Administration.
- Provided lifesaving education and resource for child passenger safety, bicycle, and Pedestrian Safety
- Provide training to you drivers on transportation safety.
- Developed training for Intersection Safety Audits and Road Safety Audits.
- Working with City of Houston on Crosstimbers Road and Intersection Safety Audit. This is one of the City of Houston high injury roadways.
- Analyzed Crash Record Information System (CRIS) data to determine 40 high crash rates intersection in the region.
- Reports annually MPO’s Safety Performance Measures
- Works with Planning on reporting Safety Performance Measures.
- Conducted a Child Passenger Safety and Child Bicycle and Pedestrian Safety Campaign to reduce Child Traffic Fatalities and Serious Injuries.
- Conducted a Teens Peer to Peer Program to reduce Teen Traffic Fatalities and Serious Injuries.
- Conducted an Adult Bicycle Safety Education Program to reduce Bicycle Fatalities and Serious Injuries.
- Support Regions Vision Zero Goal.
- Developed an updated Congestion Management Process (2021).
- Conducted congestion management analysis of multiple added-capacity projects according to requirements in the Congestion Management Process, producing reports and waiver letters as needed.
- Began work on a dashboard to share regular evaluation of congestion management process impact on the related transportation network.

- Launched the regional TDM Workgroup.
- Completed procurement and consultant selection for the TDM evaluation study.
- Completed telework plans for employers within the eight-county transportation management area.
- Began development of site-based TDM education and outreach plans for employers and universities within the eight-county transportation management area.
- Reviewed ITS Projects for the region for the 2022-2023 Fiscal Year.
- Worked on the procurement of a contract to update the ITS Regional Architecture, TSMO Plan the supporting website.
- Provided ITS and TSMO Support for the region.
- Provided Tow and Go Service in Unincorporated Harris County, City of Houston, Baytown Bellaire, Deer Park, Humble, Jersey Village, La Porte, Pasadena, and Webster
- Conducted After Action Reports to expedite Tow and Services
- Performed Public Outreach Campaign to educate the public on Tow and Go.
- Worked with Harris County on the Motoring Assist Program.
- Piloted Conroe Connection service to downtown and the medical center.
- Launched pilot of suburb to suburb commuter service from the Woodlands to the Energy Corridor.
- Implemented and/or refined telework and compressed work week programs for multiple employers in the region.
- Completed multiple marketing campaigns to increase awareness about the commute solutions program and options in the region.
- Launched campaign to encourage greater use of bicycles for transportation.
- Completed the Commute Solutions Month Campaign to increase awareness and education about transportation options.
- Developed a regional commute calculator, “Make Your Commute Count”.
- Published Livable Centers 12 Year Evaluation Report and Local Partner Report Cards.
- Developed a database that tracks and maps the implementation of projects and their status. Streamlined over 500 Livable Centers GIS data/ recommendations from eleven Livable Centers studies to a single spatial database.
- Refined the Livable Centers Air Quality methodology with more streamlined language based on feedback received from Livable Center study project teams.
- Published quarterly newsletters to study sponsors to support funding and partnership opportunities and implementation efforts.
- Held “Finding the Money: Getting Projects Prepped for Funding” workshop on September 16, 2022, with 95 attendees. At this workshop participants learned

innovative strategies that leverage existing resources and expand active transportation projects' funding potential.

- Scheduled “Elements of Placemaking Beyond Aesthetics” workshop for September 14, 2023. At the workshop, participants will learned about different elements of placemaking beyond aesthetics, such as safety, economic development, and environmental impact.
- Developed graphics to illustrate the effects of quick win projects and best practices for three Livable Centers principles: traffic calming measures, access to multimodal transportation options, and elements of placemaking.
- Since 2008, completed 41 studies and specifically 10 studies were completed in FY21/22.
- For FY 22/23, 6 active studies in City of South Houston, Clute, Pasadena, Prairie View, Alvin and Sugar Land are underway.
- Included emerging technologies in topics for the Brown Bag Lunch Series in 2020 and 2021, which provided staff and member jurisdictions a forum and information on key transportation planning issues facing the region and industry.
- Assisted METRO and Texas Southern University and Automated Vehicle pilot project (Phase 1), including evaluation of patronage, operation, and potential expansion.
- Surveyed intercity tour, transit, and school buses for fleet and vehicle size, fuel usage, and age distribution to determine inventory share of emissions.
- Continue to implement heavy-duty vehicle replacement or engine modification projects.
- Develop and apply for grant opportunities as able.
- Providing support for quarterly Clean Cities stakeholders meetings
- Develop in person and virtual events educational events such as webinars, podcasts, and in-person meetings to promote alternative transportation fuels.
- Provide technical assistance and outreach to local fleets.
- Support regional Alternative Fueling corridor infrastructure planning and development activities.
- Continue development of Region-wide Transportation Resiliency Plan to improve resiliency of transportation infrastructure.
- Incorporation of the 25 Adaptation Strategies identified by the Resilience and Durability to Extreme Weather Pilot Plan into transportation plans and processes.
- Continue research to develop a Low-Impact Development Toolbox to serve as a resource to encourage sustainable planning, construction, and design of roadways and transportation facilities in the region.
- Completed the Resiliency and Durability to Extreme Weather Pilot Study was completed in January 2021 and submitted to the Federal Highway Administration

(FHWA).

- Finalized contract agreements with TxDOT and initiated interlocal agreements with local sponsors/partners.
- Completed procurement of consultant services for Washington Avenue, Pearland FM 518, and Cemetery Road Corridor studies.
- Initiated procurement for Friendswood Lake Corridor study.
- Researched and identified potential employment hubs with a higher likelihood of active transportation use for future study, including public engagement.
- Continued development of a Transit-Oriented Development (TOD) guide for the region and an online tool to evaluate potential success of TOD implementation in geographic areas based on evaluation criteria including physical and demographic features.
- Initiated TOD Corridor Data Collection and Interactive Web Mapping to capture accurate data related to demographics, employment, housing, transit, ridership, land values in existing and future HCT corridors, and rail station areas to assist cities, transit agencies, developers, and other stakeholders in identifying development trends and opportunities.

Subtask 5.1: Safety Planning

This subtask promotes the continued pursuit and analysis of safety issues as they relate to our long-range planning efforts. These efforts range from the collection of crash data to the sponsoring of planning studies and initiatives to address high crash locations. A multi-disciplinary Transportation Safety Committee has been developed to bring interested and involved parties to the table to address regional safety in a holistic manner. All tasks will be funded by Transportation Planning Funds (TPF) unless it is noted otherwise.

Subtask 5.1.a – Regional Safety Planning

This subtask supports the region's efforts to reach vision zero aspirational goals of no fatalities or serious injuries by 2050. It provides support to the region to promote transportation and to provide transportation safety for the Transportation Improvement Program and Regional Transportation Plan.

Staff Contact: David Fink

All activities will be funded by TPF unless noted otherwise.

Objectives:

- A. Administer the bi-monthly Traffic Safety Committee Meetings.
- B. Secure contractor to provide lifesaving education and resources to promote child Passenger Safety, and Bicycle and Pedestrian Safety. (Surface Transportation Block Grant (STBG) Funding)
- C. Secure contractor to provide a peer-to-peer program for teens that focuses solely on traffic safety and addresses all major risks for high school students. (STBG Funding)
- D. Secure a contractor to perform intersection safety audits on high crash rate intersections. (STBG Funding)
- E. Provide support to local government agencies of transportation safety.
- F. Provide and coordinate training opportunities for local government agencies on transportation safety.

• Expected Products:

- A. Prepared meeting agendas, meeting notices, minutes, and agenda item background materials for TPC and TAC meetings during the 2022-2023 fiscal years, as well as annual workshops for TPC and TAC members.
- B. Contractor to providing lifesaving education and resources to promote child Passenger Safety, and Bicycle and Pedestrian Safety.
- C. Contractor to provide a peer-to-peer program for teens that focuses solely on traffic safety and addresses all major risks for high school students Sets HSIP Safety Performance Measures for the MPO.

- D. Contractor that performs intersection and road safety audits.

Subtask 5.1.b Safe Streets and Roads for All

This subtask includes the development of a plan to enhance safety for all roadway users with an aspirational goal of eliminating all traffic fatalities and serious injuries in the 8- County H-GAC planning area. The MPO will work with the FHWA and local partners to develop Safety Action Plans for the regional and partner cities and transit agencies. (Consultants may be utilized for any activities).

Staff Contact: Allie Isbell

All activities will be funded by SS4A Action Plan Grant Funds unless noted otherwise.

Objectives:

- A. **Develop SS4A safety action plan(s)** with local partners.
- B. **Administer and maintain the SS4A Action Plan Grant**, including the fiscal management, contracts, handling of personnel matters, and the procurement of equipment and supplies required for operations.
- C. **Manage contracts and agreements** between the MPO and participating agencies or subcontractors. Support contract implementation, management, and compliance.
- D. **Maintain financial records** for departmental contracts and ensure payment of invoices.
- E. **Maintain the federal requirements for the SS4A grant** related requirements associated with the budgeting and expenditures of Federal funding.
- F. **Administer and manage supporting services contracts.** Develop and oversee all aspects of contracts with consultants to provide staff and planning support services, including developing and approving work activities, for the develop of a Safety Action Plan.

Expected Products:

- A. SS4A Website to coordinate and facilitate regional and local SS4A efforts, including the development of the region-wide and local Safety Action Plans.
- B. Develop a SS4A website and include online engagement tools/platforms/software, including surveys and/or polling, which may be used for the Safety Action Plans and other transportation safety projects to increase regional residents' participation
- C. Meeting agendas, meeting notices, meeting minutes and agenda items, and background materials for planning meets.
- D. Billing submissions and the filing of billing/invoicing documentation.
- E. Completed and managed contracts and agreements using the Agiloft contract system.
- F. Maintained documentation for audit and informational purposes.

Subtask 5.1.c Safety Performance Measures, Analysis and Reporting

This subtask supports the Highway Safety Improvement Program (HSIP) and requires Metropolitan Planning Organizations (MPOs) to set HSIP targets for 5 safety performance

measures. This document highlights the requirements specific to MPOs and provides a comparison of MPO and State DOT.

Staff Contact: David Fink

All activities will be funded by TPF unless noted otherwise.

Objectives:

- A. Establish HSIP Performance Measures and Targets for all public roads in the MPO in coordination with the State.
- B. Estimate Vehicle Miles Traveled (VMT) for all public roads for MPO for rate targets.
- C. Coordinate with the State and include the safety performance measures and the MPO's safety targets for those measures in the Metropolitan Transportation Plan.
- D. Integrate the safety goals, objectives, performance measures and targets described in other State safety transportation plans and processes such as applicable portions of the HSIP, including the Strategic Highway Safety Plan.

• **Expected Products:**

- A. HSIP Safety Performance Measures for the MPO.
- B. HSIP targets for the MPO,
- C. Report of MPO HSIP to State.
- D. Report of MPO HSIP targets to the State by February 27 of the calendar year they apply.

Subtask 5.1.d – Safety Outreach

Transportation Safety Outreach aims to improve traffic safety throughout the eight-county Metropolitan Planning Organization (MPO) region through support the safety efforts education, training and public outreach to the media outreach, schools, community organizations and agencies.

Staff Contact: David Fink

All activities will be funded by Surface Transportation Block Grant Funding (STBG) unless noted otherwise.

Objectives:

- A. Develop and provide materials for a public outreach campaign involving traffic safety in the region.
- B. Purchase digital advertising social media partnerships, email blasts, streaming services, billboards, and radio advertising to promote Public Outreach campaign.
- C. Secure Contractor to perform Child Passenger Safety and Child Bicycle and Pedestrian Safety Program to prevent injuries and fatalities sustained in motor vehicle crashes.

- D. Secure a program Contractor to do a peer to peer that focuses on teen for traffic Safety and major risks for high school students and young drivers.
- E. Conduct a program to conduct Adult Bicycle Safety

Expected Products:

- A. Billing submissions and the filing of billing/invoicing documentation.
- B. Completed and managed contracts and agreements using the Agiloft contract system.
- C. Conduct a Child Passenger Safety and Child Bicycle and Pedestrian Safety Campaign to reduce Child Traffic Fatalities and Serious Injuries.
- D. Conduct a Teens Peer to Peer Program to reduce Teen Traffic Fatalities and Serious Injuries.
- E. Conduct an Adult Bicycle Safety Program to reduce Bicycle Fatalities and Serious Injuries.
- F. Support Regions Vision Zero Goal.

