

2012-2013

Unified Planning Work Program

for the Houston-Galveston
Transportation Management Area



Adopted
July 22, 2011

Amended December 16, 2011
Amended April 27, 2012



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DISCLAIMER

This report was prepared in cooperation with the Texas Department of Transportation, the U.S. Department of Transportation, Federal Highway Administration, and Federal Transit Administration. The contents of this report reflect the views of the authors who are solely responsible for the opinions, findings, and conclusions presented herein, and do not necessarily reflect the views or policies of the aforementioned agencies, or any other agencies, organizations, or persons that contributed to the report or that are mentioned or listed in the report.

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INTRODUCTION

2012-2013 UNIFIED PLANNING WORK PROGRAM

A. PURPOSE

The *2012-2013 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 Years 2012 (10/01/11 - 09/30/12) and 2013 (10/01/12 - 09/30/13) 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 2012-2013:

- **Task I – Administration** covers 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** covers 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 will be made.
- **Task III – Short Range Planning** addresses planning for activities taking place within a 3- to 5-year timeframe, including the management of the Transportation Improvement Program (TIP), the provision of transit services outside of the METRO service area, and Intelligent Transportation Systems development.
- **Task IV – Long Range Planning** covers planning activities for the long-term including the development of the *2040 Regional Transportation Plan*, Air Quality planning, Bicycle and Pedestrian facilities, and the promotion of sustainable development.

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- **Task V – Special Studies** cover other planning issues and studies including Traffic Safety, Major Corridor Studies (MCS), Hurricane Evacuation planning, Freight planning, and General Aviation planning.

As part of the planning process, The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), in recognition that transportation investments impact the economy, environment, public safety/security, efficient movement of people/goods, and community quality of life, requires the consideration of eight factors in the metropolitan and statewide planning processes. Below lists how the MPO addresses these factors and how they have been programmed:

1. Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency, including services provided by public and private operators;

- *Transportation Improvement Program (TIP) project selection criteria assigns benefits to projects that: a) support/improve port operations, b) remove bottlenecks & fill gaps on existing system that inhibit the movement of people and goods, and c) provide improved access between activity centers.*
- *The Regional Transportation Plan (RTP) focuses on strategic corridor plans that will improve the movement of people and goods within and through the region.*
- *MPO supports activities of the Gulf Coast Freight Rail District (GCFRD) that is seeking to improve the movement of freight within and through the region by reducing conflicts with personal vehicular travel.*
- *MPO supports transit service activities that foster urban redevelopment and improve access around transit stations*

2. Increase the safety of the transportation system for motorized and non-motorized users;

- *TIP provides funding for improved bicycling & pedestrian facilities.*
- *RTP focuses on identification of crash hot spots and strategies to reduce crashes.*
- *MPO convenes a Regional Safety Council to address transportation safety in the region*

3. Increase the security of the transportation system for motorized and non-motorized users;

- *TIP provides funding for improved lighting in and around transit centers*
- *RTP supports connections at port entrances and exits that facilitate enhanced security*
- *MPO participates in emergency preparedness and evacuation activities initiated by state and local governments*

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- 4. Increase the accessibility and mobility of people and for freight, including services provided by public and private operators;**
 - *TIP project selection criteria assigns benefits to projects that: a) support/improve port operations, b) remove bottlenecks & fill gaps on existing system that inhibit the movement of people and goods, and c) provide improved access between activity centers.*
 - *RTP focuses on strategic corridor plans that will improve the movement of people and goods within and through the region.*

- 5. Protect and enhance the environment, promote energy conservation, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;**
 - *MPO is engaged in a Subregional Planning initiative designed to link local land use goals with transportation investments.*
 - *MPO has developed geographic information system (GIS) layers of regional environmental assets.*

- 6. Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight, including services provided by public and private operators;**
 - *Livable Centers initiative designed to improve access and connectivity to and around transit stations*
 - *TIP and RTP support projects such as the downtown intermodal terminal that will link a variety of modes in one station.*
 - *MPO engaged in discussions with stakeholders regarding opportunities to reduce conflicts between pedestrians, vehicles and passenger and freight rail activities*
 - *MPO supports regional vanpooling, carpooling and telework initiatives*
 - *Forty-seven percent (47%) of funding in the 2011-14 TIP has been allocated to transit projects*

- 7. Promote efficient system management and operation; and,**
 - *The Congestion Management Process (CMP) focuses on identifying non-added capacity alternatives that will improve traffic flow and safety for motorists.*
 - *RTP includes an expanded managed lane system to derive improved efficiency from new capacity projects.*
 - *Access Management studies and implementation efforts undertaken by the MPO and partners are designed to improve system operation and traffic flow.*

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- *TIP provides funding for expansion of traffic management systems throughout the region.*
- 8. Emphasize the preservation of the existing transportation system, including services provided by public and private operators.**
- *TIP programs approximately half of all funding to preservation, rehabilitation and maintenance of the existing system.*
 - *MPO works with the state to identify major reconstruction needs over the life of the plan*

In addition to these planning factors, MPOs must 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 (PIP) in 2007. The intent of the plan 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 early and often throughout the planning process.

B. 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 five U.S. Census-designated urbanized areas with populations greater than 50,000 (the Houston Urbanized Area, the Texas City/La Marque Urbanized Area, the Galveston Urbanized Area, The Woodlands Urbanized Area, and the Angleton/Lake Jackson Urbanized Area), with a total of 5.9 million people in 2010. Please see Appendix B for a map of the Houston-Galveston TMA.

C. ORGANIZATION and STAKEHOLDERS

The Transportation Policy Council (TPC) is the policy-making board for the MPO. Its twenty-six (26) 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 seven major cities (over 50,000 in population) and each of the eight counties within the TMA. In addition, Harris, Brazoria, and Montgomery counties each have an at-large city representative appointed by the H-GAC Board of Directors. The H-GAC Board of Directors also appoints one member to the TPC to represent

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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 Technical 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 thirty-four (34) 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 seven (7) subcommittees to assist with specific program activities. These are: Regional Transportation Plan (RTP) Subcommittee, Transportation Improvement Program (TIP) Subcommittee, Transportation Demand Management (TDM) Implementation Subcommittee, the Transportation Control Measure/Voluntary Mobile emissions Reduction Program (TCM/VMEP) Development Working Group, Regional Transit Coordination Group, Operations Task Force, and the Pedestrian and Bicycle Subcommittee. Current TAC membership can also be found in **Appendix A**.

In 1991, the Regional Air Quality Planning Committee (RAQPC) 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 twenty-six (26) member committee is composed of members representing a variety of public agencies, private industry, business, local health organizations, and citizen and environmental groups. The membership list is available upon request.

In 2005, the Regional Safety Council (RSC) was set up by the TPC 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.

D. PRIVATE SECTOR INVOLVEMENT

The private sector is actively involved in planning efforts outlined in the 2012-2013 UPWP. H-GAC utilizes private sector contractors and consultants extensively to execute many of its planning responsibilities. In addition, the private sector participates in H-GAC's

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transportation planning policy structure. Industry interests and business groups have representatives serving on the Technical Advisory Committee, the Regional Air Quality Planning Committee, the Regional Safety Council, and their respective subcommittees.

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 in the provision of ridesharing, vanpooling, and other trip reduction activities. H-GAC provided start-up funds for area TMOs, which assist employers in implementing transportation demand management (TDM) strategies such as carpooling and vanpooling.

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. A Job-Access Reverse Commute (JARC) funded project in Austin County expanded the public transportation services through a public/private partnership agreement. Another initiated commuter project connects the Woodlands Township in Montgomery County with the Sam Houston State University (SHSU) in Huntsville, in Walker County, with funding provided through a public/private partnership.

E. PLANNING ISSUES AND EMPHASIS AREAS

2040 Regional Transportation Plan – The MPO will be working over the next two years on the development of the 2040 Regional Transportation Plan (RTP). Key focus areas for the 2040 RTP include the connection between transportation and land use, an analysis of regional transit needs and opportunities, environmental considerations and implications for project development, an enhanced congestion management system, and a consideration of the growth in regional freight activity and the related infrastructure needed to improve regional multi-modal mobility.

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:

1. Initiating technical and policy analyses of control strategies for the TMA's ozone SIP;
2. Participating with regional leaders, business and industry, environmentalists, and federal, state and local governments to develop/review clean air strategies, modeling, processes, and technologies;
3. Conducting conformity analyses, as needed by the TIP, RTP and/or SIP timelines;

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4. Defining the potential regional impacts of implementation, as well as the potential sanction ramifications of the current one-hour nonattainment designation and the eight-hour nonattainment designation (although we are not designated for fine particulate 2.5 nonattainment designation, we continue to monitor developments);
5. Participating in the establishment of emission budgets for transportation conformity;
6. Aiding in the implementation of SIP strategies through demonstration projects and contractual programs; and
7. Working on flexible and alternative attainment plans.

Safety Planning – H-GAC will continue to assess safety data as it is provided to determine the problem areas in terms of traffic safety. Staff will be developing a long-range safety plan based on the data assessments and provide potential countermeasures for consideration. H-GAC will also continue to provide technical support on traffic safety issues, including the support of various outreach initiatives to promote safer driving.

Freight Planning – H-GAC will continue work on its Regional Goods Movement Study. 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 will be 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 will be the focal point of this effort.

Livable Centers – H-GAC will continue to provide outreach, training, and technical assistance to local governments and private developers to help achieve an improved connection between development patterns and the transportation system (Subtask 4.4). 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 programs helps to create quality, mixed-use places that provide multi-modal transportation options through studies and implementation projects.

Bicycle and Pedestrian Planning – H-GAC will continue support for the implementation of the Transportation Policy Council's adopted pedestrian and bicycle policy goals and recommended actions. This includes the maintenance of the regional bicycle system plan, the development of a long-range bicycle system plan in conjunction with the 2040 RTP, the provision of technical support to local governments, and the hosting of trainings for best practices

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TASK I

PROGRAM MANAGEMENT

The purposes of the activities listed under Task 1.0 are to provide administrative support to the transportation planning process for the eight-county Houston-Galveston Transportation Management Area (TMA) and to facilitate interagency cooperation and coordination.

OBJECTIVES:

- To develop a Comprehensive, Continuing and Coordinated, or "3-C," regional transportation planning process.
- To develop public information exchange and education programs that increase public interest and participation in ongoing transportation and air quality planning activities.
- To promote public involvement and communication in "best practices" for land use/transportation interactions.
- To prepare the Regional Transportation Plan (RTP) for the 2040 planning horizon with proactive public outreach efforts including: follow-up and feedback to concerned citizens regarding comments made on the 2040 RTP;
- To obtain and maintain computer hardware, software, technical support, and training necessary to maintain transportation and related air quality planning activities.

EXPECTED PRODUCTS:

- New 2-year Unified Planning Work Program (UPWP) for FY 2014-15.
- Technical assistance and support for committees and public meetings
- Public information materials and interaction in a variety of formats, including emails, letters, brochures, websites, surveys, etc.
- Considerable public outreach for the development of the 2040 RTP.

PREVIOUS WORK

- During FY 2010, 55 new consultant contracts were awarded for various projects, such as Clean Cities/Clean Vehicles; Commuter Pilot Projects; Corridor Studies, and Transit Planning. In addition, there were 37 consultant contract amendments regarding time extensions, budget increases, and scope modifications.
- Conducted a workshop and public meeting in July 2010 for disadvantaged business enterprises (DBEs) that provide Engineering, Planning, Advertising, and Public Relations services.
- Prepared presentation, meeting materials, notices and advertisements for the workshop and public meetings.
- Staff assisted stakeholder group with a Housing and Urban Development (HUD) application for a sustainability grant awarded to H-GAC in October 2010.
- Prepared meeting materials, notices, minutes and provided other administrative support to the TPC and TAC as necessary.

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- Staff provided briefings to the TPC and TAC about relevant transportation related state and federal legislation.
- Staff attended a Performance Measures Workshop held by the Federal Highway Administration in September 2010;
- Several staff attended the Local Government Project Procedures Class at the Texas Department of Transportation (TxDOT) Houston District Office in June 2010.
- Staff maintained the UPWP, which has included 15 amendments through October 2010.
- Conducted two public meetings for Amendments No. 186, 190 and 204 to the 2008-2011 TIP and 2035 RTP in January-February 2010.
- Conducted two meetings for the Subregional Planning Initiative workshops for the East Port area in February 2010.
- Conducted four meetings for the Regional Transit Framework Study in February 2010.
- Conducted six public meetings for the Matagorda County Transit Service Plan in February-March and July 2010.
- Conducted two public meetings for Amendments No. 1 and 2 to the 2011-2014 TIP and 2035 RTP in August-September 2010.
- Conducted two rounds of six public meetings on SH 288 access management in March-April and September 2010.
- Participated in Texas Association of Metropolitan Planning Organizations (TEMPO), national Association of Metropolitan Planning Organizations (AMPO) and National Association of Regional Councils (NARC) discussions, webinars and conference calls on a variety of federal and state issues relevant to MPOs.
- Participated in panel discussions, including TxDOT and stakeholder meetings to discuss best practices for public involvement and diversity.

SUBTASK 1.1 Program Support / Unified Planning Work Program (MPO)

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.

This subtask 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.

H-GAC also serves as the Regional Reviewing Agency under the Texas Review and Comment System (TRACS). TRACS is the official state review process, and it offers both state and local officials the opportunity to review applications for state and federal assistance that may affect the H-GAC's 13-county area.

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PRODUCTS:

Program Support & Administration

- 1.1.a1** Manage contracts and agreements between the MPO and participating agencies or subcontractors. [As needed]
- 1.1.a2** Maintain financial records for departmental contracts and ensure payment of invoices.
- 1.1.a3** 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), the Disadvantaged Business Enterprise goal development, and the annual self-certification assurances.
- 1.1.a4** Provide technical assistance to local governments, public agencies, other qualified grant sponsors, and staff regarding federal grant applications, TRACS, transportation planning activities, and transportation management issues.
- 1.1.a5** Provide technical assistance to the Transportation Policy Council (TPC), the Technical Advisory Committee (TAC), and other committees and subcommittees appointed. Technical assistance includes preparing meeting materials, meeting notices, maintaining permanent meeting records, an annual training workshop for the respective members, and other assistance as directed. Provide food and non-alcoholic beverages, pending TxDOT approval, at selected meetings and events when deemed appropriate.
- 1.1.a6** Conduct non-lobbying participation in the Association of Metropolitan Planning Organizations (AMPO), Texas Metropolitan Planning Organizations (TEMPO), 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), and other organizations that enhance the planning process.
- 1.1.a7** 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.
- 1.1.a8** Maintain historical data, publications, and map warehousing/archive libraries, along with an online-query system for public research and access to historical information.
- 1.1.a9** The acquisition of supplies, services, and equipment to support MPO operations.
- 1.1.a10** Acquire legal defense/advice in accordance with 2 CFR Part 225, Cost Principles for State, Local, and Indian Tribal Governments (OMB Circular A-87) for conformity

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determinations and other issues as determined to be necessary and reasonable to carry out the metropolitan planning process per 23 CFR 420.113.

Unified Planning Work Program Development

- 1.1.b1.** Maintain the 2012-2013 Unified Planning Work Program (UPWP), reflecting current plans, programs, and regional priorities, by amendments approved by the TPC, TxDOT, FHWA, and FTA.
- 1.1.b2.** Develop and adopt the 2014-2015 Unified Planning Work Program per schedule determined by staff in coordination with other Transportation Partners.

SUBTASK 1.2 Public Involvement and Outreach Program

H-GAC has 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 adopted in July 2007, with the primary objective to provide timely, accurate, and complete information to the public on important transportation issues. Fulfilling this objective requires the continuous development of visualization techniques, educational materials, transportation websites, newsletters, and other public outreach activities.

PRODUCTS:

Public Involvement

- 1.2.a1** Conduct public outreach and provide support for public meetings for the RTP, TIP, Air Quality, and other significant plans. This includes publishing legal notices, press releases, and advertisements, conducting public meeting arrangements, slide presentation production, and development of educational materials for distribution at these meetings. **(Consultant Assistance Required)**
- 1.2.a2** Continue to publicize H-GAC's Transportation Activities via the publication and distribution of newsletters, management of the Transportation Department's website, the holding of information workshops and the development of other pertinent publications as needed.
- 1.2.a3** Continue to solicit public comment on transportation programs, projects, and policies and to respond to public comment in a timely fashion.
- 1.2.a4** Continue to employ visualization techniques to deliver information, including websites, video, and audio technologies to interested parties.
- 1.2.a5** Continue to develop and maintain mailing and community contact lists to ensure adequate distribution/notice of public meetings and materials.

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Policy and Government Affairs

- 1.2.b1** Continue to provide MPO comments to the Federal Highway Administration (FHWA), Federal Transit Administration (FTA), and the Environmental Protection Administration (EPA) as part of the federal rule-making process.
- 1.2.b2** Organize and/or participate in seminars, peer exchanges, and peer reviews as necessary to facilitate communication between MPOs, federal, state, and local agencies, providing food and non-alcoholic beverages, pending TxDOT approval, when deemed appropriate.
- 1.2.b3** Development of briefings and printed materials for policy-makers on federal and state issues relevant to the regional transportation planning process.
- 1.2.b4** Participate in best practices and public involvement training workshops when resources are available.