Subtask 5.2: Congestion Management Planning and Operations

The purpose of congestion management is the development and application of strategies to improve transportation system performance and reliability by reducing the adverse impacts of congestion on the movement of people and goods. This subtask emphasizes the development and feasibility of strategies such as Travel Demand Management (TDM) and Regional Incident Management (RIM). TDM focuses on user behavior-based strategies to reduce single-occupant vehicles and shift travel away from peak periods. RIM involves effective management of existing infrastructure through a range of strategies, and includes freeway incident clearance programs.

Subtask 5.2.a – Congestion Management Process

The MPO is required to develop a Congestion Management Process (CMP) to analyze system, corridor and segment-level performance data to understand the location, extent and duration congestion within the transportation system. Using this data H-GAC informs the selection of performance measure targets related to multimodal congestion and identifies strategies to mitigate and manage congestion. Roadway projects that are on the CMP network and add capacity for single occupancy vehicles must be addressed through the region’s congestion management process, including analysis for exemption as a addressing a safety or bottle neck issue and analysis to ensure alignment with the targeted levels of performance and mitigation strategies prior to use of federal funds to support said project.

Staff Contact: Jamila Owens

All activities will be funded by Transportation Planning Funds (TPF) unless noted otherwise.

Objectives:

- A. Work with internal and external stakeholders to revise and update the region’s congestion management process; including goals and objectives, priority areas and corridors, strategies to be implemented, methods of measuring success, and how the process will integrate with the Regional Transportation Plan and Transportation Improvement Program.
- B. Regularly evaluate implementation and impact of the congestion management process.
- C. Provide detailed analysis for roadway expansion projects to ensure they meet congestion management process requirements related to congestion impact prior to their being added to the TIP.

Expected Products:

- A. Updated Congestion Management Process
- B. Congestion Management Process Regional Evaluation Report (digital dashboard or print)
- C. Congestion Management Analysis Added-Capacity Project Reports
- D. Congestion Management Analysis Waiver Letters

Subtask 5.2.b – Development of Travel Demand Management Strategies

The MPO will work with area partners to develop transportation demand management (or TDM) strategies to expand mode choice; market to and educate users of travel options; and outline pricing strategies that influence travel behavior and mode choice. These strategies have benefits such as reducing peak period travel, reducing vehicle miles traveled, and improving air quality. Consultants may be used to complete the TDM strategies below.

Staff Contact: Jamila Owens

All activities will be funded by Transportation Planning Funds (TPF) unless noted otherwise.

Objectives:

- A. **Coordinate with regional stakeholders**, such as employers, local governments, transit agencies, universities, k-12 schools and transportation management associations to shape regional TDM strategies. (TPF and CMAQ)
- B. Work with employers, universities, property managers and owners, residential communities and others to **develop site based TDM plans and strategies**. (TPF and CMAQ)
- C. Conduct an **evaluation of the regional transportation demand management peak period trip reduction program**, including but not limited to conducting focus groups, a national best practices scan, program benchmarking and a plan review in order to develop recommendations for improving the program and maximizing its impact on the region. This will help with future development of a regional TDM plan. (CMAQ)
- D. **Staff the regional transportation demand management stakeholder workgroup**

through regular coordination of meetings and reporting to relevant TAC subcommittees.

Expected Products:

- A. TDM Workgroup meeting agendas, meeting minutes and agenda items
- B. TDM Program Evaluation Final Report and supporting materials
- C. Site-based TDM Plans

Subtask 5.2.c – Intelligent Transportation Systems (ITS) and Transportation Systems Maintenance and Operations (TSMO)

This subtask supports activities related to ITS and TSMO. It supports the ITS/TSMO website, maintains the ITS Regional Architecture and supports TSMO activity in the Region. It also assists in incorporating ITS and TSMO in the planning process.

Staff Contact: David Fink

All activities will be funded by Transportation Planning Funds (TPF) unless noted otherwise.

Objectives:

- A. Support a set of strategies to anticipate and manage traffic congestion, and minimize the other unpredictable causes of service disruption and delay, thereby maintaining roadway capacity while improving reliability and safety.
- B. Administer and maintain the Regional ITS Architecture
- C. Administer and maintain a Regional Database of ITS Devices and Traffic Signals,
- D. Administer and maintain the Regional TSMO website tsmo.h-gac.com.
- E. Hold Quarterly TSMO Subcommittee meetings to support TSMO and ITS in the Region.
- F. Administer and manage contract services to update the ITS Architecture, the Regional Database and Regional TSMO website.

Expected Products:

- A. Meeting agendas, meeting notices, meeting minutes and agenda items, and background materials TSMO Subcommittee meetings.
- B. Billing submissions and the filing of billing/invoicing documentation.
- C. Completed and managed contracts and agreements using the Agiloft contract system.
- D. Review Regional ITS_TSMO projects for compliance with the Regional ITS Architecture.

Subtask 5.2.d – Regional Incident Management

This subtask supports activities related to Traffic Incident Management. It supports the Incident Management in the region to improve the safety of First Responders and the traveling public. This also strives to improve crash clearance times to improve congestion.

Staff Contact: David Fink

All activities will be funded by Surface Transportation Block Grant (STBG) funds unless noted otherwise.

Objectives:

Improve the safety of first responders and traveling in the region by improving response to crash scenes.

- A. Conduct Monthly Traffic Incident Management Meetings with first responders.
- B. Administer a freeway quick Clearance program known as Tow and Go™
- C. Conduct Monthly Operations Meeting for the Tow and Go Program.
- D. Conduct After Action Reports (AAR) for long duration Crash Scenes
- E. Conduct Public Outreach campaign to inform the public about the Tow and Go Program.
- F. Administer a freeway service patrol known as Motorist Assistance Program (MAP)
- G. Administer and manage agreements with to provide services to provide towing and Incident Management services.

▪ **Expected Products:**

- A. Meeting agendas, meeting notices, and agenda items, and background materials TSMO Subcommittee meetings
- B. Billing submissions and the filing of billing/invoicing documentation
- C. Completed and managed contracts and agreements using the Agiloft contract system
- D. Conducted Tow and Go Public Outreach Campaign

Subtask 5.2.e – Travel Demand Management Operations

Transportation demand management includes a variety of strategies such as offering information and education, providing effective travel choices, development of policies and incentives/disincentives that can influence travel behavior to improve congestion and air quality. The MPO implements such strategies to meet requirements for being in non-attainment of certain air quality standards.

Staff Contact: Jamila Owens

All activities will be funded by Transportation Planning Funds (TPF) unless noted otherwise.

Objectives:

- A. **Administer Commute Solutions**, the regional voluntary trip reduction program, to improve VMT reduction and air quality in the region through increased awareness and behavior change. Commute Solutions provides tdm strategy implementation services including marketing, education and outreach. Activities including supporting development of TDM strategies, providing educational campaigns and tools, and marketing initiatives to support mod shift, such as emergency ride home and ozone

action campaigns. (CMAQ)

- B. **Conduct the Commuter and Transit Pilot Program.** This program issues a call for partners to local agencies and nonprofit organizations. The goal of the program and the partnerships is to expand transit and transit supportive operations in the region. This includes, but is not limited to commuter bus, first-mile last mile shuttles, carshare, bikeshare, scooter share, and microtransit. (CMAQ)
- C. **Purchase, develop and/or utilize TDM/ridematching platforms or software** to operate the regional trip reduction program, measure its impact, and increase use of shared and active transportation options.

Expected Products:

- A. Campaign materials (ex: flyers, websites, social media posts, ads, billboards)
- B. Telework and Compressed Work Week policies, training materials, guides, forms and other implementation documents
- C. TDM/ridematching platform software and reports
- D. Emergency ride home program operations
- E. Transit Ridership reports
- F. Program participant reports
- G. Monthly progress reports

Subtask 5.3: Livable Centers

This subtask provides outreach and technical assistance to local governments and private developers to achieve more efficient coordination between development patterns and the transportation system; to develop policies, plans and projects that will help achieve this objective within MPO Transportation Management Area (TMA). All tasks will be funded by Transportation Planning Funds (TPF) unless it is noted otherwise.

Subtask 5.3.a – Livable Centers Planning and Technical Support

H-GAC provides outreach, training, and technical assistance to local governments and private developers to help achieve an improved connection and more efficient coordination between development patterns and the transportation system; and to develop policies, plans and projects.

Staff Contact: Cheryl Mergo

All activities will be funded by Transportation Planning Funds (TPF) unless noted otherwise.

Objectives:

- A. Conduct one-on-one meetings with past and current Livable Centers project sponsors to identify opportunities and barriers associated with project implementation.

- B. Provide technical assistance and develop tools to advance Livable Centers Program priority projects and initiatives. May include identification of policies, regulations and best management practices that can advance Livable Centers principles.
- C. Provide liaison assistance to facilitate Livable Centers partnerships to build institutional capacity of local partners including sharing of potential funding sources and partnerships.
- D. Conduct trainings/workshops and develop support materials to advance coordinated land use implementation strategies.
- E. Provide technical assistance and data to support the development of Livable Centers project evaluation for future RTP and TIP updates as requested by H-GAC Transportation Department staff.

Expected Products:

- A. Production of Livable Centers 14 Year Evaluation Report and Local Partner Report Cards.
- B. Development of best practices guide to address challenges determined from one-on-one interviews.
- C. Development of graphics to illustrate the effects of quick win projects and best practices for Livable Centers principles.
- D. Production and distribution of comprehensive funding and partnership guide.
- E. Annual livable center workshop and bi-annual roundtables.

Subtask 5.3.b – Livable Centers Planning Studies

Livable Centers planning studies will provide a framework for promoting efficient use of existing infrastructure, creating multi-modal travel choices, improving accessibility and circulation, and leveraging private resources for strategic investment. Studies will identify TIP eligible transportation projects and include estimated Vehicle Miles Traveled reductions and air-quality benefits.

Staff Contact: Cheryl Mergo

All activities will be funded by Transportation Planning Funds (TPF) unless noted otherwise.

Objectives:

- A. **Conduct Call for Planning Study Partners** for full and focused Livable Centers studies, including developing selection criteria and online application, partner solicitation, hosting call for planning partners informational meeting, scoring and selection of partners.
- B. **Administer and manage planning consultant contracts for individual studies.** Develop and oversee all aspects of contracts with consultants to provide project management, oversight and compliance activities, staff and planning support services, including

developing and approving project scope of work development, providing day-to-day management of consultants, assigning tasks, and conducting other activities necessary.

- C. **Conduct local livable centers studies** in partnership with project sponsors to help to create quality, mixed-use places that provide multi-modal transportation options through policy and programmatic recommendations and implementation projects. Consultants will be utilized for these studies. (Projects will utilize STBG funding.)
 - Number of studies and locations will be determined after call is conducted.
- D. **Incorporate livable centers studies recommendations into livable centers database** and program trackers.

Expected Products:

- A. Meeting agendas, meeting notices, meeting minutes and agenda items, and background materials from study related meetings.
- B. Billing submissions and the filing of billing/invoicing documentation.
- C. Completed and managed contracts and agreements using the Agiloft contract system.
- D. Completed local livable centers planning studies for:
 - Number of studies and locations will be determined after call is conducted.
- E. Updated livable centers database and program trackers.

Subtask 5.4: Transportation Innovation and Emerging Technologies

Subtask 5.4, Transportation Innovation and Emerging Technologies, establishes activities that will plan for the arrival of automated vehicles and other new transportation technologies on the Houston-Galveston region, mobility within the region, and transportation infrastructure needs. These activities will focus on identifying and responding to the implications that autonomous vehicles and emerging technologies may have on the region's travel demand, activities, and patterns; land use; congestion; and transportation data. Planning tools, including travel forecasting models, may need to adapt in ways that account for the effect upon the roadway system brought about by these technological innovations and transformations. Autonomous vehicles are no longer discussed solely in the context of automobile passenger travel, but also in the context of freight, transit, and people-mover/shuttle systems. Planning efforts will include coverage of associated technologies such as connected vehicle technologies, microtransit innovations, artificial intelligence applications, and digital and virtual reality technologies that allow people to engage in life activities without having to travel through physical space.

Subtask 5.4.a – Autonomous Vehicles and Emerging Technologies

Transportation is undergoing substantial and rapid technology advances relating to autonomous vehicles, connected vehicle technologies, commercial drones (unmanned aerial vehicles), artificial intelligence (AI) tools, transportation network companies, and increasing market adoption of electric vehicles. These developments have the potential to trigger significant changes in transportation safety, costs, resource consumption, mobility, and other important areas. However, benefits can only be achieved if the transportation system can

effectively accommodate and leverage these emerging technologies. This Subtask includes activities to examine current, anticipated, and potential trends relating to various new and developing transportation technologies to identify challenges and opportunities related to the Houston-Galveston region's transportation infrastructure planning over near-, mid-, and long-term time horizons.

Staff Contact: Craig Raborn

All activities will be funded by Transportation Planning Funds (TPF) unless noted otherwise.

Objectives:

- A. **Conduct research and analysis of emerging technologies** related to the planning, implementation, and adoption of autonomous/connect vehicle technology, autonomous freight shuttle technology, and other emerging transportation technologies related to freight and vehicular movement. (Consultant may be utilized)
- B. **Review and monitor emerging transportation technologies**, including technology development, deployment trends, potential impacts, peer activities, and industry actions and trends. Engage with stakeholder in and outside the region, including attending trainings and conferences, and prepare briefings and updates as needed.
- C. **Develop a regional emerging transportation strategy** or policy document to address planning and infrastructure needs for the region. Issues to address may include any emerging transportation technologies, potential infrastructure and fiscal impacts, economic development opportunities, environmental impacts, and long-range planning needs. (Consultant may be utilized)
- D. **Provide planning support and assistance** for local partners related to emerging transportation technologies. These activities may include, but are not limited to, identifying use cases, evaluating projects, policy development, public outreach and planning, scenario and/or land use pattern planning, or traffic modeling.
- E. **Review scenarios for adoption of new technologies** (connected/autonomous vehicles and ITS) in the Houston-Galveston TMA and potential impacts on mobility and congestion. Identify infrastructure and policy necessary to maximize mobility, congestion management and safety.
- F. **Conduct phase II of the AV Texas Southern University project**, connecting Texas Southern University, University of Houston, and the Metro Light Rail System for a University District AV Circulator. (Consultant may be utilized)
- G. **Develop and maintain an online information clearinghouse** for the region that provides information about emerging transportation technologies and information about deployment in the region.
- H. **Liaise with public and private stakeholders** on autonomous and connected vehicles, implementation and deployment, and other emerging transportation technologies.

Expected Products:

- A. Regional emerging transportation strategy or policy document to address planning and infrastructure needs for the region.
- B. Briefing documents, white papers, research reports, etc., relating to emerging transportation technologies and potential impacts or opportunities for the Houston-Galveston region.
- C. Scenario planning or forecast document for emerging technologies.
- D. Web-based information clearinghouse for the region on autonomous vehicle and other emerging technologies.
- E. Completed Phase Two activities and report from the Texas Southern University AV pilot and study.

Subtask 5.5: Air Quality Management and Operations

The purpose of this subtask is to identify, design, implement, and promote voluntary local strategies to reduce transportation-related emissions, energy, and air quality impacts. Emphasis is placed on achieving reductions in ozone precursor emissions to achieve compliance with federal ozone standards, but work includes efforts to comprehensively reduce emissions of other air pollutants. In all areas, H-GAC works collaboratively with local governments, peer organizations, State and federal agencies, and other stakeholders to advance emission-reducing activities. H-GAC also carries out responsibilities as the Department of Energy (DOE)-designated Houston Clean Cities Coalition.

Subtask 5.5.a – Air Quality Initiatives for Fleets

H-GAC’s vehicle replacement programs provide resources, services, and assistance to promote the reduction of harmful emissions in the eight-county nonattainment area through the awarding of grants to partially reimburse the cost of replacing aging heavy-duty diesel vehicles newer, cleaner models or engines powered by traditional or alternative fuels. These grant funds may also be used to assist with the purchase of alternative fueling or charging infrastructure.

Staff Contact: Andrew DeCandis

All activities will be funded by Transportation Planning Funds (TPF) unless noted otherwise.

Objectives:

- A. **Implement heavy-duty vehicle replacement or engine modification projects** such as the Clean Vehicles Program or the Heavy-Duty Diesel Replacement Program. (Some projects may utilize non-TPF funding sources such as CMAQ, STBG, Department of Energy, or Environmental Protection Agency funding)

- B. **Implement additional ongoing short-term vehicle replacement projects** such as those associated with the EPA’s Diesel Emission Reduction Act (DERA) program. (Some projects may utilize non-TPF funding sources such as CMAQ, STBG, Department of Energy, or Environmental Protection Agency funding)
- C. **Develop and apply for grant opportunities** to initiate additional vehicle replacement or engine modification projects.
- D. **Develop program materials to support future electric vehicle charging efforts** including the development of program standards and guidance.
- E. **Work to resolve existing Buy America issues.** Staff should work to resolve existing Buy America concerns that limit vehicle replacement programs. This can include working state and federal agency staff to initiate new Buy America Waivers or to work directly with manufacturers to secure Buy America certification commitments.

Expected Products:

- A. Program materials to support future electric vehicle charging efforts including the development of program standards and guidance.
- B. Grant applications and other supporting materials as needed.

Subtask 5.5.b – Air Quality Initiatives for Consumers and Communities

In addition to working with large fleets to reduce transportation related emissions, H-GAC anticipates working with consumers and communities to help reduce emissions. Initial efforts for this task will work to better understand and transcend barriers related to the acceptance and use of zero emission vehicles within our region.

Staff Contact: Andrew DeCandis

All activities will be funded by Transportation Planning Funds (TPF) unless noted otherwise.

Objectives:

- A. **Develop a regional zero emission vehicle (ZEV) infrastructure plan** to help guide the development of regional infrastructure needs for zero emission at the tailpipe fuels. This should include a study of existing and estimated future vehicle populations as well as the charging, fueling, and infrastructure needs related to these estimates. This report should also identify policies to reduce potential bottlenecks towards the expansion of these technologies. It is anticipated that this study will also examine the potential regional emissions benefits associated with the ZEV transition. This effort will inform the development of alternative fuel charging grants discussed in Subtask 5.5.a.
- B. **Work with regional governmental stakeholders to develop model “EV-Ready” building codes** for residential and commercial construction. These EV-Ready codes can be

implemented throughout the region to help facilitate the acceptance of ZEV vehicles within the region.

Expected Products:

- A. Zero emission vehicle Infrastructure Plan.
- B. EV-Ready model building code.

Subtask 5.5.c – Clean Cities

The Clean Cities program is a Department of Energy (DOE) funded program that supports the nation's energy and economic security by building partnerships to advance affordable domestic transportation fuels, energy efficient mobility systems, and other fuel-saving technologies and practices. The Houston-Galveston Clean Cities Coalition, hosted by H-GAC, works with local stakeholders to provide the technical expertise local decision makers and fleets need to understand and implement alternative and renewable fuels, electric vehicles, idle-reduction measures, fuel economy improvements, new mobility choices, and emerging transportation technologies within our region.

Staff Contact: Andrew DeCandis

All activities will be funded by a grant from the U.S. Department of Energy (DOE) unless noted otherwise.

Objectives:

- A. **Provide support for a Clean Cities stakeholders meeting** at least quarterly. This meeting will provide space for stakeholders to exchange ideas and information about alternative fuels as well as provide information about current funding opportunities for alternative fuels.
- B. **Develop in person and virtual events educational events** to promote affordable domestic transportation fuels, energy efficient mobility systems, and other fuel-saving technologies and practices. These events may include a mix of in-person and virtual meetings, webinars, listening sessions, and exhibitions.
- C. **Provide technical assistance and outreach to local fleets** and other regional stakeholders to facilitate the acceptance of alternative fuels within our region through a variety of discussions and events.
- D. **Support regional corridor infrastructure planning and development activities.**
- E. **Organize workshops and/or roundtables focused on workforce issues** to provide stakeholders and other participants with the opportunity to identify concerns and share success stories regarding including alternative fuel issues into the workforce.

Expected Products:

- A. Meeting agendas, meeting notices, meeting minutes and agenda items, and background materials for quarterly Clean Cities Stakeholder Meetings.
- B. Quarterly progress reports to Department of Energy
- C. Submittal of a quarterly fuel price report based on a survey of alternative fueling locations within coalition territory.
- D. Completion of Annual Clean Cities fleet survey
- E. In person and virtual events educational events including a mix of meetings, webinars, and exhibitions.

Subtask 5.6: Resiliency Planning

This subtask coordinates resiliency efforts to improve reliability and security of the transportation system to withstand threats from man-made and natural disasters. Region-wide plans will be coordinated with homeland security, disaster preparedness, and post-disaster redevelopment efforts. All tasks will be funded by Transportation Planning Funds (TPF) unless it is noted otherwise. Consultant may be utilized for the studies.

Subtask 5.6.a – Regional Resiliency Planning

Coordinate resiliency efforts to improve reliability and security of the transportation system to withstand threats from man-made and natural disasters. Region-wide plans will be coordinated with homeland security, disaster preparedness, and post-disaster redevelopment efforts. All tasks will be funded by Transportation Planning Funds (TPF) unless it is noted otherwise. Consultants may be utilized for the studies.

Staff Contact: Caroline Bailey

All activities will be funded by Transportation Planning Funds (TPF) unless noted otherwise.

Objectives:

- A. **Seek PROTECT Discretionary Grant Planning Program** in coordination with H-GAC regional partners.
- B. **Develop a region-wide resiliency plan**, performance measures, and potential pilot opportunities. Consultants may be utilized.
- C. **Initiate regional coordination** through local sponsor/partner technical assistance and education-based resources/training including, but not limited to, regional transportation resiliency policy and legislative recommendations.
- D. **Develop an H-GAC regional resiliency website** and include online engagement tools/platforms/software, including surveys and/or polling, which may be used on various projects within the region to increase regional residents' participation.

Expected Products:

- A. **Resiliency Planning Website** to facilitate resiliency planning information exchange and access including the development of the region-wide resiliency plan.
- B. **Draft resiliency education-based training materials & best practices** for future local partner training and coordination including, but not limited, to distribution through workshops, webinars, online toolkits, and the RTP and/or TIP Call for Projects.

Subtask 5.7: Corridor, Project-Level, and Special Studies

This area focuses on bicycle and pedestrian planning, frequently linking to public transportation. Activities in this subtask include existing condition assessments, review and coordination among local transportation plans, technical assistance, capacity building tools and activities, coordination with subcommittees, development of recommendations, implementation plans, and performance measures to advance congestion management and active transportation in the region. All tasks will be funded by Transportation Planning Funds (TPF) unless it is noted otherwise.

Subtask 5.7.a – Corridor Planning

Corridor Planning evaluates the short- and long-term needs of a defined corridor to develop actionable recommendations to improve safety, mobility and resiliency of the corridor. These studies include data collection and analysis, public engagement and incorporates alternative analysis to establish a preferred roadway cross section, right-of-way recommendations, and anticipated planning-level project costs estimates. Recommendations include projects, programs and policies which inform potential project list considerations for the Regional Transportation Plan, future Capital Improvement Programs and other funding opportunities as defined by associated plan implementation chapters. Consultant(s) may be utilized to assist with the following studies below.

Staff Contact: Carlene Mullins

All activities will be funded by Transportation Planning Funds (TPF) unless noted otherwise.

Objectives:

- A. **Develop corridor plans** with continued emphasis on improving safety by analyzing identified mobility issues and land use. The recommendations will incorporate multimodal and safety solutions to mitigate congestion and improve safety for all.
- B. **Conduct consultant contract management** and oversight activities for active sub-regional studies. (TPF and STBG)
- C. **Initiate corridor studies** over the next fiscal year in which a consultant may be utilized that include: (TFP and STBG)
 - i. Washington Avenue Corridor Study
 - ii. Pearland FM 518 Corridor Study

- iii. Cemetery Road Corridor Study
- iv. Friendswood Lake Corridor Study
- D. Review recommendations from previous plans or studies to assess eligibility and competitiveness for discretionary grant programs. Review may include analysis of new factors for consideration and updating evaluations and rankings. (Consultants may be utilized.) [NEW]
- E. **Conduct outreach** including online engagement tools/platforms/software, including surveys and/or polling, may be used on various projects within the region to increase regional residents' participation.

Expected Products:

- A. No Corridor Studies are expected to be complete by September 30, 2024. Regular updates will be provided.

Subtask 5.7.b – Project-Level Planning

H-GAC will work with federal, state, and local agencies toward the on-time delivery of federal surface transportation projects selected by the TPC. Projects and plans will be selected through the H-GAC project selection process that are aligned with the current regional transportation plan and the associated air quality conformity determination. Projects identified in the project selection process will be monitored by staff to proactively identify project development concerns that may cause project delays or budget changes.