Task 1 Funding Summary Table			
Funding Source	Task 1.1	Task 1.2	Task 1 Total
FHWA-FTA TPF	\$3,109,464	\$1,869,715	\$4,979,179
STP - Cat 7	\$ -	\$ -	\$ -
TxDOT SPR	\$ -	\$ -	\$ -
TxDOT Dist. Discret.	\$ -	\$ -	\$ -
TxDOT Fund 6	\$ -	\$ -	\$ -
TxDOT-82nd Leg.	\$ -	\$ -	\$ -
ARRA	\$ -	\$ -	\$ -
FTA 5304/5307/5309/5339	\$ -	\$ -	\$ -
FAA	\$ -	\$ -	\$ -
TCEQ-local	\$ -	\$ -	\$ -
Other Local	\$ -	\$ -	\$ -
TOTAL	\$3,109,464	\$1,869,715	\$4,979,179

TxDOT will apply transportation development credits sufficient to provide the match for FHWA PL-112 and FTA Section 5303 programs. As the credits reflect neither cash nor man-hours, they are not reflected in the funding tables.

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TASK II

DATA DEVELOPMENT AND MAINTENANCE

The Subtasks contained in Task II, collect, update, model, and maintain the basic data and tools required for executing the planning activities described in this UPWP.

OBJECTIVES:

- To collect, process and analyze socioeconomic data necessary to develop and implement regional transportation plans and systems.
- To develop and maintain advanced state-of-the-practice travel demand modeling tools and explore *advanced practice* modeling methods that enhances the region's capabilities for regional, sub regional, and corridor planning and analysis.
- To participate in the ongoing data collection efforts of other transportation agencies in the region and expedite the sharing of roadway inventory data and candidate roadway project information between transportation agencies.
- To maintain a regional database clearinghouse on the H-GAC Transportation web pages to provide easier access to the large quantities of data generated by the various transportation agencies.

EXPECTED PRODUCTS:

- Continued maintenance of socioeconomic databases necessary for transportation planning and modeling activities.
- Development of revised population and employment forecasts and base year estimates.
- Continued development of an “advanced-practice” set of regional travel models that incorporate updated modeling practices and theories as well as new travel survey data.
- Cartographic materials in support of public outreach and environmental justice programs.
- Web-based roadway project information sharing between Transportation agencies.
- Establish a central location for transportation-related data, generated by local governments in the course of performing planning activities.
- The development of the Cube Cargo model for freight modeling.
- The review and assessment of traffic data used in base year networks, including Automated Vehicle Identification (AVI), Wavetronic, Bluetooth, private data and Automatic Traffic Recorder (ATR) data to help rectify the modeling network

PREVIOUS WORK

- Staff has maintained and updated the socioeconomic databases consisting of employment information, household size, income, etc.
- Staff has been maintaining and updating the databases with micro data on land use,

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households and businesses.

- Staff has made improvements to the existing land use forecasting model and has produced a version 1.0 of the land use forecast (currently in review).
- Staff has developed and deployed a new web-based GIS application (<http://www.h-gac.com/go/RLUIS>)
- Staff has provided assistance to H-GAC Transportation staff and to local governments.
- Work was completed for the Work Place, Special Generator, External Station, Toll Road, and Commercial Vehicle surveys used to update the current inputs for travel demand modeling and forecasting.
- Enhanced the Cube Voyager model to incorporate other advanced functionalities such as the: Feed-back-loop, production of Home base Work trip in five different income groups, expansion of the model to run on over 3000 traffic analysis zone (TAZ) geography. Continue to enhance the model for other needed functionalities.
- Continue to support the development of the Zone-1 (Galveston County) Transim evacuation model being developed in partnership of Texas Southern University (TSU) and Louisiana State University (LSU)
- Continued work with model validation using available annual count data from TxDOT for State maintained roadways including ATR station data.

SUBTASK 2.1 Socioeconomic Data and Models (C&E Planning)

Subtask 2.1 addresses the ongoing development of socioeconomic data and socioeconomic forecasting models, along with informational services and analytical support of Transportation planning activities and studies.

PRODUCTS:

Socioeconomic Data

- 2.1.a1.** Staff will continue monitoring releases of aggregate socioeconomic data from federal and state agencies, and other public and private sources. Staff will continue maintaining and updating databases with such information.
- 2.1.a2.** Staff will continue researching, obtaining, and processing information on the location, timing, and details of planned development projects in the region. Staff will continue maintaining and updating databases with such information.
- 2.1.a3.** Staff will continue researching, obtaining, processing, and synthesizing disaggregate information on parcels, buildings, businesses, and households in the region. Staff will continue maintaining and updating databases with such information.

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Socioeconomic Models

- 2.1.b1** Staff will continue improving and enhancing the existing operational version of the demographic and economic macro forecasting model.
- 2.1.b2** Staff will continue improving and enhancing the existing operational version of the land-use micro forecasting model.
- 2.1.b3** Staff, in cooperation with the Travel Demand Modeling group, will develop scenario-based regional integrated “land use-transportation” small-area population and employment forecasts for Transportation Planning purposes.

Information Services and Analytical Support

- 2.1.c1** Staff will continue improving and enhancing the existing web-based mapping and database query applications allowing easy access to socioeconomic data by Transportation partners and general public.
- 2.1.c2** Staff will provide informational services and analytical support to H-GAC Transportation staff, transportation agencies, local governments and their consultants in support of regional Transportation Planning activities and studies.
- 2.1.c3** Staff will participate in the agency’s work under the Sustainable Communities Regional Planning Grant by providing informational services and analytical support.
- 2.1.c4** Staff may provide analytical services to agencies and organizations, upon request and subject to schedule availability and funding assistance.

SUBTASK 2.2 Physical Features, Data, & Modeling Support (MPO)

Subtask 2.2 describes the ongoing development, maintenance, and training activities associated with travel demand data development, mapping, and modeling. This subtask describes efforts directed toward the continued development, enhancement, and maintenance of the MPO’s travel demand models, including the physical collection, entry, preliminary tabulation, GIS-based mapping, maintenance, and analysis of transportation-related data.

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PRODUCTS:

Transportation Data & Modeling Support

- 2.2.a1 Use geographic information systems (GIS) to develop menus, macros, programs, and user manuals needed to display and evaluate transportation tasks.
- 2.2.a2. Maintain, rectify and enhance the data required to operate the travel demand models, including the road network, segment nodes, and traffic analysis zones.
- 2.2.a3. Provide programming support for modeling and GIS applications
- 2.2.a4. Create maps and other GIS-related publications as needed.
- 2.2.a5. Maintain the GIS-based Project Viewer for TIP and RTP projects.

Travel Demand Forecasting

- 2.2.b1. Develop a state-of-the-practice, activity-based travel demand model set - **Consultant Assistance - \$605,000** (\$484,000 STP, \$121,000 Local)
- 2.2.b2. Continue technical support and assistance in the implementation of the Cube Voyager model set. (**Consultant Assistance Required**)
- 2.2.b3. Finalize development of the Cube Cargo model for freight modeling - **Consultant Assistance - \$214,800 ARRA**
- 2.2.b4. Support special studies and model applications with technical support and review of major model applications. Examples include but are not limited to toll revenue studies, member agency mobility plans, and environmental justice assessments.
- 2.2.b5. Review and assess traffic data used in base year networks, including AVI, Wavetronic, Bluetooth, private data and ATR data to help rectify the modeling network.
- 2.2.b6. Review and assess demographic data and other model inputs.
- 2.2.b7. Continue Cube Avenue development for use in corridor and mesoscopic analyses.

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MPO Support and Training

- 2.2.c1. Attend meetings and participate on committees of the GIS Users Groups, Network Users Groups, and other technical support groups as needed.
- 2.2.c2. Continue staff training on the Cube Suite of software.

Task 2 Funding Summary Table			
Funding Source	Task 2.1	Task 2.2	Task 2 Total
FHWA-FTA TPF	\$1,349,726	\$2,477,929	\$ 3,827,655
STP - Cat 7	\$ -	\$ 484,000	\$ 484,000
TxDOT SPR	\$ -	\$ -	\$ -
TxDOT Dist. Discret.	\$ -	\$ -	\$ -
TxDOT Fund 6	\$ -	\$ -	\$ -
TxDOT-82nd Leg.	\$ -	\$ -	\$ -
ARRA	\$ -	\$ 214,800	\$ 214,800
FTA 5304/5307/5309/5339	\$ -	\$ -	\$ -
FAA	\$ -	\$ -	\$ -
TCEQ-local	\$ -	\$ -	\$ -
Other Local	\$ -	\$ 121,000	\$ 121,000
TOTAL	\$1,349,726	\$3,297,729	\$4,647,455

TxDOT will apply transportation development credits sufficient to provide the match for FHWA PL-112 and FTA Section 5303 programs. As the credits reflect neither cash nor man-hours, they are not reflected in the funding tables.

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TASK III

SHORT-RANGE PLANNING

The work elements contained in Task III include the development of the Transportation Improvement Program (TIP), as well as sub-regional or county-level mobility studies, transit feasibility studies, and operations planning. Short-range planning efforts will also be focused on the continued coordination and development of transit and Transportation Demand Management (TDM) projects. An important aspect of that effort includes the facilitation of ongoing planning and coordination of public transportation services within the 13 county Gulf Coast Planning Region for the elderly, physically challenged, low income and those who cannot or choose not to drive. Task III also includes ongoing maintenance of the Regional Intelligent Transportation System (ITS) Plans.

OBJECTIVES:

- Support the development of short-range transportation planning consistent with federal air quality requirements.
- Facilitate implementation of transportation projects and programs in the TIP through coordination and consultation with local implementing agencies.
- Involve the private sector in the planning of transit services and the joint development of transit facilities.
- Maintain and enhance the transportation project database.
- Revise and maintain the Regional ITS Architecture and Strategic Plan revised in 2005.
- Continue support for TDM activities that are consistent with recommendations from earlier planning studies.
- Continue to seek improved mobility options for people who have limited mobility choices today. That group includes youth, senior citizens, the physically-challenged, and others. This objective will be accomplished by improving access to jobs, training opportunities, and educational, social, medical, and recreational activities.

EXPECTED PRODUCTS:

- The development of a new TIP and RTP project tracking system.
- Revision of the Call for Projects and Project Evaluation processes
- The integration of the updated Gulf Coast Region Public Transportation Coordination Plan into the 2040 RTP
- The development of systems engineering templates for ITS implementations
- The development of a Regional Incident Management Strategic Plan and Assessment

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PREVIOUS WORK

- Updated Statewide Transportation Improvement Program (STIP) reporting products in accordance with revised STIP amendment procedures and reporting requirements.
- Worked with local project sponsors to update the status of locally funded projects in support of the 2011-2014 TIP and 2035 RTP Update.
- Coordinated Call For Projects for the 2011-14 TIP
- Reprogrammed Surface Transportation Program-Metropolitan Mobility (STP-MM) and Congestion Mitigation Air Quality (CMAQ) projects from the 2008-11 TIP in the 2011-14 TIP
- An action plan has been developed as part of the Gulf Coast Regional Public Transportation Coordination Plan
- Completed the Matagorda County Transit Plan.
- Commissioned a prototype regional arterial traffic information collection system to collect and store information on traffic signal outages, traffic incidents, street/lane closures, and other traffic-related data for the assessment of non-recurring arterial congestion

SUBTASK 3.1 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 Houston-Galveston TMA. The purpose of the TIP is to identify the transportation improvement projects selected by the TPC through the continuing, coordinated, and comprehensive ("3-C") regional transportation planning process. The TIP must conform to federally mandated emission reductions for air pollutants, and must be financially consistent with estimated federal, state, and local revenues for the four-year time frame.

PRODUCTS:

- 3.1.a1** Continue the development and improvement of the online TIP/RTP project information database to allow for enhanced project tracking and access by member agencies. **(Consultant Assistance Required)**
- 3.1.a2** Provide information regarding project programming and implementation to Federal, State and local transportation stakeholders as required.
- 3.1.a3** Track the implementation status of projects [project monitoring] and update the project list for interim periods, maintaining a historical record of projects submitted by various sponsors for inclusion in the RTP and TIP project databases.
- 3.1.a4** Analyze proposed amendments to the current TIP for conformity implications, financial

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impact, and administrative changes.

- 3.1.a5** Staff, in conjunction with the subcommittees of the Technical Advisory Committee (TAC), will gather input for various planning and project development activities. Guidance from Subcommittees is used to develop recommendations to the TAC and Transportation Policy Council when needed.
- 3.1.a6** Conduct educational RTP/TIP presentations and workshops for H-GAC committee members, local transportation and government agencies, as well as other project sponsors and the public. These presentations and educational workshops include review of such activities as project submittal, selection, evaluation, amendment procedures, and policies, and Title VI investigations as necessary. Provide food and non-alcoholic beverages, pending TxDOT approval, at selected meetings and events when deemed appropriate.
- 3.1.a7** Conduct project development workshops for project sponsors and transportation engineering consultants when new projects may be called for. The project development workshop(s) will be used to educate project sponsors on advanced project implementation with TxDOT.
- 3.1.a8** Reassess and modify the TIP Call for Projects process, including submission requirements, readiness determination, timing, and project evaluation process.
- 3.1.a9** Develop the 2013-16 TIP, the 2014-17 TIP, and any additional TIPs if required.

SUBTASK 3.2 Short-Range Transit Planning

The objective of this subtask is to undertake planning and coordination projects for public transportation services in underserved areas of the region. These projects may take the form of transit feasibility assessments or coordination plans that will include the development of a five-year financial plan for new or expanded services. The primary beneficiaries of this coordinated planning effort are the elderly, physically and mentally challenged persons, and low-income individuals, particularly those without access to an automobile or those living in areas with inadequate public transit services.

PRODUCTS:

MPO Transit Planning

- 3.2.a1** Continue planning support for project implementation activities for Job Access and Reverse Commute (JARC) FTA5316 and New Freedom (NF) FTA5317 Calls for Projects in the MPO's Urbanized Area (UZA) as well as TxDOT's call for JARC and NF projects in the small urban and rural areas.

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- 3.2.a2** Work on integration of the updated Gulf Coast Region Public Transportation Coordination Plan into the 2040 RTP, as well providing planning support for the implementation of priority projects identified in the Coordination Plan.
- 3.2.a3** Staff support of additional transit planning efforts stemming from the Gulf Coast Region Public Transportation Coordination Plan's recommendations for Walker County and for Phase 2 of Montgomery County's Transit Plan. **(Consultant Assistance Required)**
- 3.2.a4** Continue staff support to the Regional Transit Coordination Subcommittee of the Technical Advisory Committee (TAC). The subcommittee has formed three working groups that are taking steps to implement the recommendations from the regional transit coordination plan relative to; resource sharing, public information and involvement, and a seamless fare system.
- 3.2.a5** Continuation of sub regional and county level planning analyses in support of Environmental Justice-Title VI requirements to ensure compliance with FTA requirements. Planning level socio-economic and equity analyses will be used to support the data needs in the semi-annual Title VI compliance reports.
- 3.2.a6** Continue transportation assessment for the Texas Medical Center (FTA Earmark). **(Consultant Assistance Required)**

FTA Planning Funds for Transit Agencies

- 3.2.b1** Transit agencies wishing to use **FTA 5307** funds for planning purposes must have those dollars programmed in the UPWP and the current TIP. **Figures stated are based on FY 2011 allocations and will be updated upon receipt of new figures:**

- A Island Transit {Galveston UZA} Planning** - Funding applications, marketing plans, planning for local and regional rail connectivity; peer review of Island Transit; financial capacity analysis; activities identifying transportation projects and related improvements to reduce congestion, improve air quality and create economic and employment impacts. Grant and other submissions include TIP, RTP, and UPWP preparations and participation on H-GAC transportation planning committees

FTA 5307 Planning	Federal	State	Local	Total
2012	\$336,000	\$0	\$84,000	\$420,000
2013	\$336,000	\$0	\$84,000	\$420,000

- B Gulf Coast Center {Lake Jackson/Angleton UZA}** - Implementation planning for initiation of local service. Grant and other submissions include TIP, RTP, and UPWP preparations and participation on H-GAC transportation planning committees.

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FTA 5307 Planning	Federal	State	Local	Total
2012	\$75,000	\$15,000	\$0	\$90,000
2013	\$75,000	\$15,000	\$0	\$90,000

- C Gulf Coast Center {Texas City/LaMarque UZA}** - Implementation planning for user side subsidy taxi service. Grant and other submissions include TIP, RTP, and UPWP preparations and participation on H-GAC transportation planning committees.