Staff Contact: Adam Beckom

All activities will be funded by Transportation Planning Funds (TPF) unless noted otherwise.

Objectives:

- A. Coordinate with local project sponsors and TxDOT to develop transportation projects that support the goals of the regional transportation plan and regional policies.
- B. Work with consultant to provide project development support for projects identified in the H-GAC project selection process. *(Other funding sources will be utilized.)*

Expected Products:

- A. Portfolio of federally-funded projects that are at various stages of planning or project development.

Subtask 5.7.c – Complete Streets Planning

A Complete Street is safe, and feels safe, for everyone using the street and prioritize safety, comfort, and access to destinations for people who use the street network, including pedestrians, bicyclists, transit riders, micro-mobility users, freight delivery services, and motorists. The goal is to provide an equitable and safe transportation network for travelers of all ages and abilities, including those from marginalized communities facing historic

disinvestment. This vision is not achieved through a one-size-fits-all solution – each Complete Street is unique and developed to best serve its community context and its primary role in the network. MPO’s are federally required to create Complete Streets plan(s). (Consultants may be utilized to assist with these activities.)

Staff Contact: Anita Hollmann Matijcio

All activities will be funded by Transportation Planning Funds (TPF) unless noted otherwise.

Objectives:

- A. **Federal, state, regional and local coordination** to increase safe and accessible options for multiple travel modes for people of all ages and abilities.
- B. **Initiate development of IJA-required Regional Complete Streets Plan.** Initial efforts will focus on building policy consensus and identifying current conditions. (A consultant may be utilized)
- C. **Provide technical assistance, education and training** on Complete Streets concepts and principles related to Complete Streets and context-sensitive design.
- D. **Initiate complete streets plan(s)** for future development.

Expected Products:

- A. Phase One of Regional Complete Streets Plan
- B. Complete Streets Planning Website to facilitate resiliency planning information exchange and access including the development of the region-wide resiliency plan.

Subtask 5.7.d – Transit Oriented Development (TOD)

Conduct planning activities to support TOD in the region. The task will include coordination activities with local governments and public transportation providers to identify opportunities for Transit Oriented Design in conjunction with their plans for existing and proposed services. Consultant(s) may be utilized to assist with the following studies below.

Staff Contact: Anita Hollmann Matijcio

All activities will be funded by Transportation Planning Funds (TPF) unless noted otherwise.

Objectives:

- A. **Conduct TOD planning** to improve first-mile and last-mile connections, and to improve economic potential of station areas.
- B. **TOD Corridor Data Collection and Interactive Web Mapping** to capture accurate data related to demographics, employment, housing, transit, ridership, and land values in existing and future High-Capacity Transit corridors, high-ridership bus route corridors, and

rail station areas to assist cities, transit agencies, developers, and other stakeholders in identifying development trends and opportunities.

- C. **Online engagement** tools/platforms/software, including surveys and/or polling, may be used on various projects within the region to increase regional residents' participation.
- D. **Support local sponsor/partner in TOD planning** efforts, including, but not limited to Tidwell Transit Center along the University Corridor that will enhance connectivity, promote walkability and sustainability, and support equity through economic development and affordable housing. (Partner activity to be completed by METRO.)

Expected Products:

- A. **TOD Planning Website** to facilitate Transit Oriented Development planning information exchange and access including the development of future TOD planning.
- B. Buffalo Bayou East Concept Final Report will provide recommendations to improve connectivity for active transportation in Second and Fifth Wards in the City of Houston. It will also provide a TOD plan for the Fifth Ward Transit Center.

Subtask 5.7.e – Partner Agency Planning Activities

In addition to the work outlined in this Unified Planning Work Program (UPWP), other transportation and air quality planning activities will be conducted by various transportation planning and implementation agencies. The federal metropolitan planning guidelines for preparation of the UPWP call upon Metropolitan Planning Organizations to include in the UPWP a detailed description of transportation and transportation-related planning activities anticipated within the metropolitan area during the period covered by the UPWP, regardless of funding sources. Local governments and transportation agencies throughout the metropolitan area were asked to submit a summary of these anticipated activities.

Staff Contact: Craig Raborn

Objective:

- A. Develop and include in the UPWP a list all partner-sponsored or conducted regionally-important transportation planning activities, including all federally-funded planning activities.

The following information summarizes the efforts that were submitted to the Houston-Galveston MPO for inclusion in this document.

Houston-Galveston Area Council Unified Planning Work Program

Agency	Budget	Funding Source	Project Description
City of Houston	\$690,200	FHWA Grant (w/local)	“Gulfton and Beyond” planning grant awarded in FY2023: Conduct a planning study to examine connections between Hillcroft Avenue in Gulfton and destinations including Hillcroft Transit Center, Wisdom High School, and Bray’s Bayou, that are currently separated by infrastructure, including Southwest Freeway, Westpark Tollway, and other busy roads. The grant is for \$552,160 of <i>FHWA Reconnecting Communities Discretionary Grant</i> funds, with a local match of \$138,040 provided by the City of Houston. The total project amount will be \$690,200.
Greater Southeast Management District (Houston UZA)	\$314,445	FTA 5304 Grant (w/local)	Continue implementing an FTA 5304 “Areas of Persistent Poverty” grant awarded in FY2023 to develop transit plans for three corridors in southeast Houston to improve safety, increase transit connectivity and maximize proposed and existing transit access. Activities will include conducting planning, preliminary engineering, and NEPA activities. The grant is for \$283,000 and has a \$31,445 local match.
METRO (Houston UZA)	\$470,000	FTA 5309 Grant (w/local)	Develop a Transit-Oriented Development plan at the Tidwell Transit Center; utilizing \$376,000 FTA 5309 grant and \$94,000 local. (Continued from FY2023)
City of Conroe Transit (Conroe/Woodlands-UZA)	\$166,000	FTA 5307	Conduct in-house operations system planning, new pilot project for On-Demand transit zone planning, maintenance plans for Conroe Connection Lo/No Emission Motor Coach commuter service fleet, and a new asset management plan to include new Lo/No Emission Motor Coach fleet.
Fort Bend County Transit (Houston-UZA)	\$935,288	FTA 5307	General planning activities related to financial, operational, marketing and reporting activities. Routine transit service studies, Westpark Service Planning, Energy Corridor Service Planning and continuation of long and short range planning
Gulf Coast Transit (Lake Jackson/Angleton-UZA)	\$250,000	FTA 5307	System planning related to the expansion/alteration of services to better accommodate changes in urbanized and rural areas. GCTD is also developing disaster recovery, finance, and system plans for the next 5, 10 and 20 years. In addition to this GCTD will be using project planning and preliminary engineering for land and facilities in the northern part of both Galveston and Brazoria counties. The anticipated plan is to find land in Pearland and Webster to acquire and then begin work on building new hub facilities for the GCTD services in those areas. This will better allow for services and lead to increased ridership and reduction of per ride cost by reducing the non-revenue miles for trips.
Gulf Coast Transit (Texas City-UZA)		FTA 5307	

Houston-Galveston Area Council Unified Planning Work Program

Agency	Budget	Funding Source	Project Description
Harris County Transit (Houston-UZA)	\$774,000	FTA 5307	Planning activities will include bus route reconfiguration of the Northshore (formally DR) Fixed Route service, Planning activities to move the Crosby/ Highlands/ McNair service from Fixed Route to an On-Demand service and development of after-hours service in Baytown in conjunction with Lee College. In addition to service planning Harris County will use planning funds to update our PTASP, update our agency TAM plan, Operations and Management studies for all services and develop a new SSEPP.
Woodlands Township (Conroe/Woodlands-UZA)	\$140,000	FTA 5307	Utilize a consultant for services general transit/ transportation planning, transit/transportation related studies, transit/transportation systems & operations planning, data collection & analysis, evaluation of transit projects, administration, procurement assistance, and program administration.
Total FTA 5307	\$2,265,288		(Note: TDCs used for local matches)
Total Other Federal	\$1,211,160		(Note: Local Match Amounts Total: \$263,485)

Task V Funding Table

Task V: SPECIAL PLANNING PROJECTS - FUNDING SUMMARY

Subtask	Activity	Responsible Agency	Transportation Planning Funds (TPF) ¹	Other Federal Funds ²	FTA Section 5307 Funds	Local ³	TOTAL FUNDS
			<i>FY 2024</i>	<i>FY 2024</i>	<i>FY 2024</i>	<i>FY 2024</i>	
5.1	Safety Planning	H-GAC	\$225,000	\$450,000 \$750,000 - G	\$0	\$187,500	\$1,612,500
5.2	Congestion Management Planning and Operations	H-GAC	\$370,000	\$6,400,000 \$2,150,000 - C	\$0	\$0	\$8,920,000
5.3	Livable Centers	H-GAC	\$185,000	\$850,000	\$0	\$0	\$1,035,000
5.4	Transportation Innovation and Emerging Technologies	H-GAC	\$285,000	\$0	\$0	\$0	\$285,000
5.5	Air Quality Management and Operations	H-GAC	\$65,000	\$0	\$0	\$100,000	\$165,000
5.6	Resiliency Planning	H-GAC	\$135,000	\$0	\$0	\$0	\$135,000
5.7	Corridor, Project-Level, and Special Studies	H-GAC; Partner Agencies	\$300,000	\$750,000 \$1,211,160 - G	\$2,270,000	\$558,750	\$5,089,910
	TOTAL		\$1,565,000	\$12,561,160	\$2,270,000	\$846,250	\$17,242,410
	Pass-Thru Total		\$0	\$8,550,000	\$0	\$0	\$8,550,000
	Partner Activities Total	<i>See Sec. 5.7.e</i>	\$0	\$1,211,160	\$2,270,000	\$558,750	\$4,039,910
	TOTAL (excluding non-planning MPO activities and non-HGAC activities)	H-GAC	\$1,565,000	\$2,800,000	\$0	\$287,500	\$4,652,500

Note 1: TPF includes both FHWA PL-112 and FTA Section 5303 Funds. TxDOT will apply transportation development credits sufficient to provide the match for TPF. As the credits reflect neither cash nor work hours, they are not reflected in the funding tables.

Note 2: "Other Federal Funds" may include Surface Transportation Block Grant (default), Congestion Mitigation and Air Quality ("C"), or Discretionary Grant Funds ("G")

Note 3: "Local" funds include any local contributions, but also may include non-transportation Federal funds provided to H-GAC or partner agencies.

Houston-Galveston Area Council Unified Planning Work Program

Task Five Activities or Projects with Consultant Spending

TASK / Sub-Task	ACTIVITY OR PROJECT NAME	LISTING TYPE	ACTIVITY TYPE	STATUS (as of UPWP adoption)	FUNDING
5 / 5.1.a	Safety Intersection Audits	Carryover	Consultant	Currently Underway	Other - FHWA
5 / 5.1.b	Safe Streets and Roads for All (SS4A) [Grant; multiple contracts]	New	Consultant, Staff, and Pass-Thru	In Development	USDOT Grant
5 / 5.2.a	Congestion Management Process Review and Update	New	Consultant	Initiate in FY2024	TPF
5 / 5.2.b	Commute Solutions Travel Demand Management Program Evaluation	Consultant	Consultant	Currently Underway	Other - FTA
5 / 5.2.c	Intelligent Transportation System (ITS) Architecture	Carryover	Consultant	In Procurement	TPF
5 / 5.2.e	Telework Consultant	New	Consultant	Initiate in FY2024	Other - FHWA
5 / 5.3.b	Livable Centers Planning Studies (Multiple Contracts)	Ongoing	Consultant	Initiate in FY2024	Other - FHWA
5 / 5.4.a	Autonomous Vehicles Regional Strategy	Carryover	Consultant or Staff	Initiate in FY2024	TPF
5 / 5.6.a	Region-Wide Resilience Plan	Carryover	Consultant or Staff	Initiate in FY2024	TPF
5 / 5.7.a	City of Houston - Washington Corridor	Carryover	Consultant	In Procurement	Other - FHWA
5 / 5.7.a	City of Pearland - FM 518 Corridor	Carryover	Consultant	In Procurement	Other - FHWA
5 / 5.7.a	Galveston County - Cemetery Road Study	Carryover	Consultant	In Procurement	Other - FHWA
5 / 5.7.a	SH-35 Corridor Study	New	Consultant	Initiate in FY2024	TPF
5 / 5.7.a	City of Friendswood - Lakes Boulevard Extension	Carryover	Consultant	Initiate in FY2024	Other - FHWA
5 / 5.7.b	TBD Project-Level Planning (Multiple)	New	Consultant	Initiate in FY2024	Other - FHWA
5 / 5.7.c	Complete Streets Planning (Multiple)	New	Consultant	Initiate in FY2024	TPF
5 / 5.7.e	Project Delivery Process Assessment and Strategy	New	Consultant or Staff	Initiate in FY2024	TPF