FTA 5307 Planning	Federal	State	Local	Total
2012	\$75,000	\$15,000	\$0	\$90,000
2013	\$75,000	\$15,000	\$0	\$90,000

- D Harris County Transit {Houston UZA}** - Review of the present location of park & ride lots and study the long term need to retain in place or relocate; Conduct site and engineering studies for two proposed lots on SH 225; provide grant and planning administration; training activities; feasibility analyses. Grant and other submissions include TIP, RTP, and UPWP preparations and participation on H-GAC transportation planning committees.

FTA 5307 Planning	Federal	State	Local	Total
2012	\$576,000	\$0	\$144,000	\$720,000
2013	\$576,000	\$0	\$144,000	\$720,000

- E Fort Bend County Transit {Houston UZA}** - Planning activities related to financial, operational, marketing, and reporting activities; Analysis activities related to ridership projections, service modes, travel demand, capital projects, transit regulations; Conduct Phase II of the Fixed Guideway Feasibility Analysis; Grant and other submissions include TIP, RTP, and UPWP preparations and participation on H-GAC transportation planning committees.

FTA 5307 Planning	Federal	State	Local	Total
2012	\$680,000	\$0	\$170,000	\$850,000
2013	\$680,000	\$0	\$170,000	\$850,000

- F The District (Brazos Transit) {The Woodlands UZA}** has opted to use no federal FTA 5307 funding for planning purposes. Grant and other submissions include TIP, RTP, and UPWP preparations and participation on H-GAC transportation planning committees included.

FTA 5307 Planning	Federal	State	Local	Total
2012	\$100,125	\$76,000	\$0	\$176,125
2013	\$100,125	\$76,000	\$0	\$176,125

SUBTASK 3.3 Regional Operations/Intelligent Transportation Systems Planning

The aim of Intelligent Transportation Systems (ITS) is to improve efficiency and safety of the transportation system in the area through deployment of advanced technologies and

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systems management techniques. ITS technologies offer benefits ranging from improved safety on the existing transportation infrastructure to enhanced travel information to users of the transportation facilities. ITS technologies also provide managers of the transportation systems to better utilize existing infrastructure by using information from ITS solutions.

A foundation element for deploying and integrating Intelligent Transportation Systems (ITS) is the development of an ITS Architecture and Strategic Plan. The ITS architecture defines how major elements of a comprehensive system are interrelated while the strategic plan defines how to successfully deploy and operate the ITS infrastructure.

PRODUCTS:

- 3.3.a1** Re-evaluate RTP and TIP project selection processes and criteria to ensure consistency with the adopted ITS Plan, Architecture and User's Guide.
- 3.3.a2** Continue maintenance of the regional ITS Architecture.
- 3.3.a3** Research Benefit-Cost methodologies to better assess operational and ITS improvements' impacts on congestion and air quality.
- 3.3.a4** Participate in Houston TranStar/ITS-related functions, such as attending meetings to provide the MPO's perspective and fulfilling TranStar Leadership Team requests.
- 3.3.a5** Facilitate annual ITS training for public sector entities in the TMA involved in the implementation of ITS. Provide food and non-alcoholic beverages, pending TxDOT approval, at events when deemed appropriate.
- 3.3.a6** Provide technical assistance to the Operations Task Force Subcommittee and other ITS-related groups as appointed. Technical assistance includes preparation of meeting materials, notices, maintaining meeting records, training workshop(s) for the respective members, and other assistance.
- 3.3.a7** Non-lobbying participation in the Intelligent Transportation Society of America (ITS America), the Texas Chapter of ITS America (ITS Texas), and other organizations that enhance the ITS planning process.
- 3.3.a8** Research the availability and accessibility of traffic counts from different agencies in the region to develop a traffic count clearinghouse.
- 3.3.a9** Develop a Regional Incident Management Strategic Plan and Assessment to determine the benefits of incident management on the region's roadways and to determine ways to grow the use of incident management programs throughout the region - **Consultant Assistance - \$275,000 TPF**

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Task 3 Funding Summary Table				
Funding Source	Task 3.1	Task 3.2	Task 3.3	Task 3 Total
FHWA-FTA TPF	\$1,188,740	\$ 436,050	\$ 447,738	\$2,072,528
STP - Cat 7	\$ -	\$ -	\$ -	\$ -
TxDOT SPR	\$ -	\$ -	\$ -	\$ -
TxDOT Dist. Discret.	\$ -	\$ -	\$ -	\$ -
TxDOT Fund 6	\$ -	\$ -	\$ -	\$ -
TxDOT-82nd Leg.	\$ -	\$ 212,000	\$ -	\$ 212,000
ARRA	\$ -	\$ -	\$ -	\$ -
FTA 5304/5307/5309/5339	\$ -	\$4,484,250	\$ -	\$4,484,250
FAA	\$ -	\$ -	\$ -	\$ -
TCEQ-local	\$ -	\$ -	\$ -	\$ -
Other Local	\$ -	\$ 996,000	\$ -	\$ 996,000
TOTAL	\$1,188,740	\$6,128,300	\$ 447,738	\$7,764,778

TxDOT will apply transportation development credits sufficient to provide the match for FHWA PL-112 and FTA Section 5303 programs. As the credits reflect neither cash nor man-hours, they are not reflected in the funding tables.

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TASK IV

LONG-RANGE PLANNING

INTRODUCTION

The 2040 Regional Transportation Plan (RTP) is a complex and detailed public policy document. The plan is principally concerned with workers and businesses that sustain our region's economic health, while at the same time preserving and improving the community and environmental attributes that contribute the region's quality of life. The RTP's recommendations are regional and are intertwined with local transportation decisions, requiring coordinated actions. The plan is constrained by the available financial resources and air quality requirements.

Federal and state mandates require that: 1) the RTP conform to air quality mandates; 2) the RTP be financially constrained; 3) the eight Planning Factors identified in the SAFETEA-LU be considered in the RTP's development; 4) public participation be actively sought in designing the RTP for the region's future transportation system; and 5) the Congestion Management Process (CMP) be integrated with RTP development. The ongoing maintenance of the CMP is included in the RTP subtask.

This task also includes ongoing initiatives regarding transportation-related air quality planning and emissions inventories and the Area Emission Reduction Credit Organization (AERCO). A secondary objective of the program is to improve the region's air quality by complying with state and federal requirements contained in the State Implementation Plan (SIP) and Clean Air Act (CAA).

The subtask for regional bicycle and pedestrian planning was added during FY 2003. Its purpose is to focus resources on developing and implementing a full range of plans, processes, promotion, education, and outreach for the region's bicycle and pedestrian traffic safety.

The subtask for Livable Centers provides outreach and technical assistance to local governments and private developers in achieving a more effective interface between land-use development patterns and the transportation system

OBJECTIVES:

- Develop regional, sub-regional and local area plans; continued emphasis on analyses of alternative land use and transportation system development scenarios, safety and security related projects, goods movement, and regional public transportation needs.
- To incorporate projects and/or strategies resulting from Major Corridor Studies and Alternative Analyses.
- To comply with the Clean Air Act as outlined in the State Implementation Plan (SIP), its development and revisions, and to provide implementation assistance for local governments.
- To prepare the planning, tracking, documentation and reporting of implementation projects as related to Transportation Control Measures (TCMs) and Voluntary Mobile Emission Reduction Program (VMEP).

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- To provide local governments with information regarding the strategies, alternatives, implications, and consequences of SIP measures.
- To develop and/or update mobile emission inventories and participate in the establishment of emissions budgets for ozone precursors emitted by the region's transportation system.
- To calculate the conformity of the RTP to the air quality emission budgets from the State Implementation Plan.
- Promote public involvement and communication in 'best practices' for land use/transportation coordination.
- To develop more Livable Centers plans and projects, assisting local governments in creating quality mixed-use places that reduce dependence on single-occupancy vehicles.
- To decrease the share of trips made by single-occupancy vehicles and promote alternatives such as walking, biking, telework, vanpool and carpool.
- To integrate and maintain the congestion management process into the RTP, replacing the plan adopted in 1997.

EXPECTED PRODUCTS:

- Develop the 2040 Regional Transportation Plan (RTP), with a proactive public involvement process, an enhanced public information campaign, performance-based evaluation criteria, and safety and security related projects.
- Draft conformity determination documentation.
- An updated regional major thoroughfare plan
- Continued Metropolitan Planning Organization (MPO) support in State Implementation Plan (SIP) development, coordination, and implementation efforts.
- A Subregional Planning Initiative to provide a community-based focus and a major input into the 2040 RTP.
- The development of a State of Congestion Report for the region
- Documentation of the progress and fulfillment of VMEPs and TCMs.
- Continued support of clean air compliance for local governments
- Facilitation of the Area Emission Reduction Credit Organization initiatives and reporting.
- Documentation of efforts to meet the mobile vehicle emission budget.
- Development of a Regional Bikeway Plan that correlates with the 2040 RTP and emphasizes regional connectivity for all modes of travel.
- Analyses of project implementation and prioritization, capacity enhancements, environmental status, environmental justice, performance measures, scenario planning, costs, description of work, etc.
- Documentation regarding control strategies for on-road and non-road mobile sources to be included on SIP.
- Calculation of on-road emission inventories for the Reasonable Further Progress SIP for

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several years.

- Livable Centers studies to assist local areas in creating walkable, mixed-use places that provide transportation options.
- Periodic reports of CMP activities and impacts in the Houston-Galveston transportation management area (TMA).

PREVIOUS WORK

- The 2035 RTP was updated to reflect a project list constrained to the financial forecast.
- The regional financial forecast was revised to reflect TxDOT's Unified Transportation Program. Outreach activities with the public, stakeholders, and local governments were held in August, September, and October to obtain input and comments on creating a revised project list that was in accordance with the revised financial forecast.
- Air quality conformity determination and documentation was conducted based on the new networks resulting from the 2035 RTP Update.
- The Regional Transit Framework Study was completed, resulting in four scenarios based on various financial constraints and philosophies.
- Collaborated with TTI on the Mobile Source Emission Reduction Strategies (MOSERS) update; provide with the calculation methodology we use to evaluate new commuter and transit services for use in the revision of MOSERS
- Completion of the 2010 Air Quality Reference Guide that explains Air Quality issues to the citizens of the Houston-Galveston-Brazoria Area.
- Solicited applications, implemented projects, and analyzed emissions benefits through the Clean Vehicles program
- Solicited proposals for new commuter and transit services pilot projects and applications for new telework projects
- Analyzed emissions benefits through the Commute Solutions program for all trip reduction program elements.
- Prepared and issued a three year Request for Proposals for Commuter and Transit Services Pilot Projects.
- Provide emission impact assessments for proposed pilot projects as well as guidance on designing proposed transit services to maximize emission reductions
- Issued a call for Special District Planning studies in June 2010 with resulting studies underway for the City of Houston Clear Lake area and City of Houston Fifth Ward.
- Completed Missouri City Special Districts Study.
- Worked with FHWA and TxDOT to bring two pedestrian safety design courses to the Houston area in August of 2010.
- Produced the guide "Bicycling for Transportation: Your Guide to an Active Commute" in April, 2010, providing as a guide for people that are interested in bicycling for transportation.

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- Completed Livable Centers plans for Midtown Houston, Upper Kirby, and the Near Northside.
- Began Livable Centers studies for the Fourth Ward, Energy Corridor District, and Downtown Houston.
- Completed a Subregional Plan for the East Port area, providing a vision, strategies, and recommended priorities for the 14 local jurisdictions encompassing the East Port Subregion for land-use and transportation development.

SUBTASK 4.1 2040 Regional Transportation Plan (RTP) Development

This subtask will focus on the development of the 2040 Regional Transportation Plan (RTP). Key focus areas for the 2040 RTP include the connection between transportation and land use, an analysis of regional transit needs and opportunities, environmental considerations and implications for project development, and a consideration of the growth in regional freight activity and the related infrastructure needed to improve multi-modal mobility in the region.

In late 2007, development of a Congestion Management Process (CMP) began out of the 1997 CMS plan. A new part of the CMP Plan will be “The State of the Congestion Report” in every TIP cycle. The Significant Roadway Network of the CMP is defined as roadways classified as principal (or major) arterials and above in urban areas, selected major collectors and above in rural areas, as defined in the TxDOT Roadway Inventory Log (RI-2) and other roadways designated by the TPC.

PRODUCTS:

2040 Regional Transportation Plan

- 4.1.a1** Develop a scenario-based Regional Transportation Plan (RTP) by conducting public education and outreach utilizing web-based tools and providing scenario refinement to reflect the regional vision. Develop strategies to link RTP goals and objectives to recommended projects. Develop performance measures based on RTP goals. Analysis will include, but not limited to: the prioritization process, project data base, congestion management, performance measures, environmental justice, land use/ transportation integration, and scenario planning - **Consultant Assistance - \$472,300 TPF.**

The key elements of the plan include:

- a) Projects Update
- b) Development of Goals, Objectives, and Selection Criteria
- c) 2040 Socio-economic Forecast (Subtask 2.1)
- d) Transportation Demand Model Network Development (Subtask 2.2)
- e) Inclusion of Regional Initiatives, Processes, and Plans: Transit, Congestion Management Process, Environmental Justice, Bike/Pedestrian (Subtask 4.3),

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Livable Centers (Subtask 4.4), Corridor Studies (Subtask 5.2), Safety (Subtask 5.1), ITS (Subtask 3.3), and Freight/Goods Movement (Subtask 5.4).

- f) Financial Plan
 - g) Public Outreach
 - h) Projects Review and Selection
 - i) Air Quality Conformity Determination (Subtask 4.2)
- 4.1.a2** Coordinate with the State and local governments to update thoroughfare plan information, project descriptions, and project implementation schedules to develop the 2040 RTP project list. This includes a review of project priorities and project need. Provide food and non-alcoholic beverages, pending TxDOT approval, at selected meetings and events when deemed appropriate.

Long-Range Transit Planning

- 4.1.b1** Develop implementation plan for the recommendations discussed in the Regional Transit Framework, including regional transit planning, coordination, integration, and financing for a regional transit framework.
- 4.1.b2** Assess potential options for bringing commuter rail into the Inner Loop (IH 610) (**Consultant Assistance Required**).
- 4.1.b3** Finalize assessment of alternative sites to provide access to commuter rail services operated within or adjacent to existing rail freight corridors on shared or new tracks and develop operating plans and recommended capital improvements necessary to provide safe, efficient passenger movement with FRA compliant vehicles while preserving (if not enhancing) freight rail capacity – **Consultant Assistance - \$127,900 TPF**

Subregional Planning Initiative

- 4.1.c1** Work with communities in Fort Bend County to develop an integrated subregional land-use and transportation plan, which will assist in the development of projects for the RTP (**Consultant Assistance Required**).
- 4.1.c2** Work with communities in northern Brazoria County to develop an integrated subregional land-use and transportation plan, which will assist in the development of projects for the RTP (**Consultant Assistance Required**).
- 4.1.c3** Work within the Greater West Houston area to develop an integrated subregional land-use and transportation plan, which will assist in the development of projects for the RTP (**Consultant Assistance Required**).
- 4.1.c4** Work with communities and agencies in the METRO service area to develop an

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approach to connecting bicycle and pedestrian facilities to transit routes (**Consultant Assistance Required**).

- 4.1.c5** Work with the Greater East End Management District and the City of Houston in the development of a subregional mobility study. (**Consultant Assistance Needed**)

Congestion Management Process

- 4.1.d1** Prepare an updated CMP significant roadway network map to reflect roadway classification upgrades and new roadway development.
- 4.1.d2** Maintain and update congestion indices on regional facilities as for project prioritization measurement for the RTP.
- 4.1.d3** Continue to monitor and evaluate transportation system management (TSM) and transportation demand management (TDM) solution effectiveness as they relate to congestion mitigation, air quality benefits, and safety.
- 4.1.d4** Review congestion mitigation analyses (CMAs) submitted by transportation partners for regionally significant added-capacity projects on the CMP Network. Provide training when requested.
- 4.1.d5** Upon completion of all travel surveys in Task Two, revise the Transportation Systems Management/Travel Demand Management (TSM/TDM) Toolbox measures of effectiveness based on travel survey analyses.
- 4.1.d6** Continue participation in and support for the nationwide mobility measurement research project – **TTI - \$50,000**
- 4.1.d7** Develop State of Congestion Report in conjunction with Congestion Management Process development and the integration of recently-acquired private-sector roadway data – **Consultant Assistance - \$80,000**.

SUBTASK 4.2 Air Quality Planning/A.E.R.C.O. (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 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 and VMEPs. Also H-GAC develops the on-road emission inventories for the Reasonable Further Progress State Implementation Plan for the Texas Commission on Environmental Quality (TCEQ). H-GAC provides support and guidance for regional congestion mitigation and air quality implementation programs for compliance with state implementation plan (SIP) and

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federal clean air requirements.

The Area Emission Reduction Credit Organization (AERCO) is a 501(c)(3) that provides a legal framework to promote air quality improvements and economic growth in the non-attainment area. AERCO initiatives also provide a mechanism for pooling emission credits to meet federal offset requirements and making credits available for economic development. The emission credit trading mechanism under AERCO has not been active for several years, instead AERCO has been providing support to the school bus program by being able to accept federal and state Supplemental Environmental (SEP) Funds and private donations .

PRODUCTS:

- 4.2.a1** Develop, coordinate, and participate in response to state and federal air quality plans and new regulations affecting the region. Examine legal and sanction ramifications regarding different standards for the region.
- 4.2.a2** Provide coordination, participation, and expertise to local and statewide air quality planning committees.
- 4.2.a3** Support the Regional Air Quality Planning Committee (RAQPC), researching air quality issues and making recommendations to the H-GAC Board of Directors.
- 4.2.a4** Support the Transportation Air Quality Subcommittee to advise on project selection for the state implementation plan (SIP).
- 4.2.a5** Analyze emissions benefits for VMEPs, TERMS, and TCMs and seek additional commitments from implementing agencies - **Consultant Assistance - \$87,700 TPF**
- 4.2.a6** Revise, print, and distribute the *Air Quality Initiatives Reference Guide for the Houston-Galveston Area Council and Annual Air Quality Report*.
- 4.2.a7** Provide staff training, public relations and/or sponsorship support for air quality technical workshops.
- 4.2.a8** Provide consultant assistance to H-GAC for analysis and implementation strategies to meet 8-hour ozone standards for the region, mobile vehicle emission budget and enhance off-road mobile inventory and control strategies - **Consultant Assistance \$23,950 TCEQ**

SUBTASK 4.3 Bicycle/Pedestrian System Planning (C&E Planning Dept.)

The Transportation Policy Council (TPC) adopted pedestrian and bicycle policy goals, and recommended action steps in FY 2002. This subtask programs support for the continued implementation of the Transportation Policy Council's adopted pedestrian and bicycle policy goals, and recommended actions.

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PRODUCTS:

- 4.3.a1** Provide technical assistance to local governments and other transportation agencies to identify bicycle and pedestrian issues, opportunities, needs and barriers, and provide assistance in project planning and design.
- 4.3.a2** Review documentation of pedestrian and bicycle accommodations submitted by project sponsors and provide assistance or comments, as appropriate, and work with sponsors and TxDOT to move TIP and RTP bikeways and special district studies forward.
- 4.3.a3** Maintain an up-to-date regional bicycle system plan that identifies existing and planned bicycle facilities, system gaps, and future facility needs by developing a process to standardize GIS and other inputs from local governments that produces easy to read maps and leads to regular updates of the plan. The bicycle system plan will be integrated with the updated project management system to allow users and project sponsors to view bikeway projects programmed into the RTP and TIP.
- 4.3.a4** Conduct or host topical training workshops for local government staff. Potential topic areas include: “best practices” for local pedestrian and bicycle planning; design and maintenance for pedestrian and bicyclist facilities; improving connectivity; project management and cost estimation; and pedestrian bicyclist safety.
- 4.3.a5** Update the Regional Bikeway Plan in concert with the 2040 RTP update. The bikeway plan will place an emphasis on regional connectivity between various modes of travel (i.e. walking, biking and transit) as well as identifying connections among and within regional activity nodes (or livable centers).
- 4.3.a6** H-GAC pedestrian and bicycle staff will coordinate and offer technical assistance for other H-GAC initiatives as necessary including the 2040 RTP, commute solutions, air quality planning, and the subregional planning initiative.
- 4.3.a8** H-GAC staff will coordinate regular pedestrian and bicycle counts and surveys at areas throughout the TMA. Consultant services will be solicited to assist with tasks that may include bicycle and pedestrian counts and surveys while working with communities in the TMA to better assess the benefits of completed pedestrian/bicyclist facilities. The data will be used to determine the usage of pedestrian and bicycle travel to more accurately document pedestrian and bicycle travel demand and air quality benefits associated with investments in pedestrian/bicyclist infrastructure. Counts will also be used to document trends of facility usage over time. Data will be documented and mapped to show areas of greatest impact - **Consultant Assistance - \$100,000 TPF**
- 4.3.a9** H-GAC staff will coordinate with the Regional Plan for Sustainable Development by providing support and technical assistance on Plan elements related to pedestrian and

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bicycle travel, land use and transportation connections, and broader connections between livability and transportation. H-GAC staff will participate in coordinating this effort with the 2040 RTP, assist with transportation related advisory committees for the Plan, and help develop policy and implementation recommendations related to transportation and livability.

SUBTASK 4.4 Livable Centers (H-GAC C&E Planning Dept.)

This subtask provides outreach and technical assistance to local governments and private developers in achieving a more effective interface between development patterns and the transportation system; to develop policies, plans and projects that will help achieve this objective within H-GAC Transportation Management Area (TMA).

PRODUCTS

- 4.4.a1** Assist project sponsors in completing project readiness component for TIP eligibility or for other funding sources, including environmental processes, cost estimations, and partnership development.
- 4.4.a2** Refine criteria and conduct livable center project evaluation for next TIP funding round and other potential funding programs.
- 4.4.a3** Assist Transportation Department staff, including contributing to land use/transportation related RTP elements, preparation for 2040 RTP, Subregional Planning program and public outreach efforts.
- 4.4.a4** Conduct training workshops for local government staff and officials on implementing land use-transportation coordination principles such as context sensitive solutions, financing livable centers, urban design, sustainability, or Planning Commissioner training.
- 4.4.a5** Maintain updated database and map of significant centers, mixed use, transit oriented development, or sustainable mobility projects and local government planning and implementation projects pertaining to land use-transportation program.
- 4.4.a6** Acquire consultant assistance to conduct research on metrics regarding sustainable mobility projects based on a peer review of best practices and existing research. Metrics will be used to estimate the benefits of land use-transportation programs and projects and can be incorporated into RTP and TIP project selection criteria. **(Consultant Assistance Required)**
- 4.4.a7** Conduct analysis and utilize data for transportation planning and in presentations to local governments, reports to TAC and TPC.

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- 4.4.a8** Coordinate with the Regional Plan for Sustainable Development by providing support and technical assistance on plan elements related to land use and transportation connections, livable centers, and broader connections between livability and transportation. H-GAC staff will participate in coordinating this effort with the 2040 RTP, organize and manage transportation and land use related advisory committees for the Plan, assist with public outreach efforts, develop policy and implementation recommendations related to transportation and livability, participate in outreach and education to local governments regarding plan elements, and assist with plan development and writing (**Consultant Assistance Required**)
- 4.4.a9** Seek to develop new sources of funding to help support Livable Centers planning in diverse communities throughout the TMA.

Task 4 Funding Summary Table					
Funding Source	Task 4.1	Task 4.2	Task 4.3	Task 4.4	Task 4 Total
FHWA-FTA TPF	\$2,926,889	\$1,148,409	\$ 467,104	\$ 812,562	\$ 5,354,964
STP - Cat 7	\$1,022,909	\$ -	\$ -	\$ -	\$ 1,022,909
TxDOT SPR	\$ -	\$ -	\$ -	\$ -	\$ -
TxDOT Dist. Discret.	\$ -	\$ -	\$ -	\$ -	\$ -
TxDOT Fund 6	\$ 35,000	\$ -	\$ -	\$ -	\$ 35,000
TxDOT-82nd Leg.	\$ -	\$ -	\$ -	\$ -	\$ -
ARRA	\$ -	\$ -	\$ -	\$ -	\$ -
FTA 5304/5307/5309/5339	\$ -	\$ -	\$ -	\$ -	\$ -
FAA	\$ -	\$ -	\$ -	\$ -	\$ -
TCEQ-local	\$ -	\$ 23,950	\$ -	\$ -	\$ 23,950
Other Local	\$ 290,728	\$ -	\$ -	\$ -	\$ 290,728
TOTAL	\$4,275,526	\$1,172,359	\$ 467,104	\$ 812,562	\$ 6,727,551

TxDOT will apply transportation development credits sufficient to provide the match for FHWA PL-112 and FTA Section 5303 programs. As the credits reflect neither cash nor man-hours, they are not reflected in the funding tables.

TASK V

SPECIAL PLANNING STUDIES

The special studies of Task V include special one-time planning activities, major corridor studies/analyses, freight planning, and an update to the Regional Airport Airspace System Plan (RAASP).

Subtask 5.1 documents the MPO's efforts in addressing Safety issues in the region, including studies on the region's high-crash locations.

Subtask 5.2 provides for MPO support of Major Corridor Studies (MCS) and analyses. Specifically, participation in Study Steering Committees, assistance in public information and outreach activities, and travel model forecasting are programmed. This subtask also includes the continuing studies focused on low-cost access management solutions to some of the region's more congested corridors.

Subtask 5.3 programs funds to support state and local government hurricane evacuation planning, coordination, and implementation efforts.

Subtask 5.4 updates and maintains inventories of multimodal transportation facilities and services including public transit, measures their use, and develops and maintains an inventory of goods movement statistics to and from the region. This subtask also looks at general aviation development for the region.

OBJECTIVES:

- To expand our knowledge of the quantity, severity, and causes of traffic accidents in the region and look for cost effective solutions.
- To enable a more effective dialogue between the Freight stakeholder community and the public sector and to enhance the public sectors ability to respond to Intermodal issues.
- Coordinate the region's Major Corridor Studies and analyses.
- To continue to identify low-cost TSMs along the region's most congested corridors through ongoing access management studies.
- To coordinate and support state and local evacuation planning efforts.
- To examine the issue of commuter rail connectivity along selected corridors as a follow-up to ongoing regional freight study.
- Work on implementation of recommendations from the Regional Aviation System Plan, including the further examination of the potential need for an additional commercial aviation airport in the region.

EXPECTED PRODUCTS:

- The development of a long-range traffic safety plan to be integrated into the 2040 RTP
- The development of annual State of Safety in the Region reports outlining the traffic

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safety situation in the region

- The completion of access management studies for FM 1764 in Texas City, BF 1960 in Humble, SH 105 in Montgomery County, Murphy Road in Missouri City, and for Houston's Greater East End Management District
- The development of the "Together Against the Weather" initiative
- Completion of the Regional Goods Movement Study

PREVIOUS WORK

- Worked with TTI to regionally grow the Teens in the Driver Seat program to provide peer-to-peer teen outreach regarding safe driving
- Worked with Texas Children's Hospital to conduct bicycle, pedestrian, and child restraint outreach for young children
- Conducted an education campaign on the new child booster seat laws with most of the school districts in the region
- Developed a documentary with the Houston Police Department about the dangers of Driving While Intoxicated that was geared towards teens
- Completed access management studies for SH 6 and FM 1960
- Contracted with Rice University for the development of a flood prediction system for high-risk TxDOT facilities.
- Began the Regional Goods Movement Study to determine the transportation needs for the regional movement of freight.
- Conducted initial site evaluation of downtown locations for an intermodal transit terminal
- Staff served on Texas Southern University (TSU) Maritime Industry Advisory Board.
- Staff assisted the Gulf Coast Rail District in its study of the feasibility of commuter rail along the 290 Hempstead Corridor.
- Conducted an updated Regional Aviation System Plan through funding from the Federal Aviation Administration (FAA)

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 Regional Safety Council has been developed to bring interested and involved parties to the table to address regional safety in a holistic manner.

PRODUCTS:

- 5.1.a1** Develop a long-term Regional Transportation Safety Plan to identify areas of concern in transportation safety, appropriate countermeasures for addressing safety issues, and

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funding sources for remediating these issues (to be incorporated into the 2040 RTP).

- 5.1.a2** Continue to support the Regional Safety Council and its subcommittees involving transportation, law enforcement, emergency services, medical, safety advocates, non-profit, business, and other interested organizations.
- 5.1.a3** Conduct non-lobbying participation in local, state, and national initiatives involved in promoting increased traffic safety.
- 5.1.a4** Research and analyze crash data from TxDOT's Crash Record Information System (CRIS) and assist agencies in assessing problem locations with CRIS data.
- 5.1.a5** Coordinate trainings and workshops on safety-related issues for agencies and regional implementers, if available or needed.
- 5.1.a6** Produce an annual State of Safety in the Region report, summarizing the regional crash experience and various efforts to address traffic-related crashes in the region.
- 5.1.a7** Continue support for Safe Kids of Greater Houston/Texas Children's Hospital to provide education and outreach for bicycle, pedestrian, and child seat safety geared towards children in the region - **\$75,000 (\$60,000 STP, \$15,000 Local)**
- 5.1.a8** Continue support for *Teens in the Driver Seat*, an educational program devised by the TTI for teens to educate fellow teens on the dangers of driving at night, speeding, distraction (texting, cell phones, other teens in the vehicle, etc.), not wearing a seatbelt, and driving under the influence.
- 5.1.a9** Host a regional safety forum promoting best practices in traffic safety

SUBTASK 5.2 Major Corridor Studies

The requirements for Major Corridor Studies (MCS), formerly called major investment studies (MIS), have changed with the implementation in 2005 of the Safe, Accountable, Flexible, and Efficient Transportation Equity Act – A Legacy for Users (SAFETEA-LU). The guidelines have been streamlined to reduce costs and the level of effort for studies associated with regionally significant projects. Also, efforts were made to coordinate development of environmental assessments as part of early phases of the corridor analyses.

A MCS may consist of many of the following activities or tasks consistent with the level of feasibility, alternative analyses and/or environmental assessments needed:

- Identify corridor and sub area boundaries, denoting any subdivided areas of analysis within the study area.
- Determination of current and future travel demand along the corridor through travel forecasting support for Major Corridor Studies: Development of input data;

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Development of travel forecasts; Review of travel forecasts; and Documentation and summary of forecasting methodology and forecasting results.

- Selection of reasonable transportation alternatives, identifying the demand associated with each of those alternatives.
- Perform estimation of the cost effectiveness of each transportation alternative, using financial analysis.
- Documentation of public comments for each alternative. Comments are received via the public involvement process.
- Identification based on technical analysis and public comments, of the preferred transportation alternative or combination of alternatives.

A combination of funding sources including STP funds will be used for these studies depending, in part, on whether or not a transit alternative is viable for each project.

PRODUCTS:

5.2.a1 Active Major Corridor Studies - The following are major corridor studies with anticipated activity occurring during FY 2012-13 that are funded in part by TxDOT project planning funds, STP funds, and/or FTA 5309 funds [not including capital or operating funds] when provided by the MPO transportation partners. These major corridor studies are designed to enhance public participation in proposed transportation improvements of significant local and regional impact. In addition, the studies insure that a full range of transportation needs and solutions have been examined. As a result, the transportation investments recommended have been designed to work in concert to best meet identified transportation goals.

Regional Active Major Corridor Studies – FY 2012-13		
NAME	LIMITS	STATUS
SH99 Segments H, I-1 (TxDOT)	US 59 North to IH 10 East	MIS complete. EIS in progress. Anticipated ROD in June 2013
SH 288 (TxDOT)	US 59 (CBD) to SH 36 (Freeport)	MIS complete. EA anticipated approval by FHWA in June 2012
SH 35 (TxDOT)	IH 45 to SH 288 (Angleton)	MIS Complete. EIS completion anticipated in December 2012
SH 99 Segment B (TxDOT)	SH 288 to I-45 South [26.2mi]	MIS complete. EIS in progress – anticipated; ROD November 2013.
SH 99 Segment C (TxDOT)	US 59 South to SH 288 [26.4mi]	MIS complete. EIS in progress. ROD anticipated by June 2012.
US 90A/Southwest Corridor (METRO)	Fannin Park-and-Ride to Missouri City	Draft EIS anticipated late 2011. ROD in FY 2012-13
SH 3 Commuter Rail (City of Galveston)	Galveston to Downtown Houston	Continuation of the Mobility Corridor Analysis, FY 2012-13
Greater East End Circulator Study	Greater East End Management District in Houston	Alternatives analysis to be conducted

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- 5.2.a2** Completion of feasibility analysis in exploring alignment issues and new or upgraded track alternatives along the Eureka, Palestine, and Galveston Subdivisions to handle commuter trains as listed in the H-GAC American Recovery & Reinvestment Funds project list. **(Consultant Assistance Needed)**

Access Management Studies

- 5.2.b1** Consultant assistance, in conjunction with the City of Missouri City, in completing an access management study for Murphy Road from SH6 to the City of Missouri City's City Limits - **Consultant Assistance - \$27,200** (\$19,429 STP, \$7,721 Local)
- 5.2.b2** Consultant assistance, in conjunction with TxDOT, in performing/completing an access management study for SH 105 from Loop 336 to US 59 - **Consultant Assistance - \$68,300** (\$54,640 STP, \$13,660 TxDOT-Fund 6)
- 5.2.b3** Consultant assistance, in conjunction with the City of Texas City, in performing/completing an access management study for FM 1764 from SH 146 to 14th Street - **Consultant Assistance - \$17,200** (\$13,760 STP, \$3,440 Local)
- 5.2.b4** Consultant assistance, in conjunction with TxDOT, in performing/completing access management study for BF 1960 from FM 1960 west of Lee Road to FM 1960 east of Humble City Limit. **(Study complete –awaiting adoption)**
- 5.2.b5** Consultant assistance, in conjunction with TxDOT, in conducting an access management study for the US 90A corridor from SH 6 in Sugar Land to Spur 592 in Rosenberg.
- 5.2.b6** Consultant assistance, in conjunction with TxDOT, in conducting an access management study for FM 1092 from US 59 to Dove Country Road in Stafford.
- 5.2.b7** Consultant assistance, in conjunction with TxDOT, in conducting an access management study for SH 3 from Hughes Road to 20th Street in Dickinson.
- 5.2.b8** Consultant assistance, in conjunction with TxDOT, in conducting an access management study for FM 517 from Cemetery Road to Gum Bayou in Dickinson.
- 5.2.b9** Consultant assistance to conduct a post-implementation assessment of recommendations from prior access management studies.