Task Five Activities or Projects with Pass-Thru Spending

TASK / Sub-Task	ACTIVITY OR PROJECT NAME	LISTING TYPE	ACTIVITY TYPE	STATUS (as of UPWP adoption)	FUNDING
5 / 5.1.b	Safe Streets and Roads for All (SS4A) [Grant; multiple contracts]	New	Consultant, Staff, and Pass-Thru	In Development	USDOT Grant
5 / 5.1.d	TEENS IN THE DRIVER SEAT	Ongoing	Pass-Thru	Ongoing; contracts may be updated	Other - FHWA
5 / 5.1.d	YOUTH TRAFFIC SAFETY ED AND OUTREACH	Ongoing	Pass-Thru	Ongoing; contracts may be updated	Other - FHWA
5 / 5.1.d	REGIONAL SAFETY CAMPAIGN	Ongoing	Pass-Thru	Ongoing; contracts may be updated	Other - FHWA
5 / 5.2.e	TRAVEL DEMAND MGMT, OUTREACH & PUBLIC ED	Ongoing	Pass-Thru	Ongoing; contracts may be updated	Other - FHWA
5 / 5.2.d	REGIONALLY FRWY MGMT PROG OUTREACH	Ongoing	Pass-Thru	Ongoing; contracts may be updated	Other - FHWA
5 / 5.2.d	REGIONALLY FRWY MGMT PROG IMPLEMENTATION	Ongoing	Pass-Thru	Ongoing; contracts may be updated	Other - FHWA
5 / 5.2.e	Emergency Ride Home Operators	New	Pass-Thru	Initiate in FY2024	Other - FHWA
5 / 5.4.a	Automatic Vehicles Transit Pilot; Texas Southern University	Carryover	Pass-Thru	Initiate in FY2024	TPF

2024 UPWP BUDGET SUMMARY

This section summarizes the budget for the 2024 Unified Planning Work Program. The following Budget Summary Tables list the total amounts and funding sources for each of the Tasks in the UPWP.

There are multiple versions of the Budget Summary. All versions are financially and internally consistent, but provide different levels of detail.

- **Table 6-1: 1-Year Funding Summary (TxDOT required format)**, showing only funds allocated for metropolitan planning. These include Transportation Planning Funds (described below), FTA Section 5307 Funds (provided to transit agencies for planning activities), and any required matching local funds.
- **Table 6-2: Overall Budget Summary (H-GAC-developed format)**, showing the all-inclusive total budget for the MPO and planning activities at partner agencies. This table includes pass-thru funds for activities such as operating the region’s “Tow and Go”, Commute Solutions, and a variety of outreach and communications programs. These pass-thru activities are not themselves technically part of the MPO’s planning process, but H-GAC includes them in this table because these activities can impact the transportation system and should be documented for their potential impacts on the MPO’s planning process.
- **Table 6-3: Overall Budget Summary, without partner funds (H-GAC-developed format)**, showing all planning and pass-thru funds expected to be utilized by the MPO. This is essentially the overall budget for the MPO.

Table 6-1: 1-Year Funding Summary (TxDOT required format), showing only funds allocated for metropolitan planning. These include Transportation Planning Funds (described below), FTA Section 5307 Funds (provided to transit agencies for planning activities), and any required matching local funds.

Table 6-1: 2024 UPWP FUNDING SUMMARY (TxDOT required format)

UPWP Task	Activity	Transportation Planning Funds (TPF) ¹	FTA Section 5307 Funds	Local Funds	TOTAL FUNDS
		<i>FY 2024</i>	<i>FY 2024</i>	<i>FY 2024</i>	
Task I	ADMINISTRATION AND MANAGEMENT	\$6,585,000	\$0	\$0	\$6,585,000
Task II	DATA DEVELOPMENT AND MAINTENANCE	\$2,995,000	\$0	\$0	\$2,995,000
Task III	SHORT-RANGE PLANNING	\$2,181,000	\$250,000	\$0	\$2,431,000
Task IV	METROPOLITAN TRANSPORTATION PLAN	\$1,115,000	\$0	\$0	\$1,115,000
Task V	SPECIAL PLANNING PROJECTS	\$1,565,000	\$2,270,000	\$846,250	\$4,681,250
	TOTAL	\$14,441,000	\$2,520,000	\$846,250	\$17,807,250

Note 1: TPF includes both FHWA PL-112 and FTA Section 5303 Funds. TxDOT will apply transportation development credits sufficient to provide the match for TPF. As the credits reflect neither cash nor work hours, they are not reflected in the funding tables.

Combined Transportation Planning Funds ²	<u>\$11,773,713</u>
Estimated Unexpended Carryover	<u>\$11,767,103</u>
TOTAL TPF:	<u>\$23,540,816</u>

² Estimate based on prior years' authorizations

Table 6-2: Overall Budget Summary (H-GAC-developed format), showing the all-inclusive total budget for the MPO and planning activities at partner agencies. This table includes pass-thru funds for activities such as operating the region’s “Tow and Go”, Commute Solutions, and a variety of outreach and communications programs. These pass-thru activities are not themselves technically part of the MPO’s planning process, but H-GAC includes them in this table because these activities can impact the transportation system and should be documented for their potential impacts on the MPO’s planning process.

Table 6-2: 2024 UPWP FUNDING SUMMARY (All Funds, including Pass-Thru)

UPWP Task	Activity	Responsible Agency	Transportation Planning Funds (TPF) ¹	Other Federal Funds ²	FTA Section 5307 Funds	Local ³	TOTAL FUNDS
			<i>FY 2024</i>	<i>FY 2024</i>	<i>FY 2024</i>	<i>FY 2024</i>	
Task I	ADMINISTRATION AND MANAGEMENT	H-GAC	\$6,585,000	\$0	\$0	\$0	\$6,585,000
Task II	DATA DEVELOPMENT AND MAINTENANCE	H-GAC	\$2,995,000	\$2,970,000	\$0	\$0	\$5,965,000
Task III	SHORT-RANGE PLANNING	H-GAC	\$2,181,000	\$300,000	\$250,000	\$0	\$2,731,000
Task IV	METROPOLITAN TRANSPORTATION PLAN	H-GAC	\$1,115,000	\$3,875,000	\$0	\$0	\$4,990,000
Task V	SPECIAL PLANNING PROJECTS	H-GAC; Partner Agencies	\$1,565,000	\$12,561,160	\$2,270,000	\$846,250	\$17,242,410
	TOTAL		\$14,441,000	\$19,706,160	\$2,520,000	\$846,250	\$37,513,410
	<i>Pass-Thru Total</i>		\$0	\$8,550,000	\$0	\$0	\$8,550,000
	<i>Partner Activities Total</i>		\$0	\$1,211,160	\$2,270,000	\$558,750	\$4,039,910
	TOTAL (excluding non-planning MPO activities and non-HGAC activities)	H-GAC	\$14,441,000	\$9,945,000	\$250,000	\$287,500	\$24,923,500

Note 1: TPF includes both FHWA PL-112 and FTA Section 5303 Funds. TxDOT will apply transportation development credits sufficient to provide the match for TPF. As the credits reflect neither cash nor work hours, they are not reflected in the funding tables.

Note 2: "Other Federal Funds" may include Surface Transportation Block Grant (default), Congestion Mitigation and Air Quality ("C"), or Discretionary Grant Funds ("G")

Note 3: "Local" funds include any local contributions, but also may include non-transportation Federal funds provided to H-GAC or partner agencies.

Table 6-3: Overall Budget Summary, without partner funds (H-GAC-developed format), showing all planning and pass-thru funds expected to be utilized by the MPO. This is essentially the overall budget for the MPO.

Table 6-3: 2024 UPWP FUNDING SUMMARY (Without Partner Activities)

UPWP Task	Activity	Responsible Agency	Transportation Planning Funds (TPF) ¹	Other Federal Funds ²	FTA Section 5307 Funds	Local ³	TOTAL FUNDS
			<i>FY 2024</i>	<i>FY 2024</i>	<i>FY 2024</i>	<i>FY 2024</i>	
Task I	ADMINISTRATION AND MANAGEMENT	H-GAC	\$6,585,000	\$0	\$0	\$0	\$6,585,000
Task II	DATA DEVELOPMENT AND MAINTENANCE	H-GAC	\$2,995,000	\$2,970,000	\$0	\$0	\$5,965,000
Task III	SHORT-RANGE PLANNING	H-GAC	\$2,181,000	\$300,000	\$250,000	\$0	\$2,731,000
Task IV	METROPOLITAN TRANSPORTATION PLAN	H-GAC	\$1,115,000	\$3,875,000	\$0	\$0	\$4,990,000
Task V	SPECIAL PLANNING PROJECTS	H-GAC; Partner Agencies	\$1,565,000	\$11,350,000	\$0	\$287,500	\$13,202,500
	TOTAL MPO Budget		\$14,441,000	\$18,495,000	\$250,000	\$287,500	\$33,473,500

Note 1: TPF includes both FHWA PL-112 and FTA Section 5303 Funds. TxDOT will apply transportation development credits sufficient to provide the match for TPF. As the credits reflect neither cash nor work hours, they are not reflected in the funding tables.

Note 2: "Other Federal Funds" may include Surface Transportation Block Grant (default), Congestion Mitigation and Air Quality ("C"), or Discretionary Grant Funds ("G")

Note 3: "Local" funds include any local contributions, but also may include non-transportation Federal funds provided to H-GAC or partner agencies.

FY2024 Transportation Planning Funds (TPF) Programming Summary

The primary funding source for the MPO’s planning activities is called “Transportation Planning Funds” (TPF), which are provided by FHWA to states to distribution to MPOs. The following table shows the levels of TPF funds for FY2024, including estimated carryover from 2023 (\$11.8 million), estimated allocation to H-GAC based on a distribution formula agreed to by MPOs in Texas (\$11.8 million), estimated expenditures from conducting the planning activities described in this UPWP (\$14.4 million), and the estimated carryover that will be available for the FY2025-2026 UPWP (\$9.1 million).

Table 6-4: TPF Programming Summary

	FY 2024	
	Allocation	Programmed
FHWA (PL-112)		
<i>TPF Programmed in UPWP</i>		<i>\$14,441,000.00</i>
Carryover from FY2023 (Estimate)	\$11,767,103.23	\$11,767,103.23
New Allocation (Estimate)	\$11,773,712.85	\$2,673,896.77
Total TPF	\$23,540,816.08	\$14,441,000.00
Carryover to FY2025		\$9,099,816.08

Table 6-5: Activities or Projects with Consultant Spending (All Tasks)

TASK / Sub-Task	ACTIVITY OR PROJECT NAME	LISTING TYPE	ACTIVITY TYPE	STATUS (as of UPWP adoption)	FUNDING
1 / 1.1.a	Planning Support Services	New	Consultant	In Development	TPF
1 / 1.1.c	Legislative and Regulation Tracking Services	New	Consultant/Service	Initiate in FY2024	TPF
1 / 1.2.b	Translation Services (Multiple)	Ongoing	Consultant/Service	Ongoing; contracts may be updated	TPF
2 / 2.2.a	Regional Travel Surveys	Carryover	Consultant	Currently Underway	Other - FHWA
2 / 2.1.a	Travel Demand Model updates, validation, and calibration	Carryover	Consultant/Service	Ongoing; contracts may be updated	Other - FHWA
2 / 2.1.a	Activity-Based Model enhancement support	New	Consultant	Initiate in FY2024	Other - FHWA
2 / 2.1.a	On-Call modeling support (Multiple)	Carryover	Consultant	Ongoing; contracts may be updated	TPF
3 / 3.1.b	Call for Projects (Active Transportation-specific support)	Carryover	Consultant	Initiate in FY2024	TPF
3 / 3.1.b	Call for Projects Review Consultant	Carryover	Consultant	Initiate in FY2024	TPF
3 / 3.1.c	Project Selection Process and Programming Database	Carryover	Consultant/Service	In Development	TPF
3 / 3.2.a	Transit Information Study (Coordinated Plan)	Carryover	Consultant or Staff	In Development	Other - FTA
3 / 3.2.b	Regional Fare Plan (METRO)	Carryover	Partner Activity	Currently Underway	TPF
3 / 3.3.a	Air Quality (Health Impacts of Air Quality)	Carryover	Consultant or Staff	Initiate in FY2024	TPF
3 / 3.3.c	GHG inventory and Related Planning (Multiple)	Carryover/ New	Consultant or Staff	In Development	TPF
4 / 4.1.c	RTP Regional Transportation Vision Survey	Carryover	Consultant	In Development	TPF
4 / 4.2.a	Chambers County - Thoroughfare Plan	Carryover	Consultant	Currently Underway	Other - FHWA
4 / 4.2.b	REGIONAL GOODS MOVEMENT PLAN UPDATE	Carryover	Consultant	Currently Underway	Other - FHWA
4 / 4.2.c	North Houston Community Transportation Priorities Plan	Carryover	Consultant	In Development	Other - FHWA
4 / 4.2.c	TIRZ 13 - First Ward/Old Sixth Ward Mobility Plan	Carryover	Consultant	In Procurement	Other - FHWA
4 / 4.2.c	City of Pearland – Mobility Study	Carryover	Consultant	In Procurement	Other - FHWA
4 / 4.4.a	High Capacity Transit Feasibility Study (Outer West Park)	Carryover	Consultant	In Development	Other - FHWA
4 / 4.4.a	High Capacity Transit Feasibility Study (Regional Bus)	Carryover	Consultant	In Development	Other - FHWA
4 / 4.4.a	Gulf Coast Rail District - US90 Commuter Rail Study	Carryover	Consultant	In Procurement	Other - FTA
4 / 4.2.b	Pearland Transit Study	Carryover	Staff	Underway	TPF
4 / 4.4.b	City of Dayton - Transit System	Carryover	Consultant	In Procurement	Other - FHWA
4 / 4.5.a	Regional Active Transportation Plan	Carryover	Consultant	Initiate in FY2024	Other - FHWA
4 / 4.5.a	Regional Bike Highway Feasibility Study	Carryover	Consultant or Staff	Initiate in FY2024	Other - FHWA

Table 6-5: Activities or Projects with Consultant Spending (All Tasks)

TASK / Sub-Task	ACTIVITY OR PROJECT NAME	LISTING TYPE	ACTIVITY TYPE	STATUS (as of UPWP adoption)	FUNDING
4 / 4.5.a	Regional Safe Routes to Schools Study	Carryover	Consultant or Staff	Initiate in FY2024	Other - FHWA
4 / 4.5.b	Active Transportation Counter Installation and Maintenance	Carryover	Consultant/Service	Ongoing; contracts may be updated	TPF
4 / 4.5.c	Buffalo Bayou Partnership - Bike Ped	Carryover	Consultant	In Procurement	Other - FHWA
4 / 4.5.c	City of Friendswood Trail Plan - Bike Ped	Carryover	Consultant	In Procurement	Other - FHWA
4 / 4.5.c	Harris County Precinct 2 - BAY AREA Bike Ped	Carryover	Consultant	In Procurement	Other - FHWA
4 / 4.5.c	Memorial Drive Bike/Ped Study	Carryover	Consultant	In Development	Other - FHWA
5 / 5.1.a	Safety Intersection Audits	Carryover	Consultant	Currently Underway	Other - FHWA
5 / 5.1.b	Safe Streets and Roads for All (SS4A) [Grant; multiple contracts]	New	Consultant, Staff, and Pass-Thru	In Development	USDOT Grant
5 / 5.2.a	Congestion Management Process Review and Update	New	Consultant	Initiate in FY2024	TPF
5 / 5.2.b	Commute Solutions Travel Demand Management Program Evaluation	Consultant	Consultant	Currently Underway	Other - FTA
5 / 5.2.c	Intelligent Transportation System (ITS) Architecture	Carryover	Consultant	In Procurement	TPF
5 / 5.2.e	Telework Consultant	New	Consultant	Initiate in FY2024	Other - FHWA
5 / 5.3.b	Livable Centers Planning Studies (Multiple Contracts)	Ongoing	Consultant	Initiate in FY2024	Other - FHWA
5 / 5.4.a	Autonomous Vehicles Regional Strategy	Carryover	Consultant or Staff	Initiate in FY2024	TPF
5 / 5.6.a	Region-Wide Resilience Plan	Carryover	Consultant or Staff	Initiate in FY2024	TPF
5 / 5.7.a	City of Houston - Washington Corridor	Carryover	Consultant	In Procurement	Other - FHWA
5 / 5.7.a	City of Pearland - FM 518 Corridor	Carryover	Consultant	In Procurement	Other - FHWA
5 / 5.7.a	Galveston County - Cemetery Road Study	Carryover	Consultant	In Procurement	Other - FHWA
5 / 5.7.a	SH-35 Corridor Study	New	Consultant	Initiate in FY2024	TPF
5 / 5.7.a	City of Friendswood - Lakes Boulevard Extension	Carryover	Consultant	Initiate in FY2024	Other - FHWA
5 / 5.7.b	TBD Project-Level Planning (Multiple)	New	Consultant	Initiate in FY2024	Other - FHWA
5 / 5.7.c	Complete Streets Planning (Multiple)	New	Consultant	Initiate in FY2024	TPF
5 / 5.7.e	Project Delivery Process Assessment and Strategy	New	Consultant or Staff	Initiate in FY2024	TPF

Table 6-6: Activities or Projects with Pass-Thru Spending (All Tasks)

TASK / Sub-Task	ACTIVITY OR PROJECT NAME	LISTING TYPE	ACTIVITY TYPE	STATUS (as of UPWP adoption)	FUNDING
3 / 3.2.b	Regional Fare Plan (METRO)	Carryover	Partner Activity	Currently Underway	TPF
3 / 3.4.a	Hurricane Zip Zone Campaign	Ongoing	Pass-Thru	Annual Activity	TPF
4 / 4.5.d	BICYCLE SAFETY EDUCATION	Ongoing	Pass-Thru	Ongoing; contracts may be updated	Other - FHWA
5 / 5.1.b	Safe Streets and Roads for All (SS4A) [Grant; multiple contracts]	New	Consultant, Staff, and Pass-Thru	In Development	USDOT Grant
5 / 5.1.d	TEENS IN THE DRIVER SEAT	Ongoing	Pass-Thru	Ongoing; contracts may be updated	Other - FHWA
5 / 5.1.d	YOUTH TRAFFIC SAFETY ED AND OUTREACH	Ongoing	Pass-Thru	Ongoing; contracts may be updated	Other - FHWA
5 / 5.1.d	REGIONAL SAFETY CAMPAIGN	Ongoing	Pass-Thru	Ongoing; contracts may be updated	Other - FHWA
5 / 5.2.e	TRAVEL DEMAND MGMT, OUTREACH & PUBLIC ED	Ongoing	Pass-Thru	Ongoing; contracts may be updated	Other - FHWA
5 / 5.2.d	REGIONAL FRWY MGMT PROG OUTREACH	Ongoing	Pass-Thru	Ongoing; contracts may be updated	Other - FHWA
5 / 5.2.d	REGIONAL FRWY MGMT PROG IMPLEMENTATION	Ongoing	Pass-Thru	Ongoing; contracts may be updated	Other - FHWA
5 / 5.2.e	Emergency Ride Home Operators	New	Pass-Thru	Initiate in FY2024	Other - FHWA
5 / 5.4.a	Automatic Vehicles Transit Pilot; Texas Southern University	Carryover	Pass-Thru	Initiate in FY2024	TPF

Anticipated Software and Equipment Acquisitions

The following table provides an inventory of computer hardware, software/licenses, and maintenance items, as well as other equipment anticipated to be purchased or leased during the period of the FY2024 Unified Planning Work Program to support work activities outlined in Tasks 1 through 5 of the Work Program. Also included are the video/web hosting services required to live stream and record/post meetings of the Regional Transportation Council per State legislation, as well as public meetings and other meetings, as appropriate. The source of funding utilized to obtain these items or services is provided in the table, along with the specific Work Program Subtask in which the funding is programmed to accommodate the work activities. Costs are estimates based on previous purchases or existing licenses; MPO staff are authorized by the Transportation Policy Council to exceed the estimated amount by up to 25 percent to complete these purchases without seeking TPC approval. The MPO Director may approve software and equipment purchases not listed in Table 6-7 for amounts less than \$5000 if the Director determines that the software or equipment is necessary to complete any subtasks or objectives included in the UPWP; these purchases will be added to the UPWP at the next amendment. Specific products or vendors are provided as examples; all purchases will comply with H-GAC's procurement policies. (Software purchases with a unit cost larger than \$5000 are required to seek pre-approval from TxDOT and FHWA.)

Table 6-7: Anticipated Software and Equipment Purchases/Leases

Subtask	Description	Quantity	Estimated Cost	Funding Source
1.1.a	Regular Computer Replacement Cycle	20	\$50,000	TPF
1.1.a	Other computer hardware items, replacements, accessories, and upgrades (e.g., docking stations, monitors, headsets, hard drives, networking, warranty extensions, etc.)	--	\$10,000	TPF
1.1.c	Legislation monitoring software (e.g., Telicon)	--	\$10,000	TPF
1.1	Statistical Analysis Software for management analysis (e.g. Stata)	1	\$3,000	TPF
1.1	Customer Relationship Manager Software licenses (new)	3	\$7,000	TPF
1.2	Video/web hosting services (e.g., Swagit, etc.)	--	\$26,000	TPF
1.2.a	Public engagement online platform (e.g., Bang the Table, etc.)	--	\$50,000	TPF
2.1.a	Economic model and tool for economic impact analyses (e.g., REMI, IMPLAN etc.)	1	\$36,800	TPF
2.1.a	Software platforms and tools for the travel demand model application, validation and calibration, enabling efficient and accurate transportation demand analysis and forecasting (Multiple platforms will be utilized: e.g., Bently Cube voyage, Cube Agent, TransCAD,EMME and PTV etc.)	--	\$60,000	TPF
2.1.a	Modeling platform for dynamic traffic assignment (e.g., DynusT/DynusStudio,AIMSUN, DYNASMART and POLARIS etc.)	2	\$3,000	TPF
2.1.a	Traffic signals and intersections analysis software(e.g., Synchro,VISTRO, SIDRA etc.)	2	\$1,500	TPF
2.2.a	Traffic count hosting platform (e.g., MS2, etc.)	1	\$10,210	TPF
2.2.a	Congestion Mitigation Analysis software (e.g., HCS2023,LOSPLAN etc.)	1	\$2,000	TPF
2.3.a	Software programming language for data access, analysis, modeling, transformation and reporting (e.g. SAS, AWS, Oracle etc)	6	\$9,000	TPF
2.3.c	Software/Tool for data visualization and reporting (e.g., Tableau, Snowflake, Power BI etc.)	7	\$5,880	TPF
3.3	Membership - ICLEI - Local Governments for Sustainability	--	\$9,000	TPF
4.4a; 4.4b	Microtransit Planning Software (ex. Remix- new)	1	\$150,000	TPF
4.5b	EcoVisio Subscription for Counters (Renewal)	10	\$5,000	TPF
5.2b	Bike Challenge Platform (new; providing access to platform for staff management and operation)	1	\$50,000	CMAQ
5.2b	TDM Program Management Software/Rideshare Software- Companion to ConnectSmart (new)	1	\$150,000	CMAQ
5.2b	Customer Relationship Manager Software license with add on (Renewal)	5	\$10,000	CMAQ

APPENDIX A

COMMITTEE MEMBERSHIP

Transportation Policy Council (TPC)

The Transportation Policy Council (TPC) was formed in 1992 to provide policy guidance and overall coordination of the transportation planning activities within the region. The TPC consists of 28 members representing cities and counties, the Texas Department of Transportation (TxDOT), the Metropolitan Transit Authority of Harris County (METRO) one at-large member appointed by the H-GAC Board of Directors representing cities with a population greater than 50,000, and one voting member position for representation from the Gulf Coast Rail District.

All members of the TPC are local elected officials, officials of public agencies that administer or operate major modes of transportation in the Houston-Galveston Transportation Management Area, or appropriate officials of the Texas Department of Transportation. TPC also examines the adequacy and appropriateness of the continuing transportation planning process and reviews various agreements entered into for the execution of transportation planning, including the Unified Planning Work Program (UPWP) and the Transportation Improvement Program (TIP).