SUBTASK 5.3 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

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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.

PRODUCTS:

- 5.3.a1** Redevelop and maintain the Web Based Evacuation Map, which allows for the tracking by local governments of law enforcement and transportation resource deployments during a hurricane evacuation, on an ESRI-based platform.
- 5.3.a2** Monitor the Web Based Evacuation Map during an evacuation event.
- 5.3.a3** Update and maintain the Zip Zone and Evacuation Route maps and provide to interested parties as requested.
- 5.3.a4** Complete development of the “Together Against the Weather” initiative and promote the program at meetings, workshops, and preparedness fairs - **Consultant Assistance - \$132,850**
- 5.3.a5** Provide on-going support and training to local governments and State regarding evacuation-related matters.

SUBTASK 5.4 Multimodal Initiatives

While improving the personal commute is perhaps a primary focus in transportation planning, freight movement is also a critical planning factor within the Houston-Galveston Area Council region. 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 will be 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 will be the focal point of this effort.

As our region continues to grow, aviation planning becomes an increasing need as capacity at the region’s primary airports continues to be filled. Improvements at alternative facilities need to be assessed to help alleviate the congestion.

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PRODUCTS:

Freight Planning

- 5.4.a1** Complete the Regional Goods Movement Study - April 2012 - **Consultant Assistance - \$362,200 ARRA**
- 5.4.a2** Begin implementation of identified needs and recommendations from the Regional Goods Movement Study.
- 5.4.a3** Provide staffing and coordination for the development of a Freight Advisory Committee, as recommended in the Regional Goods Movement Study.
- 5.4.a4** Facilitate Freight Advisory Committee and freight community input on the TIP, 2040 RTP, UPWP, and other relevant policy issues, technical studies, and programs.
- 5.4.a5** Respond to inquiries, surveys, and requests regarding the region's freight transportation network and freight planning process.
- 5.4.a6** Develop a freight educational outreach effort as recommended by the Regional Goods Movement Study. This will include outreach to shippers, intermodal interests and freight stakeholders as well as developing, maintain, and updating a user-friendly freight page on the H-GAC website containing freight-related information and data.
- 5.4.a7** Develop and refine and update freight related GIS information and data developed from the Regional Goods Movement Study.
- 5.4.a8** Develop a freight data collection portal to facilitate the exchange of information.
- 5.4.a9** Pursue grant funding opportunities through collaborative efforts with the H-GAC Air Quality program.
- 5.4.a10** Continue planning support to the Gulf Coast Freight Rail District (GCFRD) to assist in freight rail scenario modeling. **(Pass-Thru Funding to GCFRD)**

Aviation Planning

- 5.4.b1** Continue Regional Aviation Airspace System Plan (RAASP) development to include the integration of the new master plans for Bush Intercontinental and W.P. Hobby airports into the RAASP project list.
- 5.4.b2** Provide support for the Transportation Research Board (TRB) Airport System Planning Conference to be held in Galveston in 2012.

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Task 5 Funding Summary Table					
Funding Source	Task 5.1	Task 5.2	Task 5.3	Task 5.4	Task 5 Total
FHWA-FTA TPF	\$ 172,063	\$ 374,285	\$ 320,827	\$ 414,485	\$ 1,281,660
STP - Cat 7	\$ 132,000	\$1,367,829	\$ -	\$ -	\$ 1,499,829
TxDOT SPR	\$ -	\$ -	\$ -	\$ -	\$ -
TxDOT Dist. Discret.	\$ -	\$ -	\$ -	\$ -	\$ -
TxDOT Fund 6	\$ -	\$ 333,660	\$ -	\$ -	\$ 333,660
TxDOT-82nd Leg.	\$ -	\$ -	\$ -	\$ -	\$ -
ARRA	\$ -	\$2,000,000	\$ -	\$ 362,200	\$ 2,362,200
FTA 5304/5307/5309/5339	\$ -	\$ 490,000	\$ -	\$ -	\$ 490,000
FAA	\$ -	\$ -	\$ -	\$ 100,000	\$ 100,000
TCEQ-local	\$ -	\$ -	\$ -	\$ -	\$ -
Other Local	\$ 33,000	\$ 94,711	\$ -	\$ -	\$ 127,711
TOTAL	\$ 337,063	\$4,660,485	\$ 320,827	\$ 876,685	\$ 6,195,060

TxDOT will apply transportation development credits sufficient to provide the match for FHWA PL-112 and FTA Section 5303 programs. As the credits reflect neither cash nor man-hours, they are not reflected in the funding tables.

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2012-13 UNIFIED PLANNING WORK PROGRAM FUNDING SUMMARY

2012-13 UPWP Funding Summary						
	Task 1	Task 2	Task 3	Task 4	Task 5	TOTAL
	Admin. / Mgmt.	Data Modeling & Maintenance	Short Range Planning	Long-Range Planning	Special Studies	
Funding Source	FTA 44.21	FTA 44.22	FTA 44.24, 44.25	FTA 44.23	FTA 44.26, 44.27	
FHWA-FTA TPF	\$ 4,979,179	\$ 3,827,655	\$ 2,072,528	\$ 5,354,964	\$ 1,281,660	\$17,515,986
STP - Cat 7	\$ -	\$ 484,000	\$ -	\$ 1,022,909	\$ 1,499,829	\$ 3,006,738
TxDOT SPR	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TxDOT Dist. Discret.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TxDOT Fund 6	\$ -	\$ -	\$ -	\$ 35,000	\$ 333,660	\$ 368,660
TxDOT - 82nd Legislature	\$ -	\$ -	\$ 212,000	\$ -	\$ -	\$ 212,000
ARRA	\$ -	\$ 214,800	\$ -	\$ -	\$ 2,362,200	\$ 2,577,000
FTA 5304/5307/5309/5311/5339	\$ -	\$ -	\$ 4,484,250	\$ -	\$ 490,000	\$ 4,974,250
FAA	\$ -	\$ -	\$ -	\$ -	\$ 100,000	\$ 100,000
TCEQ-local	\$ -	\$ -	\$ -	\$ 23,950	\$ -	\$ 23,950
Other Local	\$ -	\$ 121,000	\$ 996,000	\$ 290,728	\$ 127,711	\$ 1,535,439
TOTAL	\$ 4,979,179	\$ 4,647,455	\$ 7,764,778	\$ 6,727,551	\$ 6,195,060	\$30,314,023
TRANSPORTATION PLANNING FUNDS (TPF) ONLY						
Federal Highway Admin. (FHWA PL-112) funding estimate:					\$11,802,826	*
Estimated FHWA PL-112 Carryover from FY 2010-11:					\$3,744,000	
Federal Transit Admin. (FTA Section 5303 [Sec. 8]) funding estimate:					\$3,827,710	
TOTAL TPF AVAILABLE:					\$19,374,536	
TOTAL TPF PROGRAMED:					\$ 17,515,986	
UNDER (OVER) PROGRAMMED:					\$1,858,550	
*2012 and 2013 estimates based on 2011 actual work orders, expect more.						
By minute order, the Texas Transportation Commission authorizes the use of transportation development credits as TxDOT's non-Federal share for FHWA (PL-112) and FTA 5303 funds. As the credits reflect neither cash nor man-hours, they are not reflected in the funding tables.						

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STATE & LOCALLY FUNDED PLANNING ACTIVITIES

METROPOLITAN TRANSIT AUTHORITY OF HARRIS COUNTY (METRO)

SPECIAL STUDIES

◆ U.S. 90A/Southwest Corridor

During FY 2012 and FY 2013, METRO will continue work that began in FY 2011 on the environmental clearance of the U.S. 90A/Southwest Corridor project. This work, in conjunction with the Federal Transit Administration, will identify and assess any potential natural and human environmental impacts that may be related to high-capacity transit improvements in the U.S. 90A Corridor. To date, this process has included public involvement programs, and meetings have already begun in order to discuss preliminary alignment and technology alternatives with regional stakeholders and the general public. METRO is anticipating that the U.S. 90A Draft Environmental Impact Statement will be completed in late 2011. The Final Environmental Impact Statement and Record of Decision schedule is dependent on funding strategy decisions. The projected cost of these planning activities is approximately \$5,000,000.

◆ Transit Facility Studies

In order to meet growing demand for park and ride service to communities south of Houston, studies have begun in earnest on new park and ride facilities in Missouri City, Brazoria County, and the El Dorado Boulevard/Gulf Freeway interchange area. METRO is in the process of securing Federal environmental clearance on the El Dorado Park and Ride is coordinating with Connect Transit to secure Federal environmental clearance on the Brazoria County Park and Ride. METRO is also participating in Fort Bend County's environmental clearance efforts for a Missouri City Park & Ride site. Environmental clearance of the El Dorado and Brazoria County Park and Rides is expected in summer 2011. Environmental clearance of the Missouri City Park and Ride is summer 2012. The projected cost of obtaining environmental clearance is \$225,000 for the El Dorado Park and Ride and \$100,000 for the Brazoria County Park and Ride. METRO's share of the cost of obtaining environmental clearance for the Missouri City Park and Ride is \$73,500.

◆ METRO Bike and Ride Feasibility Study

METRO successfully obtained a Subregional Planning Initiative grant from H-GAC for the METRO Bike and Ride Feasibility Study. In conjunction with H-GAC and other jurisdictional partners and stakeholders, the Study will guide METRO towards the best approach to providing connections and accommodations between METRO transit facilities (such as park and rides, transit centers, and rail stations) and regional bicycle facilities (such as bike lanes and shared-use trails) in order to strengthen the connection between bicycle and transit and increase opportunities for alternative, more sustainable modes of travel throughout the region. The Feasibility Study will be conducted during FY 2012. The total cost of the study is \$237,900 and METRO's share is \$54,717.

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METRO staff will also continue to analyze the METRO system to identify opportunities for service improvements. This could include additional transit center and park and ride facility studies, additional Quickline signature bus routes, and bus service adjustments.

LONG RANGE PLANNING ACTIVITIES

◆ METRO Vision

METRO is in the initial stages of completing METRO Vision, its 2040 Long Range Plan. This planning process began in FY 2011 and will involve several dozen meetings with regional agencies, stakeholders, and the general public. The goal of the meetings is to gain input and guidance for METRO's continued transit service improvements and expansion through the year 2040. The results of the meetings will help fulfill the goal of the plan itself, which is to develop a blueprint of short and long range transit solutions that will meet the Houston region mobility needs for the next 25 years. Once completed, this plan will also be included as METRO's submittal into the H-GAC 2040 Regional Transportation Plan.

METRO staff will attend public meetings, continue providing long range travel demand support and perform the analyses necessary to assist in determining the optimum transit system and service development plan. This planning effort will continue through FY 2012 and has a project cost of \$3,000,000.

HARRIS COUNTY PUBLIC INFRASTRUCTURE DEPARTMENT (HCPID)

Capital Improvement Plan. The HCPID Capital Improvement Plan (CIP) is an integrated capital projects plan for transportation within Harris County over a 5-year period that is reviewed every year. HCPID created this CIP to develop budgets, plans, and studies for a county infrastructure program. This allows HCPID to more effectively communicate its program within the county system and to the public at large, and serves as a guide to Harris County Commissioners Court when facing policy decisions involving financial matters. With the understanding that comprehensive planning is a continuous process, this CIP is flexible enough to respond to the changing conditions and needs of the County.

County Asset Management System. On September 28, 2004, Commissioners Court authorized the negotiation of consultant agreements for development of a County Asset Management System (CAMS) for tracking of county infrastructure. HCPID has successfully defined the high level needs to develop a centralized system for recording all county owned infrastructure and land. HCPID has successfully released CAMS version 1.0 Fall 2010 in a map based environment with almost all known capital assets presented in the system. HCPID is continuing to work with Auditor and Management Services to meet current and future reporting needs.

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Architecture & Engineering

Traffic Signal Operation and Maintenance Program. Harris County will continue to provide for routine, emergency, and annual preventive maintenance of **over 1250** traffic signals, emergency and school zone flashers that are maintained and operated within Harris County. The annual contract amount for maintenance in FY 10-11 was \$1,900,000.

Traffic Planning & Engineering Studies. Harris County will continue to perform warrant studies for regulatory traffic control devices (i.e. stop signs, signals, speed zones, school zones, etc.) in order to comply with the Texas Manual on Uniform Traffic Control Devices.

Traffic System Management. Houston TranStar is a consortium partnership formed by the transportation and emergency management agencies in the greater Houston region. The partnership is comprised of four agencies, including Harris County. Each partner agency has brought high-tech systems to the state-of-the-art center to control their individual functions. These resources are in-turn available to assist and advise other partner agencies. The Houston TranStar partnership is responsible for coordinating the planning, design and operations of transportation systems and emergency management functions and coordinates the development and deployment of Intelligent Transportation Systems (ITS). ITS technologies such as Speed Sensors, Closed Circuit Television Cameras and Dynamic Message Signs are tremendously helpful to travelers, including transit vehicle operators, when emergency evacuations are conducted or at any other time severe weather threatens the greater Harris County region.

In addition to providing support to the field maintenance and construction activities, the traffic management personnel located at Houston TranStar are aggressively engaged in the development of an advance traffic management program. The primary goals of this group are focused on ensuring that Harris County traffic signal systems are managed in a thorough, cost-effective manner, and enhancing mobility along major traffic corridors throughout the County. In order to meet these goals, various state-of-the-art technologies are being implemented. These goals related to the traffic system management program include the development, implementation, and management of traffic signal system control strategies; the fiber optic traffic signal communication network; the development of traffic signal communication equipment standards; and the implementation of practical, new technology.

Air Quality or Emission Related Studies. Harris County will continue to work with TxDOT and other agencies to provide local matching funding in the Congestion Mitigation and Air Quality (CMAQ) Program for projects that will improve air quality by reducing traffic congestion

Roadway Projects. There are several requirements that Harris County must address in the permit and one of the requirements is to operate roadways in ways that reduce pollutants. Harris County is meeting the permit requirements by developing controls to effectively prohibit non-storm water discharges to the drainage system and to reduce the discharge of pollutants from the municipal separate storm sewer system (MS4) to the maximum extent practicable.

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Water and Wastewater Infrastructure Needs Analyses and Facilitation. Pockets of suburban areas without public water and wastewater services exist throughout unincorporated Harris County. This creates barriers to health, quality of life and economic growth and development both in the affected communities and in those communities which surround them. HCPID is working closely with other county departments and with organizations outside the county to identify areas in need, determine the precise nature of their problems, and formulate long term, permanent solutions. To date, three major master studies have been completed, and another is currently underway. HCPID has progressed to infrastructure design and construction facilitation in several areas showing critical need, and is committed to continue to address this issue until it has been resolved.

NPDES / TPDES Programs. The National Pollutant Discharge Elimination System (NPDES) permit is a federally mandated program to regulate point source discharges into the waters of the United States. The City of Houston, Harris County, the Harris County Flood Control District and the Texas Department of Transportation (TxDOT), the Storm Water Management Joint Task Force, prepared and submitted a two-part joint permit application as co-permittees. The NPDES permit, now administered by the State of Texas under the Texas Pollutant Discharge Elimination System (TPDES) permit, requires each co-permittee to develop a Storm Water Management Program and implement 11 program elements to reduce pollutants in storm water runoff. The program elements include activities to effectively prohibit illegal dumping and disposal of hazardous chemicals, monitor and analyze storm water, and promote the proper management of pesticides, herbicides, and fertilizers. Management programs also required by the TPDES permit include, among other things, the implementation and maintenance of structural and non-structural best management practices to reduce pollutants in storm water runoff from residential, commercial and industrial areas and construction sites.

To support implementation of these management programs, Harris County has also developed and implemented a comprehensive Public Education Program to communicate the importance of litter prevention; proper management of pesticides, herbicides, and fertilizers; public reporting of illicit discharges; proper management of used oils and toxics; proper management of household hazardous wastes; and minimizing contaminated runoff from new developments, re-developments, and construction sites. More information regarding the NPDES/TPDES program can be found at www.cleanwaterways.org

Flood Control District

Hike & Bike Trails. Harris County Flood Control District (the District) manages and maintains more than 2,500 miles of bayous, creeks and streams in the County. These waterways not only serve as the County's primary storm water drainage infrastructure, but also offer unparalleled opportunities for greenbelt recreation and open space areas. The establishment of trails along waterways serves three of the most popular recreational activities in Texas - walking, bicycling, and running. They serve a greater number of people for less cost than just about any other recreational facility. An initial trails system along the Harris County drainage infrastructure has been under development for more than fifteen years. Expanded development of trails along the bayous in our community is an important part of Harris County's future. Through successful partnerships, many miles of recreational trails have already been built on rights of way. Neighborhoods, schools and parks have been

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connected by these trails, and an important form of transportation and recreation has been provided. The District supports the further development of this trail system and will continue to facilitate the implementation of this program. Please see www.hcfc.org for more information about the District.