Regional Air Quality Planning Advisory Committee (RAQPAC)

The Regional Air Quality Planning Advisory Committee (RAQPAC) is appointed by the H-GAC Board of Directors to assist and advise H-GAC, regional and local governments, transportation organizations and other agencies on air quality issues. The Committee reviews air quality plans for the H-GAC region and recommends actions necessary to improve the region's air quality. RAQPAC includes representatives of local government, public health, transportation, industry, business, environmental organizations and citizens drawn from the eight-county nonattainment area.

Transportation Safety Committee

On October 26, 2018, the Transportation Policy Council changed the name of the Regional Safety Council to the Transportation Safety Committee. The committee was established by the Transportation Policy Council to improve road safety in the region. Membership includes officials from local and State governments, transportation, law enforcement, health care, insurance, trucking, railroads and non-profit organizations involved in safety. The purpose is to promote information-sharing, establish safety goals and performance measures, coordinate safety efforts across the region's jurisdictions, and identify policy issues concerning safety.

Greater Houston Freight Committee (GHFC)

In 2016, the TPC created the Greater Houston Freight Committee with the goal of better

incorporating private sector freight user perspectives into the transportation planning process. The Committee, with co-chairs appointed by the TPC, seeks to accomplish this through regular open meeting highlighting relevant industry trends and needs. The Committee has identified a locally significant freight roadway network, recommended investment in critical facilities associated with a boom in petrochemical manufacturing and coordinated with Texas Freight Advisory Committee in the updating of the State Freight Mobility Plan.

TRANSPORTATION POLICY COUNCIL MEMBERSHIP

TPC Officers

Representing	Officer	Alternate
City of Houston	Chairman David Robinson Council Member	Abbie Kamin Council Member
Waller County	First Vice Chair Justin Beckendorff County Commissioner	Walter Smith County Commissioner
Ft. Bend County	Second Vice Chair Grady Prestage County Commissioner	Stacy Slawinski, P.E. County Engineer
Smaller Counties	Secretary Nancy Arnold Council Member	Sally Branson Council Member

TPC Members

Representing	Member	Alternate
City of Baytown	Brandon Capetillo Mayor	Jason Reynolds City Manager
City of Conroe	Howard Wood Council Member	Norman McGuire Assistant City Administrator Director of Public Works
City of Galveston	Marie Robb Council Member	John Paul Listowski Council Member, District 2
City of Houston	Carolyn Evans-Shabazz Council Member	Sallie Alcorn Council Member
City of Houston	Carol Haddock, P.E. Director Houston Public Works	Veronica O. Davis, P.E. Deputy Director Houston Public Works
City of League City	John Bowen Council Member	Andy Mann Council Member
City of Missouri City	Shashi Kumar Director, Public Works	Marcus Snell Assistant City Engineer

Houston-Galveston Area Council Unified Planning Work Program

Representing	Member	Alternate
City of Pasadena	Sarah Benavides, P.E. Engineer and Sr. Assistant Public Works Director	Mark Gardemal Assistant City Engineer
City of Pearland	Kevin Cole Mayor	Trent Epperson City Manager
City of Sugar Land	Joe Zimmerman Mayor	Suzanne Whatley Council Member
City of Texas City	Dedrick Johnson Mayor	Jon Branson Executive Director of Management Services
Brazoria County	Matt Hanks, JD, P.E. County Engineer	David Linder County Commissioner
Chambers County	Ryan Dagley County Commissioner,	Tommy Hammond County Commissioner
Galveston County	Robin Armstrong, MD County Commissioner	Joe Guisti County Commissioner
Harris County	Adrian Garcia County Commissioner	Milton Rahman County Engineer
Harris County	Lina Hidalgo County Judge	Robert Treviño County Engineer
Liberty County	Melinda Soliday Department Administrator	Jay Knight County Judge
Montgomery County	Mark Keough County Judge	Matt Gray County Commissioner, Pct. 4
Gulf Coast Rail District	Carol Lewis Chairman, GCRD	Jeff Ross Board Member, GCRD
METRO	Sanjay Ramabhadran Chair, Board of Directors	Thomas Lambert President/CEO
H-GAC At-Large	Chuck Wemple Executive Director	Onyinye Akujuo Chief Operating Officer
Other Transportation Interests	Roger Guenther Executive Director, Port Houston	Phyllis Saathoff Executive Director, Port Freeport
TxDOT Beaumont District	Martin Gonzalez, P.E. District Engineer	Ana I. Mijares, P.E. Deputy District Engineer
TxDOT Houston District	Eliza Paul, P.E. District Engineer	Varuna A. Singh, P.E. Deputy District Engineer

Non-Voting TPC Ex-Officio Members

Representing	Ex-Officio Member
Texas State Senate	Carol Alvarado, District 6
Freight Rail Interests	Chad Schelbitzki Union Pacific Railroad, Asst Vice President Public Affairs-Southern Region

Texas House of Representatives	Dennis Paul, District 129
Wharton County	Phillip Spenrath, County Judge
Texas House of Representatives	Ed Thompson, District 29

Transportation Advisory Committee (TAC)

The Transportation Advisory Committee (TAC) reviews and evaluates H-GAC's regional transportation plans and provides its recommendations to the TPC. The TAC is an appointed body, which is comprised of representatives of member governments and special citizen interest groups with expertise in transportation planning. TAC members are appointed by the TPC to assist with the coordination of the Transportation Improvement Program, Metropolitan Transportation Plan and other transportation planning activities.

The Transportation Advisory Committee is comprised of elected officials, agency staff, or when appropriate, citizens who have expertise or interest in developing transportation and land use plans, implementing transportation projects, or in related fields. TAC membership reflects the diversity of transportation modes and interests affected by transportation policy decisions to assure transportation planning decisions are considered in their broadest context. The TAC advises the TPC in its development of the UPWP, and the Regional Transportation Plan (RTP) and assists with the development of the Transportation Improvement Program (TIP). To more efficiently perform its advisory duties, the TAC has created the following subcommittees:

Transportation Systems Management Operations (TSMO)

TSMO is responsible for the development of a comprehensive conceptual plan for regional traffic operations projects.

Pedestrian & Bicycle Subcommittee

The Pedestrian and Bicycle Subcommittee is responsible for providing guidance and recommendations to MPO staff in updating and implementation of the Regional Bikeway Plan.

Regional Transit Coordination (RTC) Subcommittee

The RTC Subcommittee is responsible for providing guidance regarding the implementation of regional transit coordination pilot projects. The subcommittee also assists with development of initiatives that expand and improve the efficiency and effectiveness of the current regional transit system.

Regional Transportation Plan (RTP) Subcommittee

The RTP Subcommittee is responsible for assisting MPO staff in the development of the Regional Transportation Plan. The subcommittee examines and makes recommendations regarding proposed RTP projects and activities and ensures that these proposals are consistent with the TIP and other regional plans.

Transportation Improvement Plan (TIP) Subcommittee

The TIP Subcommittee is responsible for providing guidance to MPO staff in the development of the TIP. The subcommittee recommends guidelines for the ranking of proposed TIP projects, as well as provides guidance for major TIP amendments and funding decisions.

Transportation Air Quality (TAQ) Subcommittee

The TAQ Subcommittee is responsible for assisting MPO staff in expanding existing air quality programs and projects and developing new programs for TIP consideration as well as the analysis and development of on-road transportation emission reduction measures.

TECHNICAL ADVISORY COMMITTEE MEMBERSHIP

TAC Officers - 2023

Representing	Primary Member	Alternate
Business Interests (1)	Chair Veronica Chapa-Gorczyński President, East End District	David Kim Executive Director Urban Land Institute (ULI) Houston
Smaller Cities (1)	1st Vice Chair Morad Kabiri, P.E., AICP City Manager City of Friendswood	Jildardo Arias, P.E., CFM Director of Engineer City of Friendswood
Transit (1)	2nd Vice Chair Perri D'Armond Director Public Transportation Fort Bend County	Pamela LeBrane Finance & Administration Manager Fort Bend County

TAC Members – 2023

Representing	Primary Member	Alternate
Smaller Cities (2)	(Vacant)	Brian Winningham City Manager City of Mont Belvieu
Smaller Cities (3)	Jeremiah Hill Alderman, Position #5 City of Brookshire	Janet Corte Council woman City of Katy
Transit (2)	Ruthanne Haut Deputy Director, Community Services The Woodlands Township	Todd Stephens Intergovernmental Relations Director The Woodlands Township
Transit (3)	Ken Fickes, CCTM Director, Office of Transit Services Harris County Community Services	Vernon Chambers Director, RIDES Harris County Transit
Environmental (1)	Carl Woodward, P.E., CFM Harris County Flood District	Sue Theiss Director of Advanced Project Development & Environmental

Houston-Galveston Area Council Unified Planning Work Program

Representing	Primary Member	Alternate
Environmental (2)	Katherine Parker Executive Director Gulf Coast Rail District	Amy Skicki Director Baytran
Planning (1)	David Fields, AICP Chief Transportation Planner City of Houston	Jennifer Ostlind, AICP Assistant Director, Planning Services City of Houston
Planning (2)	David Wurdlow Assistant Director, PW City of Houston	Faustino Benavidez, P.E. Director of Engineering Harris County
Planning (3)	Catherine McCreight Senior Transportation Planner TxDOT	Brenda Bustillos Transportation Engineer TxDOT
Business Interests (1)	Marlisa Briggs President North Houston Association	Elijah Williams Executive Director Energy Corridor District
Citizen Interests (1)	Dexter Handy Lt. Colonel USAF, Retired Greater Houston Coalition for Complete Streets	Amy Skicki Director Baytran
Citizen Interests (2)	Sherry Weesner, P.E., CPM President Memorial-Heights TIRZ5	Gabe Cazares Executive Director LINK Houston
Port of Houston	Bruce Mann Director of Freight Mobility Port Houston	Rohit Saxena Interim Director, Facility Planning Port Houston
Ports	Michael Wilson Director of Economic Development & Mobility Port Freeport	(Vacant)
Toll Road (1)	Brian Alcott Interim Deputy Director of Engineering & Construction Design HCTRA	(Vacant)

Houston-Galveston Area Council Unified Planning Work Program

Representing	Primary Member	Alternate
Toll Road (2)	Robert Hill Assistant Commissioner HCTRA	(Vacant)
Active Transportation (1)	Stephen Gage Planner TxDOT HOU District	Patricia Kievlan Board President Bike The Woodlands Coalition
Airport	Bill Zrioka Senior Planner Houston Airport System	Marcel Allen Manager Aviation Planner City of Houston
Regional Planning	Joe Compian Mayor Pro-Tem, District B City of La Marque	Wil Kennedy Council Member City of Iowa Colony
METRO	Clint Harbert, AICP Vice President System & Capital Planning	Alan Clark Chief Strategy Officer
TxDOT Beaumont District	Lisa Collins, P.E. Director of TP & D	Scott Ayres, P.E. Transportation Engineer
TxDOT Houston District	James Koch, P.E. Director Transportation Planning & Development	Jeffrey English, AICP Planner IV
Brazoria County	Wael Tabara, P.E. Assistant County Engineer	Karen McKinnon, P.E. Assistant County Engineer
Chambers County	Cory Taylor, P.E. County Engineer	Natalie G. Lopez Engineer in Training
Fort Bend County	Stacy Slawinski, P.E. County Engineer	Rick J. Staigle, P.E. First Assistant County Engineer
Galveston County	Michael Shannon, P.E. County Engineer	Nancy Baher, P.E. Assistant County Engineer
Harris County	Patrick Mandapaka, Ph.D., AICP Director of Community Resilience & Trans. Planning	Susan Fraser, P.E. Assistant County Engineer

Houston-Galveston Area Council Unified Planning Work Program

Representing	Primary Member	Alternate
Liberty County	Melinda Soliday Permits & Engineering Dept.	Hon. Jay Knight County Judge
Montgomery County	Jean Mann Government Relations	John McKinney Floodplain Administrator
Waller County	Ross McCall County Engineer	(Vacant)
City of Baytown	Brant Gary Interim Assistant City Manager	Martin Scribner Director Planning & Development Services
City of Conroe	Jordan Cruz City Planner	Chris Bogert, P.E. City Engineer
City of Galveston	Robert Winiecke, P.E., CFM Director of Public Works	Brandon Cook Assistant City Manager-Development & Municipal Services
City of Houston	Veronica O. Davis, P.E. Deputy Director	Fabio Capillo Assistant Director, PW
City of League City	Christopher Sims Director of Engineering	Cara Davis Assistant Director
City of Missouri City	Marcus Snell, P.E., CFM Assistant City Engineer	Shashi Kumar, P.E. Dir. of Public Works & City Engineer
City of Pasadena	Sarah Benavides Engineer & Sr. Assist. PW Director	Mark Gardemal Engineer Deputy Director PW
City of Pearland	Trent Epperson City Manager	Rajendra Shrestha, P.E., CFM City Engineer
City of Sugar Land	Monique Johnson, AICP Transportation & Mobility Innovation Manager	Melanie Beaman Transportation & Mobility Coord.
City of Texas City	Kim Golden, P.E. City Engineer	Jack Haralson, P.E. Engineer Public Works

KEY MPO STAFF

Key MPO Staff

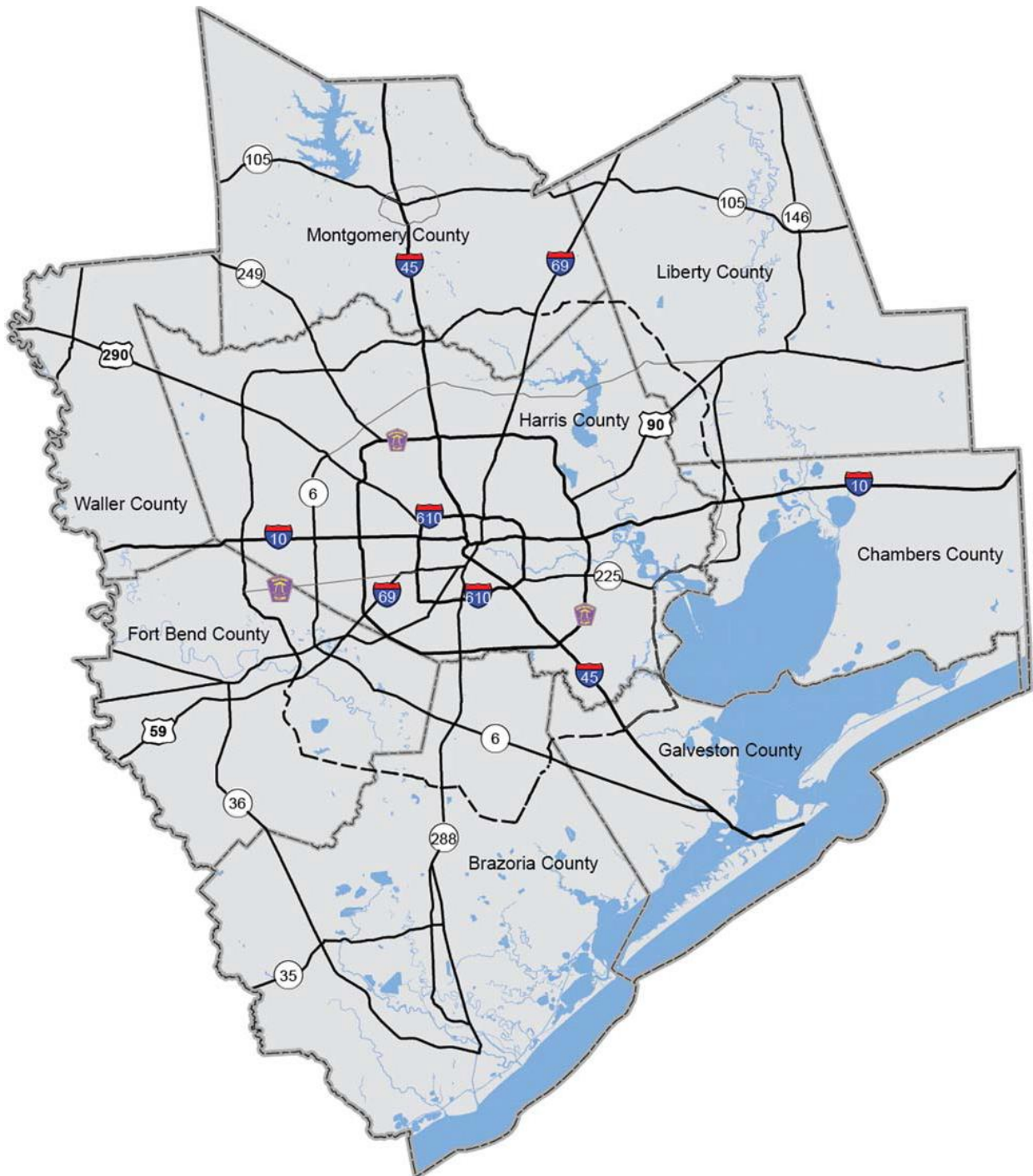
MPO Director	Craig Raborn, AICP
Assistant Director	Allie Isbell, AICP
Assistant Director	VACANT
Manager, Programming and Project Delivery	Adam Beckom
Manager, Regional Transportation Planning	Anita Hollman Matijcio
Manager, Travel Demand Management	Jamila Owens
Manager, Air Quality and Clean Cities	Andrew DeCandis
Manager, Regional Incident Management	David Fink
Manager, [Programs TBD]	VACANT
Manager, Finance and Administration	VACANT

APPENDIX B

METROPOLITAN AREA BOUNDARY MAP

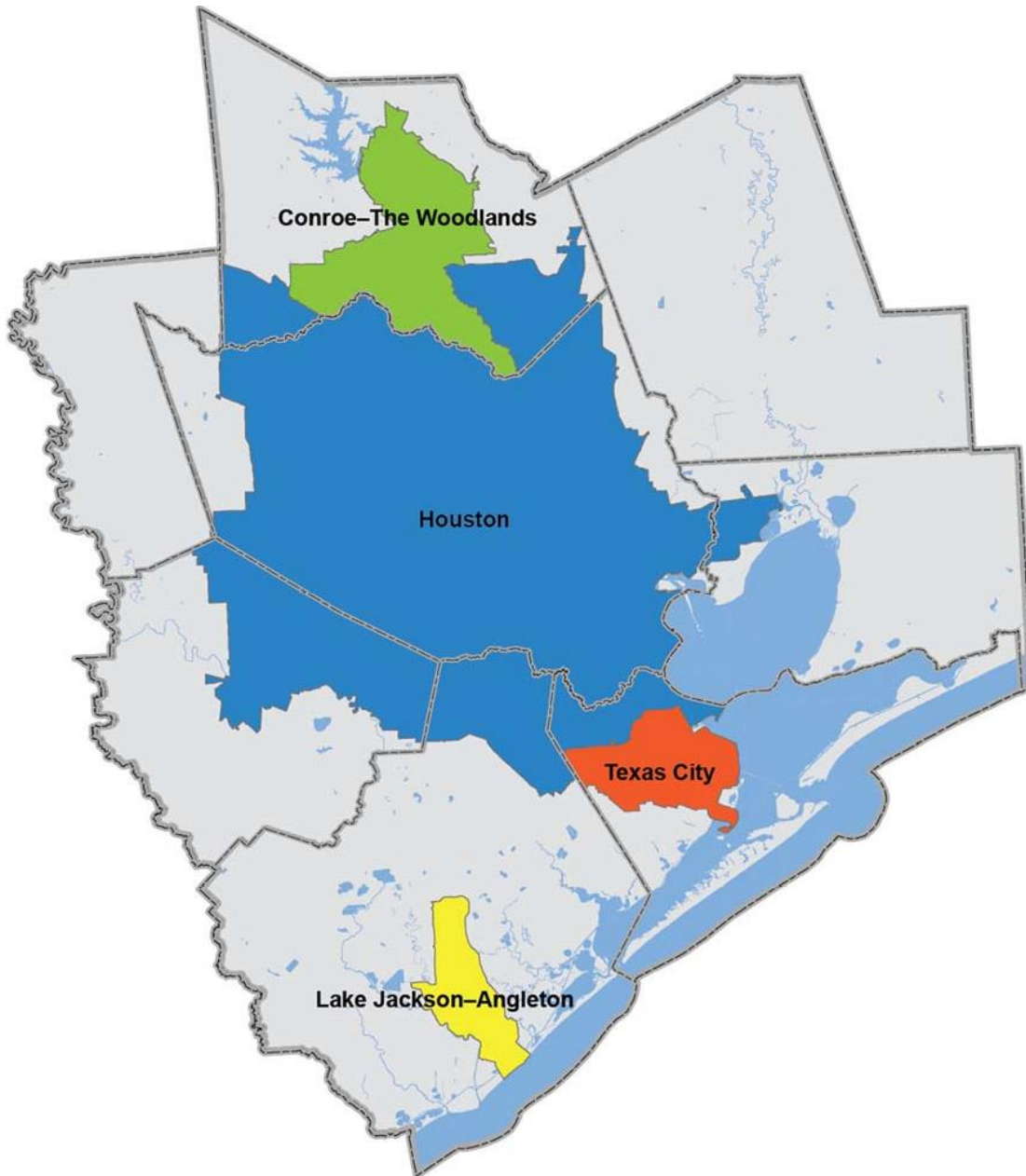
Eight-County Houston-Galveston Transportation Management Area

(Note: The Houston-Galveston Transportation Management area and Metropolitan Planning Organization was most recently redesignated by agreement between the Governor and the Houston-Galveston Area Council on September 9, 1988)



Urbanized Area Boundaries

(Note: As a result of the 2020 Decennial Census, Urbanized Areas and their boundaries are undergoing updates by the MPO, in consultation with TxDOT, that will be completed in late 2023 or early 2024)



APPENDIX C

**DEBARMENT CERTIFICATION
(Negotiated Contracts)**

- (1) The **Houston-Galveston Area Council MPO** as **CONTRACTOR** certifies to the best of its knowledge and belief that it and its principals:
 - (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from covered transactions by any federal department or agency;
 - (b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public* transaction or contract under a public transaction; violation of federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
 - (c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity* with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
 - (d) Have not within a three-year period preceding this application/proposal had one or more public transactions* terminated for cause or default.
- (2) Where the **CONTRACTOR** is unable to certify to any of the statements in this certification, such **CONTRACTOR** shall attach an explanation to this certification.

**federal, state or local*


David W. Robinson (Sep 11, 2023 11:50 CDT)

Council Member David Robinson, City of Houston
Transportation Policy Council – Chair
Houston-Galveston Transportation Management Area MPO

09/11/2023

Date

APPENDIX D

LOBBYING CERTIFICATION

**CERTIFICATION FOR CONTRACTS, GRANTS,
LOANS AND COOPERATIVE AGREEMENTS**

The undersigned certifies to the best of his or her knowledge and belief, that:

(1) No federal appropriated funds have been paid or will be paid by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form - LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.



David W. Robinson (Sep 11, 2023 11:50 CDT)
Council Member David Robinson, City of Houston
Transportation Policy Council – Chair
Houston-Galveston Transportation Management Area MPO

09/11/2023

Date

APPENDIX E

CERTIFICATION OF COMPLIANCE

I, David Robinson, Chairman - Transportation Policy Council, a duly authorized officer/representative of the Transportation Policy Council for the Houston-Galveston Transportation Management Area do hereby certify that the contract and procurement procedures that are in effect and used by the forenamed MPO are in compliance with 2 CFR §200, "Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards," as it may be revised or superseded.


David W. Robinson (Sep 11, 2023 11:50 CDT)

*Council Member David Robinson, City of Houston
Transportation Policy Council – Chair
Houston-Galveston Transportation Management Area MPO*

09/11/2023

Date

Attest:



09/11/2023

Craig Raborn, MPO Director

APPENDIX F

CERTIFICATION OF INTERNAL ETHICS AND COMPLIANCE PROGRAM

I, David Robinson, Chairman - Transportation Policy Council, a duly authorized officer/representative of the Transportation Policy Council for the Houston-Galveston Transportation Management Area do hereby certify that the forenamed MPO has adopted and does enforce an internal ethics and compliance program that is designed to detect and prevent violations of law, including regulations and ethical standards applicable to this entity or its officers or employees and that the internal ethics and compliance program satisfies the requirements of 43 TAC § 31.39 "Required Internal Ethics and Compliance Program" and 43 TAC § 10.51 "Internal Ethics and Compliance Program" as it may be revised or superseded.


David W. Robinson (Sep 11, 2023 11:50 CDT)

*Council Member David Robinson, City of Houston
Transportation Policy Council – Chair
Houston-Galveston Transportation Management Area MPO*

09/11/2023
Date

Attest:


09/11/2023
Craig Raborn, MPO Director