FloodWise (Formerly the Urban Stormwater Management Study). This substantial study is being sponsored by the Harris County Flood Control District, the City of Houston, Harris County, and the Texas Department of Transportation (TXDOT), with the District serving as the managing agency. With advances in technology, additional rainfall and stream gage records, the tools developed during the Tropical Storm Allison Recovery Project (www.tsarp.org), questions raised during the development of the District's updated Policy, Criteria, and Procedure Manual, and public interest in the subject, an opportunity exists to improve the understanding of issues related to rainfall & stormwater runoff, development & mitigation, and flooding & drainage.

This study will include two primary components. The first is a technical component, which will help us all gain a better understanding of natural and urban flooding and drainage systems – from when the rainfall hits the ground until it reaches Galveston Bay. Confirming and/or recommending changes to local stormwater management policy, regulations, and criteria, based on science and engineering, is a major portion of the technical component of this study. The technical component of this study will also help support watershed master plan updates, laying out and designing future land developments, and local governments' future capital improvement programs.

Public communications will be the other primary and equally important component of this study. The public's perceptions, concerns, and expectations regarding flooding and flood risks will be identified, which will help develop the technical scope of services, as well as help shape study recommendations. The study will also work toward increasing public awareness and understanding of flood risks and the work being done to lessen such risks.

Harris County Flood Warning System. The Harris County Flood Warning System (FWS) provides accurate and consistent rainfall, stage, and other data on a real time basis. The data is provided in a useful form to the District, National Weather Service, Harris County Office of Homeland Security and Emergency Management (OHSEM), and other Harris County officials, agencies, and the public to facilitate decision making before, during, and after storm events to reduce the risk of property damage, injuries, and loss of life.

The Harris County FWS is operated and maintained by the District and consists of 301 sensors at 137 locations throughout the County. Rainfall, stage, weather and road flooding sensors from ten other partner agencies in the region have been incorporated into the data receiving and reporting network, which adds another 335 sensors at 112 locations. The total Regional Warning System consists of 636 sensors at 249 locations. The Texas Department of Transportation, METRO, and the City of Houston have water level and weather sensors at critical locations on their roadways.

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Watershed Master Planning. The goal of the Watershed Master Plan (WMP) project is to develop and maintain a long range strategic plan as well as watershed-specific master plans to guide and support project and land development activities in each of the 22 watersheds in Harris County. The WMPs are evolving documents that address, to the degree that data is available, the many facets of the District: projects, trends, performance, funding, capital facilities, expansion of the public transportation infrastructure, development, multi-use opportunities, goals, and objectives. These plans will be generated using the latest tools and technologies and will pull from years of historical data and knowledge within each watershed.

The WMP project will produce master plans, on a watershed basis, that:

- Have sufficient and appropriate detail to communicate the District's strategy to reduce damages associated with the risk of riverine flooding along the bayous, creeks, and channels in Harris County; and that provide effective guidance and support to the District's Capital Improvement Plan.
- Provide proper guidance and criteria in support of new infrastructure and growth.
- Provide a means to improve the aesthetic, environmental, and recreational quality of Harris County's waterways and flood control facilities.

Harris County Flood Control GIS. The Harris County Flood Control District utilizes GIS extensively in many aspects of the District's mission. The mission of the District is to provide flood damage reduction projects that work, with appropriate regard for community and natural values. Once projects are built and become part of Harris County's vast 2,500-mile, multi-billion dollar stormwater drainage system, GIS is used to inventory the system. The inventory is always available and up-to-date, so maintenance and potential problems can be quickly tracked and resolved. Also, increased quality of life is assured through close GIS monitoring of environmental conditions and other aspects that affect the community

The District delivers the data the public needs to be better informed by harnessing GIS's powerful ability to graphically illustrate and organize that data. One way we're doing it is via the Internet. The ground-breaking data generated from the Tropical Storm Allison Recovery Project has produced the most accurate FEMA Flood Insurance Rate Maps ever available for Harris County, and the public has been able to access and view the new data and resulting maps throughout the study on the project's website, www.tsarp.org. The result: a public that has greater awareness and is better prepared for the next flood.

Toll Road Authority

HCTRA Capital Improvement Plan. The Harris County Toll Road Authority (HCTRA) is responsible for planning and implementing the County's toll road system. The current plan of projects will require bond fund, commercial paper, and revenue fund financing. The plan currently includes expanding the capacity of the existing system, ramp and mainlane plaza improvements, and existing system improvements.

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HARRIS COUNTY COMMUNITY SERVICES DEPARTMENT - OFFICE OF TRANSIT SERVICES

Introduction. In late 2005, The Harris County Community Services Department (Formerly the Community & Economic Development Department) commissioned a study on the transit needs of Harris County and developed The Harris County Comprehensive Transit Strategy. This strategy encompassed the expansion of various County transportation programs including a previously existing Medical Services delivery program operated by the Harris County Social Services Department and the Harris County RIDES program. The strategy also recommended additional services such as Park and Ride and local fixed route services for approximately 1/3 of the County not served by METRO. The result of this strategy was the creation of the Office of Transit Services within the Harris County Community Services Department (OTS).

In early 2007 the Harris County Social Services Department was merged into the Community Services Department. As a result of this merger, CSD acquired the Harris County Transportation Division which had a 50 year history of providing transportation services through out the county for elderly, disabled and low income residents. In late 2008, the Harris County RIDES program was transferred from the Harris County Judge's Office to CSD. The RIDES program provides a taxi voucher program and coordinates the transportation needs of over 19 local social service and human service agencies. OTS operates two Park and Ride Services in Baytown and Pasadena Texas. Both of these services utilize Houston METRO as the service contractor under contract with Harris County. Houston METRO is unable to operate in these communities as they fall outside of their service area but OTS has determined that the utilization of Houston METRO as the service provider assists in the overall goal of coordination of services.

Harris County and the surrounding counties in the region have a high level of interagency cooperation and utilize intergovernmental cooperation in their planning process. The Office of Transit Services (OTS) is an active participant in this cooperative effort to plan a transportation system that meets everyone's needs. OTS participates on the region's Transportation Policy Council, the Technical Advisory Committee, and the many interagency subcommittees of the Houston-Galveston Area Council (H-GAC). OTS also works closely with Houston METRO, and Fort Bend Transit and Connect Transit of Galveston County to implement federally required planning procedures. OTS will continue to work closely with H-GAC and other area transportation providers to develop and implement policies and programs.

Data Development and Maintenance Activities. OTS routinely collects and monitors a wide range of performance data to ensure that the OTS programs are achieving desired goals. Route level data is collected and monitored to provide input for route modifications to better serve the public and operate more efficiently. OTS anticipates that data collection efforts will continue during FY 2010-2011, and we will continue to collect operational data on a monthly basis. The work program will include ongoing monitoring of data and model performance and coordination with H-GAC staff.

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Short-Range Planning Activities. OTS planning staff is responsible for updating the Transit Services Program. All existing and proposed routes are evaluated in terms of cost and projected ridership. Routes are periodically updated to identify potential improvements. Planning staff will also conduct research on under performing routes to determine if changes would improve ridership.

OTS will continue to monitor all existing services to determine their efficiency and to identify possible improvements. Service studies and other planning activities will be done on potential and existing routes and park and ride services. OTS will also conduct the following short-range planning activities within the FY 2010-2011 years:

Park and Ride Services & Lots – OTS operates two park and ride lots; one in Baytown, Texas, and the other in Pasadena, Texas. Both of these projects are operated from shopping mall parking lots under five year use agreements. There is no charge for the use of the lots.

In January 2011, at the request of the City of Pasadena, OST conducted a review of the Pasadena Park and Ride to determine the suitability of a new location. The City of Pasadena owns the Corrigan Shopping Center at Pasadena Boulevard and State Highway 225 and believed that it would make a better location for the current Park and Ride service. OTS conducted a study of the area and determined that the new location could potentially increase ridership by over a 100 boarding's per day.

Subsequent to the above actions, the City of Pasadena announced that it would cease funding the local match funds for the Pasadena Park and Ride effective May 31, 2011 due to budgetary constraints.

OTS will continue to seek other regional opportunities to promote Park and Ride service to eastern Harris County. This would include conducting feasibility studies to determine the long term viability of present locations or seeking new locations within the region.

Fixed Route Services – In July 2008, OTS began fixed route service in the City of Baytown, Texas in eastern Harris County. In January 2010 OTS began additional fixed route service to The Highlands, McNair, Barrett Station, Crosby, Pasadena and La Porte as a demonstration project. Services were also provided to the Cities of Webster, Nassau Bay and Seabrook. The funding for this service was through a Social Services Block Grant which expires in May 2011. With the exception of Webster, Nassau Bay and Seabrook, these services will continue and the local match funds are being provided by the local communities which are served. The cities of Webster, Nassau Bay and Seabrook have temporarily opted out of the program due to budgetary issues after Hurricane Ike.

OTS will continue to pursue other opportunities in eastern Harris County to provide fixed route bus service. Additional preliminary planning has been done

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to expand service to Galena Park and Jacinto City but the local communities have not been able to provide the necessary financial resources and local match funds.

Harris County RIDES and Medical Delivery Services – CSD will continue to operate the Harris County RIDES program and its Medical Delivery Services programs. These programs are vital to the community as they serve the needs of elderly, disabled and low income residents of the County not served or underserved by Houston METRO. Harris County RIDES Non-emergency Transportation – CSD will continue to operate the Harris County RIDES non-emergency transportation program. This program is vital to the community because RIDES coordinates many local transportation resources to provide basic mobility for people with disabilities, seniors and low-income residents of the County not served or underserved by Houston METRO. RIDES fills in the gaps to provide non-emergency transportation service by providing curb-to-curb demand response service. RIDES is a subsidized voucher program that allows eligible customers and participating agencies to purchase transportation tickets at a discount. Customers are able to select shared ride providers or taxi cabs to meet their transportation needs. Taxi cabs offer RIDES clients the flexibility to have service 24 hours per day, seven days a week.

In addition, RIDES offers mobility management through its' RIDES+ program by providing one-stop shopping for transportation information and assistance to older adults, and persons with disabilities in Harris County and beyond. RIDES+ provides Ambassadors on the shared ride service as the human-to-human link for assisting this targeted population with overcoming travel challenges, and as a result, enable older adults and people with disabilities the ability to remain living independently in the community. RIDES + extends the Harris County RIDES core transportation coordination program by addressing the greater issue of "mobility" or "lack of mobility" experienced by older adults and persons with disabilities. Community mobility is vital to quality of life. Evaluation of services and outreach programs are necessary to evaluate success and require ongoing planning services. Customer surveys are an important part of this process and surveys are conducted annually.

In September of 2011, Harris County Transit will deploy an electronic debit fare card and data collection system to offer improved access and more efficient services to RIDES clients. This solution uses swipe card technology and provides interface with both Taxi Cab companies, shared-ride providers and the fixed route contracted service in Pasadena. The system will replace paper vouchers and streamline back office operations. This system will also be deployed on all fixed route buses to used with a fare card

State & Locally Funded Planning Activities. OTS participated in the development of The Gulf Coast Region Public Transportation Coordination Plan and participated in development of the 2011-2014 Transportation Improvement Program (TIP). OTS intends to expend local

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and federal funds in support of all planning activities including Livable Communities Initiatives and Transit Oriented Development projects.

Long-Range Planning Activities. Harris County and OTS are participants in the development of the region's Regional Transportation Plan (RTP) and the Regional Transit Framework and Transit Plan. As such, OTS will continue to coordinate its transit activities with other transit providers where feasible including its planning activities. The Harris County Comprehensive Transit Strategy identifies the overall system program for Harris County OTS through 2015 and identifies corridors and communities for potential development of services. OST will continue to explore other service opportunities in those areas not served or underserved by Houston METRO

Special Studies & Activities

Feasibility Studies – OTS may undertake or participate in feasibility studies for additional services including fixed route, flex route and additional Park and Ride services. These studies may lead to further planning activities and the development of Interlocal agreements for the provision of services.

Geographic Information Systems (GIS) - OTS is presently utilizing Automated Vehicle Location (AVL) systems on its fixed route service corridors. The use of these systems has enabled OTS to determine which transit stops have the highest usage and thereby determine the need for transit shelters. In the case of the Baytown Fixed Route Service, Lee College is a participant with the service and service provides free service for all Lee College Students. Through the use of GIS technology and the sharing of student addresses, OTS is in an excellent position to determine future transit corridors to serve the needs of the community. In addition, onboard surveys taken of transit users in Baytown now request the address of the rider in order to locate their proximity to the transit line enabling OTS gauge rider behavior.

Grant Planning, General Transit Planning and Planning Administration – This task supports OTS planning activities related to grant development and management, financial management and transit operations.

Marketing Activities - OTS marketing activities includes developing and distribution of materials, such as schedules and maps, brochures, and destination guides. These materials are also available on the OTS's Web site. All comprehensive communication is conducted in English and Spanish.

Customer Surveys – Customer surveys are conducted at least semiannually. The surveys are designed to determine the satisfaction OTS riders with the various services provided and to determine origins and destinations of passengers. Data is collected via self-administered surveys or through the interview process by an OTS representative. In addition to measuring satisfaction, results from this survey are used to pin point areas for improvement.

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Bicycle Racks – Bike racks have been installed on all buses providing fixed route service. As transit shelters are established, shelter bike racks will be provided on the basis of customer surveys.

CITY OF BAYTOWN

The City of Baytown will be conducting the following planning activities:

- Conducting City-wide signal synchronization studies
- Formalization of Process for implementation of Sub-Regional Detention Master Plan
- GIS Documentation of present condition of Storm Drainage system, Water Distribution system, and Waste Water Collection and Distribution systems and project development and programming with the goal of implementing up-to-date maintenance and system upgrades.
- Major thoroughfare plan (mobility plan)
- Feasibility of a collector road parallel to Garth Road from Interstate 10 to Rolling Brook
- Access management plan for Garth Road from Interstate 10 to Rolling Brook
- Amendments to the subdivision regulations concerning improved road, side walk and trail standards as well as standards for traffic analysis plans (TIA's).

CITY OF HOUSTON

City Mobility Plan, Phase II

The City has recently completed the first phase of the City Mobility Planning Process. A portion of this updated the regional transportation model to provide a more detailed model within the City of Houston. The second phase of the City Mobility Planning Process will take a more in-depth look at critical sub-areas of the City. These efforts along with continuing use of the regional transportation model will identify potential changes for the Major Thoroughfare and Freeway Plan and will generate potential projects for further evaluation and inclusion in the City's Capital Improvement Program. Some of these sub-area mobility planning studies are the Inner West Loop Mobility Study, the Greater West Houston Subregional Planning Initiative and the Texas Medical Center Transportation Master Plan.

Inner West Loop Mobility Study

The study is a comprehensive multi-modal transportation study that integrates land use and growth scenarios within the study area. The studies will look at street network inclusive of the freeways and tollways; transit modes like commuter rail, light rail, bus rapid transit, local bus, vanpools, car pools, park & ride facilities, etc.; intelligent transportation systems; pedestrian and bicycle network; and include other transportation strategies. The purpose of the study is to identify short, medium and long range project

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needs that would improve the mobility within the study area. The study area is defined by IH 10 to the north, CBD/Spur 527 to the east, US 59 to the south, and IH 610 to the west.

Texas Medical Center Transportation Master Plan

This master plan project is co-sponsored by the City of Houston, H-GAC and Texas Medical Center. The scope of the project involves conducting mobility analysis at planning and operational levels in the study area. The general study area is bound by US 59/Alabama to the north, Scott Street to the east, IH 610 to the south, and Buffalo Speedway to the west.

Greater West Houston Subregional Planning Initiative (SPI)

This project aims to integrate land use and growth scenarios by examining the street network, transit modes, ITS, bicycle/pedestrian, and other transportation strategies to respond to current and future mobility and quality of life issues in the Greater West Houston subregion. With serious and growing levels of congestion, connectivity, and accessibility traveling to and from West Houston's employment destinations, this subregional plan will proactively address short-range and long-range transportation and land use needs. The study is co-sponsored by COH, Energy Corridor, Westchase District and Memorial City Management District through H-GAC's Subregional Planning Initiative. The study area is generally defined by FM 529 to the north, Memorial Villages to the east, Bellaire Boulevard to the south, and City of Katy/SH 99 to the west.

Consolidated Transportation Plan

The goal of the CTP is to develop a framework and a gee-database for integrating information on plans and projects from agencies and special districts into one central location. CTP process will allow agencies to update their projects (include planning, design, operational, maintenance or implementation) and review ongoing transportation plans and project with the City of Houston. This coordinated effort should help with prioritizing, scheduling, coordinating and funding of projects through Houston.

Needs Assessments for Street and Stormwater Infrastructure

The City is assessing needs for storm and street infrastructure using a series of field data and modeling tools. The City completed in 2011 a surface assessment of all City roadways utilizing the Street Surface Assessment Vehicle (SSA V) to collect electronic field data related to roadway surface conditions and computing Pavement Conditions Ratings (PCR) for planning of street infrastructure. The SSAV data is combined with the Stormwater Enhanced Evaluation Tool (SWEET) to prioritize areas in most need of improvement to standards. Future Capital Projects will be prioritized on benefits to the user (traveling public, residences, businesses, etc) compared to the construction and operation costs. Focus will be placed on addressing known structural flooding, existing streets with a Level of Service F and pavement with a PCR of less than 50.

Bike and Pedestrian Studies

The City has an adopted bikeways master plan that is currently being updated to serve as one component of an overall transportation system. City staff is utilizing public input to address mobility needs and problems towards developing an overall transportation grid system for bicycle travel. The City is partnering with local non-profits, TIRZ and management districts to

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further expand the bikeway system, utilizing city roadways and bayous, as well as capitalizing upon larger projects to provide bikeway connectivity. The City is utilizing public/private partnerships to build and maintain existing and future bikeways while exploring the feasibility of new connections to the Houston bikeway network.

The City's Sidewalks program constructs pedestrian facilities as part of roadway and intersection improvement projects, safe routes to school and to assist citizens with mobility restrictions. The City is currently developing a prioritization system for addressing pedestrian connectivity between residences and major attractors, such as schools, community centers, local businesses and parks, with a significant emphasis on access to transit. The City continues to upgrade signalized intersections utilizing LED technology and installing pedestrian countdown signals. City staff are exploring funding opportunities to increase the amount of sidewalks constructed on an annual basis.

Clear Lake Ped-Bike Special District Study

The Clear Lake Ped-Bike Special District Study area focuses on pedestrian-bicyclist safety and access in the Clear Lake Area within the City of Houston. The limits of the project study area include El Dorado and Space Center Boulevards to the north and northeast, respectively, IH-45 to the west, and Nasa Road One in the south.

The overall goal of the study is to identify pedestrian and bicyclist improvements within the area. The plan shall provide recommendations for improving access and safety for pedestrian-bicyclist at existing crossing signals and along roadways and other corridors within the study area. The study should also identify potential pedestrian-bicyclist access points to local businesses, location of secure bicycle parking, and other innovative ways of improving pedestrian and bicyclist safety within the study area. The conceptual plan should emphasize routes and facilities that will encourage biking and walking for transportation purposes in an effort to increase the percentage of trips made by pedestrians and bicyclists within the study area.

Fifth Ward Ped-Bike Special District Study

The Fifth Ward Ped-Bike Special District Study area focuses on pedestrian-bicyclist safety, circulation and access in a portion of the Fifth Ward within the City of Houston. The limits of the project study area include Mills/Oats Street to the north, Waco/Hirsch Street to the west, Canal Street to the south and southeast, and McKee Street to the east. The study area benefits from its close proximity to pedestrian and bicyclist destinations such as downtown Houston and the existing trail along Buffalo Bayou. However, access to these destinations is severely limited due to physical barriers such as IH-10, US-59, several active rail lines, and large parcels of industrial land. Pedestrian and bicycle access to destinations within the Fifth Ward and beyond is especially important as many residents of the community do not own personal vehicles and rely on walking, bicycling, and transit for transportation. Key objectives of the study include:

- Strengthen pedestrian and bicycle connections between residential and commercial areas within the Fifth Ward to key destinations such as downtown Houston and Buffalo Bayou
- Identify viable strategies to improve connectivity and safety across freeway barriers for pedestrians and bicyclists

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- Identify ways to improve the conditions of existing bikeways and increase their visibility
- Prioritize sidewalk needs around key destinations such as schools and transit stops

Washington Avenue Livable Centers Study

The study area extends west from the CBD along the Washington Avenue Corridor to the Westcott Circle. The Livable Centers study will include a comprehensive overview of existing area data, past studies and community concerns including parking and a strong focus on mobility through the area and public investment opportunities. It will include a Public Realm Improvement / Implementation Plan; Parks/Open Space Improvement Opportunities; a Multimodal Mobility Plan; regulatory and public sector facilitated recommendations; and a roadmap for future projects. All recommendations will be based on strengthening the area's existing qualities and providing real strategies that can be implemented over time.

Major Thoroughfare and Freeway Plan Annual Amendments

Major Thoroughfare and Freeway Plan (MTFP) is an effective instrument in guiding the urban and suburban development, and providing mobility and accessibility to a large number of people who reside and work in this general area of Houston and its Extraterritorial Jurisdiction (ETJ). Annually, the City produces the MTFP. In compiling the MTFP, the City listens to developers and neighborhood citizens about such issues as congestion, mobility and future development plans. In the plan, the city identifies sections of roadways (either thoroughfares or major collectors) that are in need of expansion, either by lengthening or widening. The plan serves as notice to the public intending to develop land adjacent to the identified roads that certain right-of-way and development codes requirements will apply.

Sustainable Communities Planning Grant

City of Houston along with H-GAC and 23 consortium partners, recently received a \$3.75 Million Sustainable Communities Regional Planning Grant from US Department of Transportation, the US Department of Housing and Urban Development, and the US Environmental Protection Agency for the 13-County Houston-Galveston Planning Region. The three year study is projected to be completed by February 2014.

Texas Transportation Commission 1-69 Segment Committee's for Corridor Segs 2 & 3

These committees are two of five Segment Committees in Texas created by the State for the purpose of providing input and recommendations on the designated routes of the 1-69 Corridor in their areas. The Segment Committees are composed of members representing cities, counties, metropolitan planning organizations, ports, chambers of commerce, economic development organizations, and the Texas Farm Bureau along the 1-69 Corridor. The Segment Committees continue to meet and study environmental planning features and plan the best route for their communities. The Segment Committees will report their findings, advice and recommendations to the Texas Transportation Commission and TxDOT's Executive Director.

CITY OF MISSOURI CITY

- The City, in conjunction with H-GAC, will be commissioning an access management study for FM 1092/Murphy Road from SH6 to the City of Missouri City's North City Limits.
- The City will also be participating with H-GAC and other Fort Bend communities in the development of a County Subregional Plan to help in the coordination of land-use and transportation and to develop future projects for the 2040 Regional Transportation Plan.
- The City is also planning for future commuter rail along the US90A corridor, which will include the associated amenities, such as transit oriented development.

THE GULF COAST CENTER/CONNECT TRANSIT

- The Gulf Coast Center/Connect Transit has accomplished most of the planning activities identified in the previous UPWP dated July 24, 2009. The few remaining planning activities not completed have been carried forward to the 2012-2013 UPWP. They are as follows:
- Texas City and Lake Jackson Urbanized area – Connect Transit will develop a regional ADA Plan and provide service for both the Texas City and Lake Jackson urbanized areas through an inter-local agreement.
- Lake Jackson Urbanized area – Connect Transit will study the feasibility of Intercity bus service for Brazoria county providing connections from rural areas of Brazoria county to the urbanized fixed route service called Southern Brazoria County Transit which began service June 2010.
- Houston Urbanized Area - Galveston county – Connect Transit will study the feasibility of a north bound Park and Ride service from the Victory Lakes Park and Ride to the down town Houston Metro facility. The Victory Lakes Park and Ride is scheduled to start the south bound service by January 2012.

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Appendix A

Transportation Policy Council and Technical Advisory Committee Memberships

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Introduction

H-GAC has been designated by the Governor of Texas as the Metropolitan Planning Organization for transportation planning in the Houston-Galveston metropolitan area. The metropolitan area includes Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties. Under the provisions of the Intermodal Transportation Efficiency Act (ISTEA), this eight-county area has also been designated as a Transportation Management Area (TMA).

Transportation Policy Council (TPC)

With the passage of the Intermodal Surface Transportation Efficiency Act (ISTEA) in 1991 by Congress, the roles and responsibilities of Metropolitan Planning Organizations (MPOs) changed significantly. MPOs, in cooperation with their State governments, were now responsible for developing transportation plans and programs for urbanized areas. Under the provisions of ISTEA, each MPO develops and implements transportation plans and programs with the advice and consent of a transportation planning committee.

The H-GAC MPO's Transportation Policy Council (TPC) was formed in 1992 to reflect the enhanced role of the transportation planning committees in selecting and programming transportation projects mandated by ISTEA. The TPC provides several important functions. First, it serves as the MPO's policy board. Second, it is responsible for approving all region-wide federally-funded transportation plans and programs, developed in a manner constant with federal and state regulations. Finally, it provides policy guidance on transportation issues to the H-GAC Board of Directors. H-GAC provides staff support to the TPC, and its various subcommittees described below.

Membership on the TPC consists of chief elected officials and/or their designated alternates from the five major cities and each of the eight counties within the TMA. The Texas Department of Transportation (TxDOT) and the Metropolitan Transit Authority of Harris County (METRO) each have a representative on the TPC. Counties and cities without voting members are represented by members appointed by the H-GAC Board of Directors. Three additional membership positions were added to the TPC in January 1999. Two positions were for smaller cities in Brazoria County and Harris County, and one for other transportation interests. The TxDOT- Beaumont District was added in 2005. The Gulf Coast Rail District was included in 2010.

Technical Advisory Committee (TAC)

Due to the increasing administrative and technical complexities of transportation projects and policy considerations within the TMA, the TPC create the Technical Advisory Committee (TAC) in 1992 to assist with technical advice and analysis of MPO transportation plans and projects. The TAC is a permanent standing committee of the TPC. Membership in the TAC is comprised of officials, professionals, and as appropriate, citizens who have technical expertise in developing and implementing transportation plans and projects. Membership is representative of various transportation modes and interests to ensure that a broad spectrum of perspectives is considered during the review and analysis of transportation plans and proposals.

H-GAC 2012-13 Unified Planning Work Program

In order to efficiently perform its advisory duties, the TAC has created the following subcommittees:

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.

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

Operations Task Force - The Operations Task Force is responsible for the development of a comprehensive conceptual plan for regional traffic operations projects.

Regional Transportation Plan (RTP) Subcommittee - The RTP Subcommittee assists 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-Air Quality (TAQ) Subcommittee - The TAQ Subcommittee assists MPO staff in expanding existing TDM programs and projects and developing new programs for TIP consideration and inclusion as well as implementation of those projects or programs that are consistent with and meet or exceed the Air Quality and Commute Solutions Cost-Benefit Analysis. It also assists MPO staff with the development of on-road transportation emission reduction measures.

Regional Transit Coordination (RTC) Subcommittee - The RTC Subcommittee provides guidance regarding the implementation of regional transit coordination pilot projects. The subcommittee also assists with development of initiatives that expand and improving the efficiency and effectiveness of the current regional transit system.

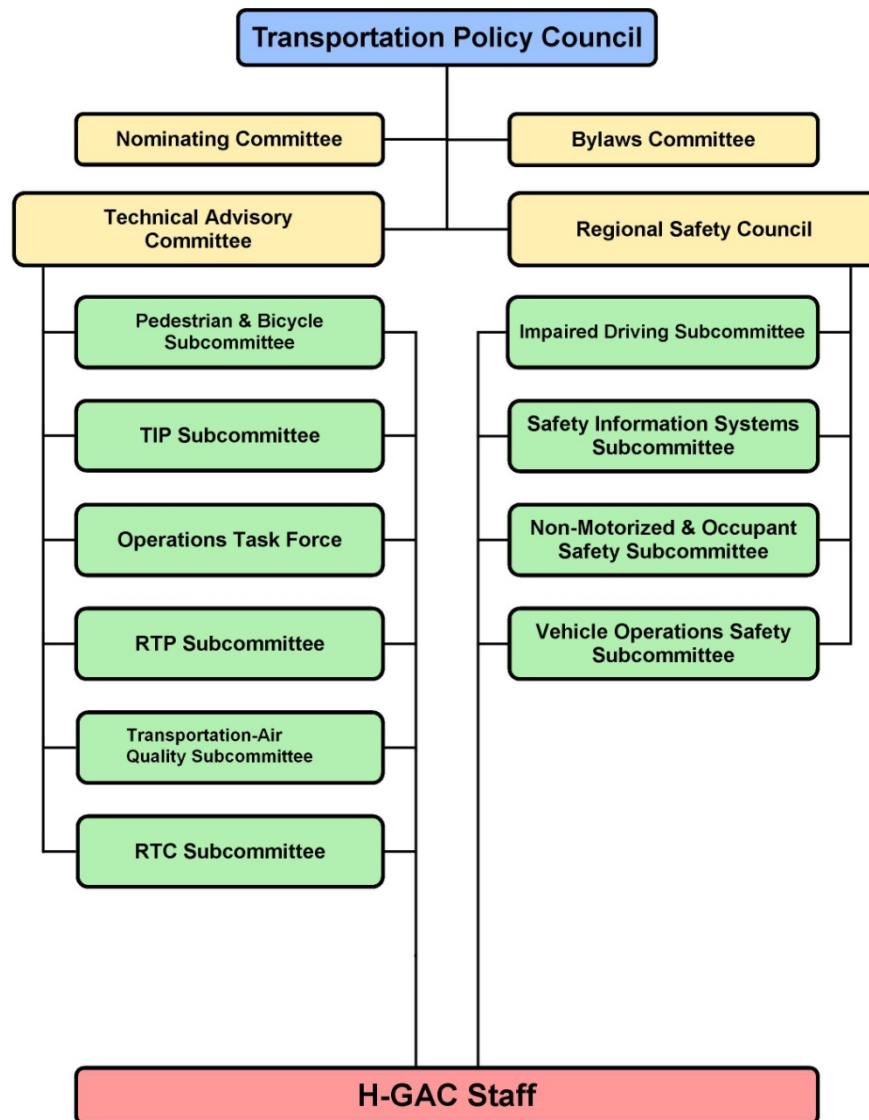
Regional Safety Council (RSC)

In August 2005, the TPC established the RSC to address the region's increasing traffic safety issues. The RSC's mission is to advise and make recommendations to the TPC regarding traffic safety policy. In addition, the RSC is responsible for encouraging safety education, effective law enforcement, safety engineering, emergency service activities, and infrastructure investments to help reduce the number and severity of traffic crashes, injuries and fatalities in the region. The RSC consists of 24 members from a broad spectrum of safety-related professions. Membership includes officials and professionals from local and State governments, transportation, law enforcement, health care, insurance, trucking, railroads and non-profit organizations involved in safety. The RSC is divided into the following subcommittees, each focused on a specific aspect of traffic safety:

H-GAC 2012-13 Unified Planning Work Program

- Impaired Driving Subcommittee
- Non-Motorized & Occupant Safety Subcommittee
- Vehicle Operation Safety Subcommittee
- Safety Information Systems Subcommittee

Figure A-1
Metropolitan Planning Organization Committee Structure



TRANSPORTATION POLICY COUNCIL (TPC) – 2011

TPC Officers - 2011

Fort Bend County

Hon. James Patterson

CHAIRMAN

County Commissioner

Alternate: Paulette Shelton

Transit Director

Harris County

Hon. Ed Emmett

1st VICE CHAIR

County Judge

Alternate: Richard Zientek

Director of Transportation Issues

Liberty County

Hon. Norman Brown

2nd VICE CHAIR

County Commissioner

Alternate: Hon. Craig McNair

County Judge

City of Pearland

Hon. Tom Reid

SECRETARY

Mayor, City of Pearland

Alternate: Modesto Mundo

Assistant City Manager

TPC Members - 2011

City of Pasadena

Hon. Darrell Morrison, P.E.

Council Member

Alternate: Sara Benevides, P.E.

Assistant City Engineer and

Acting Director of Planning

Other Transportation Interests

Steve Phelps

Commissioner

Port of Houston Authority

Alternate: A.J. "Pete" Reixach

Executive Director

Port of Freeport

Chambers County

Don Brandon, P.E.

County Engineer

Alternate: Hon. David Abernathy

Commissioner, Precinct 2

City of Houston

Hon. Sue Lovell

Council Member, At Large 2

Alternate: Hon. Brenda Stardig

Council Member, District A

City of Baytown

Hon. Terry Sain

Council Member, District 4

Alternate: Kelly Carpenter

Planning & Development Director

City of Houston

Mr. Daniel Kruger

Director of Public Works and Engineering

Alternate: Jeffrey Weatherford, P.E. PTOE

Deputy Director

H-GAC 2012-13 Unified Planning Work Program

Galveston County

Hon. Kenneth Clark

Commissioner, Precinct 4

Alternate: Michael Fitzgerald, P.E.

County Engineer

TxDOT Houston District

Delvin Dennis, P.E.

District Engineer

Alternate: Michael W. Alford, P.E.

Deputy District Engineer

Montgomery County

Hon. Craig Doyal

County Commissioner

Alternate: Mark Mooney, P.E.

County Engineer

Gulf Coast Rail District

Mark Ellis

Chairman

Alternate: Maureen Crocker

Executive Director

City of Texas City

Hon. Doug Kneupper, P.E.

City Engineer

Alternate: Vacant

City of Missouri City

Scott Elmer, P.E.

Director of Public Works

Alternate: Valerie Marvin

Engineering Project Manager

City of Houston

Hon. Stephen C. Costello

Council Member, At Large 1

Alternate: Hon. Wanda Adams

Council Member, District D

Smaller Cities, Harris County

Hon. Robert A. Fry, Jr.

Mayor Pro Tem

West University Place

Alternate: Vacant

City of Sugar Land

Hon. Jacqueline Baly-Chaumette

Council Member, At-Large Position 2

Alternate: Hon. Donald Smithers

Council Member

City of League City

Hon. Mick Phalen

Council Member

Alternate: Rich Oller, P.E.

Assistant City Manager

TxDOT Beaumont District

Duane Browning, P.E.

Interim District Engineer

Alternate: Phillip Lujan, P.E.

Director Transportation Planning & Development

Waller County

Orval Rhoads, P.E.

County Engineer

Alternate: Hon. Stan Kitzman

Commissioner, Pct. 4

Brazoria County

Hon. Matt Sebesta

County Commissioner, Pct. 2

Alternate: Hon. Larry Stanley

Commissioner

Harris County

Arthur L. Storey, P.E.

Executive Director

Harris County Public Infrastructure

Alternate: Jackie Freeman, P.E.

Deputy Executive Director

H-GAC 2012-13 Unified Planning Work Program

H-GAC At-Large

Steve Howard

Chief Operating Officer, H-GAC

Alternate: Jack Steele

Executive Director, H-GAC

City of Conroe

Larry Calhoun

Downtown Manager

Alternate: Hon Guy Martin

Council Member, Place 4

METRO

George Greanias

President & CEO

Alternate: John Sedlak

Executive Vice President, METRO

City of Galveston

Hon. Dianna Puccetti

Council Member, Dist. 6

Alternate: Hon. Rusty Legg

Council Member, Dist. 1

Ex-Officio Members

Freight Rail Interests

Joseph Adams

Vice President, Public Affairs

Union Pacific Railroad

Alternate: Hugh McCulley

BSNF Railroad

TECHNICAL ADVISORY COMMITTEE (TAC) – 2011

Chairman

Scott Elmer, P.E.

Public Works Director

Alternate: Valerie Marvin

Engineering Project Manager

City of Missouri City

1st Vice Chairman

Yancy Scott, P.E.

Assistant County Engineer

Alternate: John Isom

Waller Economic Development Corp.

Environmental/Planning

2nd Vice Chairman

Mark Loethen, P.E.

City of Houston

Alternate: John R. Whaley, P.E.

Houston TranStar

Intermodal Interests

Sarah Benavides, P.E.

Planning Director

Alternate: (Vacant)

City of Pasadena

Don Brandon, P.E.

County Engineer

Alternate: Tommy Bridwell

Engineering Project Manager

Chambers County

Kelly Carpenter, AICP

Planning Director

Alternate: Jose Pastrana

Director of Engineering

City of Baytown

James Koch, P.E.

Director of Transportation

Planning & Development

Alternate: Rakesh Tripathi, P.E.

Director, Advanced Transportation Planning

TxDOT-Houston District

Phillip Lujan, P.E.

Director of Transportation

Planning & Development

Alternate: Steven Stafford, P.E.

Director, Advanced Transportation Planning

TxDOT-Beaumont District

Andrew Mao, P.E.

Manager Traffic & Transportation

Alternate: Charles Dean, P.E.

Planning Manager

Harris County

Clark Martinson

Energy Corridor District

Alternate: Coletta Castleschouldt

Bay Tran

Citizen & Business Interests

Luis Nunez

City of Conroe

Alternate: Robert Heineman

The Woodlands Development Company

Smaller Cities

Terence O'Rourke

Harris County Attorney's Office

Alternate: Billy Cooke, P.E.

Klotz Associates, Inc.

Environmental/Planning

H-GAC 2012-13 Unified Planning Work Program

Don Carroll
City Planner
Alternate: (Vacant)
City of Texas City

Maureen Crocker
City of Houston
Alternate: Carol Lewis
Texas Southern University
Intermodal Interests

Bob Eury
Central Houston
Alternate: Perri D'Armond
Greater Fort Bend Economic
Development Council
Citizen & Business Interests

Ken Fickes
Harris County Transit
Alternate: Vernon Chambers
Harris County Transit
Urban Transit

Marlene Gafrick
City of Houston
Alternate: Mike Kramer
City of Houston
Environmental/Planning

D. Jesse Hegemier, P.E.
County Engineer
Alternate: Ron Drachenberg, P.E.
Assistant County Engineer
Fort Bend County

Mike Hodge, P.E.
City of Pearland
Alternate: Pat B. McLaughlan, P.E.
Citizen
Smaller Cities

Rich Oller, P.E.
Assistant City Manager - Public Works
Linc Wright, P.E.
Traffic Engineer
City of League City

G. Michael Fitzgerald, P.E.
County Engineer
Rod Shaut
Engineering Technician
Galveston County

Gerald Roberts, P.E.
County Engineer
Alternate: Michael Shannon
Asst. County Engineer
Brazoria County

Paulette Shelton
Fort Bend County
Alternate: Vastene Olier
Colorado Valley Transit District
Rural Transit

Kimberly Slaughter
Associate Vice President of Planning
Alternate: Larry Badon
Manager, Long Range Systems Planning
METRO

Jeff Taebel, FAICP
H-GAC
Alternate: David Crossley
Houston Tomorrow
Environmental/Planning

John Tyler, P.E.
Harris County Toll Road Authority
Alternate: David Gornet
Grand Parkway Association
Intermodal Interests

H-GAC 2012-13 Unified Planning Work Program

James Jackson, P.E.

Port of Houston

Alternate: Brenda Trevino, P.E.

Port of Houston

Intermodal Interests

Jeff Johnson, P.E.

Transportation Engineer

Alternate: J. Ross McCall, EIT

County Engineer II

Montgomery County

Stan Kitzman

County Commissioner, Pct. 4

Alternate: Orval Rhoads, P.E.

County Engineer

Waller County

Michael Worthy

Island Transit Director

Alternate: Rick Beverlin

The Woodlands Corporation

City of Galveston

Michael Worthy

Patrick Walsh, P.E.

Transportation Director

Alternate: Dale Rudick, P.E.

Director, Intergovernmental Relations

City of Sugar Land

Charlotte Warner

County Commissioner Pct. 2

Alternate: David Douglas

Dayton City Manager

Liberty County

Jeffrey Weatherford, P.E., PTOE,

Deputy Director Traffic & Transportation

Alternate: Carol Haddock, P.E.

Senior Assistant Director

City of Houston

Mike Wilson

Port of Freeport

Alternate: Diane Falcioni

Manager, Governmental Relations

Intermodal Interests

Bill Zrioka

Houston Airport System

Alternate: Carlos Ortiz

Houston Airport System

Intermodal Interests

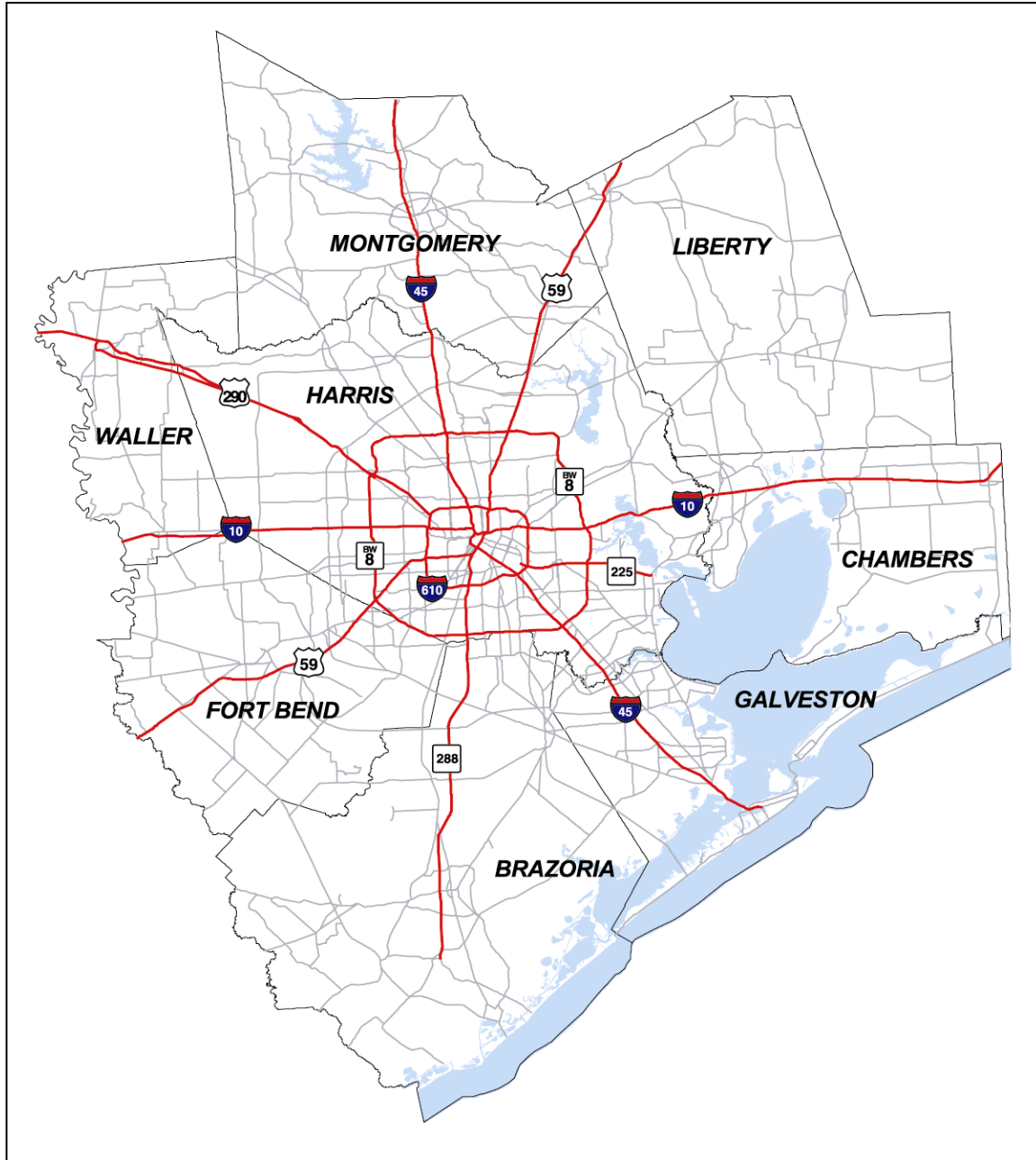
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Appendix B

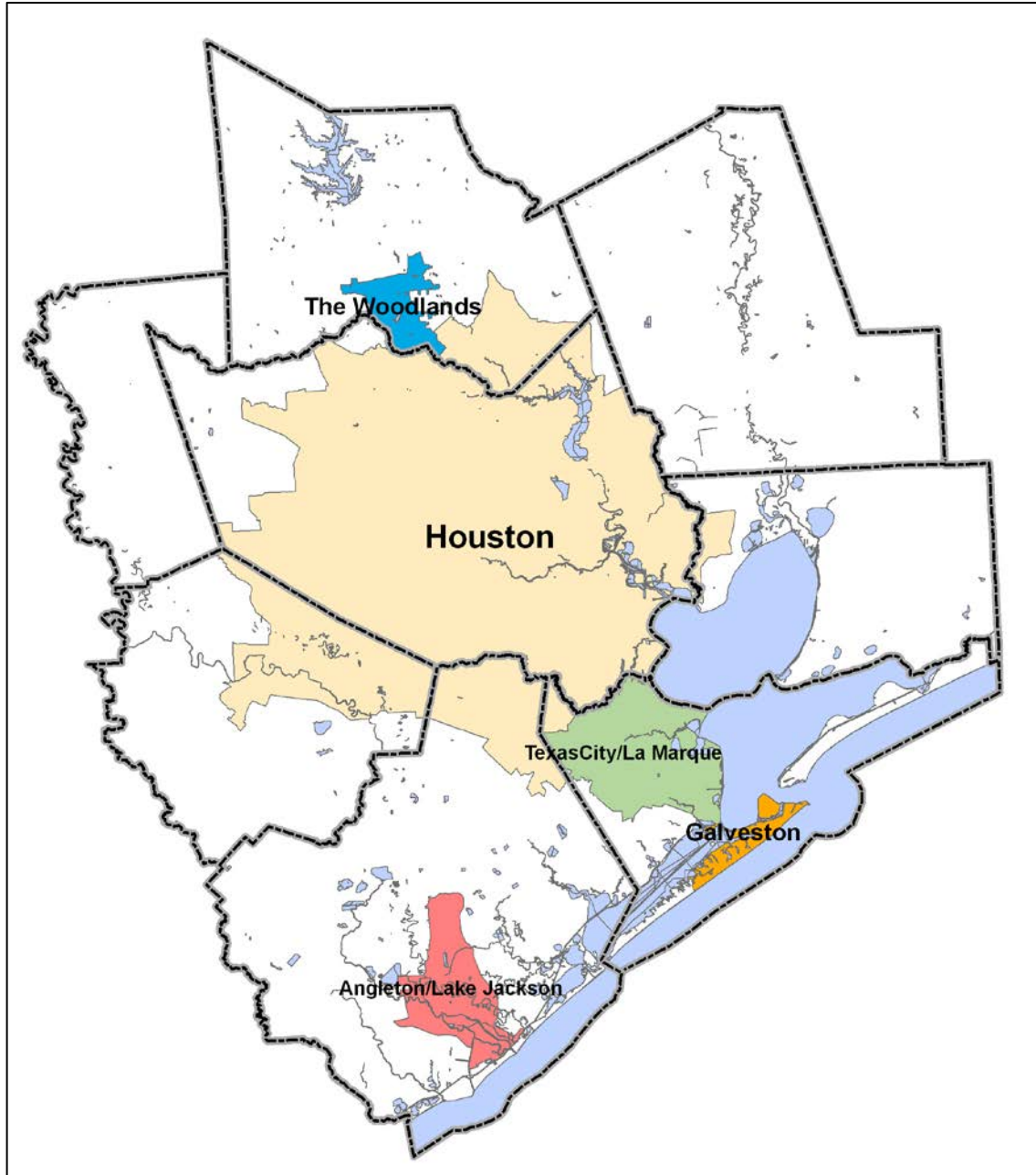
Maps of the Houston-Galveston Transportation Management Area (TMA) And Urbanized Areas (UZA)

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**Eight-County Houston-Galveston
Transportation Management Area**



**Transportation Management Area
Urbanized Area Boundaries**



Appendix C

Debarment Certification

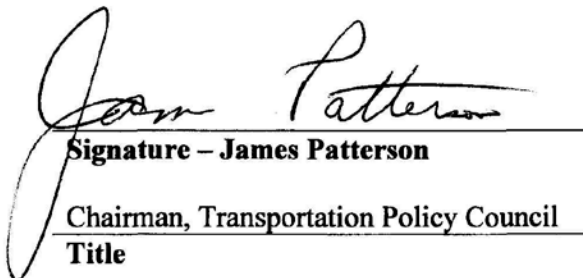
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DEBARMENT CERTIFICATION

(Negotiated Contracts)

- (1) The Houston-Galveston Area Council 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 debarment 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 or otherwise criminally or civilly charged by a governmental entity* with commission of any of these 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



Signature – James Patterson
Chairman, Transportation Policy Council

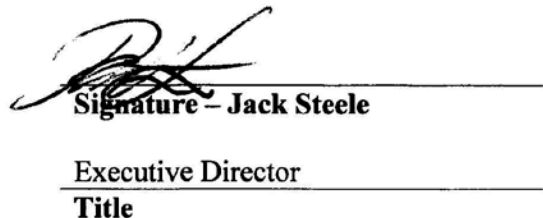
Title

Houston-Galveston Area Council

MPO

July 22, 2011

Date



Signature – Jack Steele
Executive Director

Title

Houston-Galveston Area Council

Fiscal Agent

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Appendix D

Lobbying Certification

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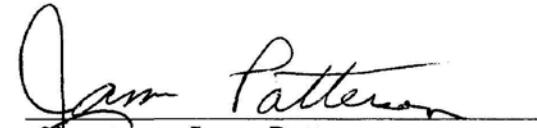
H-GAC 2012-13 Unified Planning Work Program

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.



Signature – James Patterson
Chairman, Transportation Policy Council


Title

Houston-Galveston Area Council

MPO

July 22, 2011

Date



Signature – Jack Steele
Executive Director

Title

Houston-Galveston Area Council

Fiscal Agent

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Appendix E

Certification of Compliance

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H-GAC 2012-13 Unified Planning Work Program

Certification of Compliance

I, James Patterson, Chairman, a duly authorized representative of the Houston-Galveston Area Council (H-GAC), do hereby certify that the contract and procurement procedures that are in effect and used by the forenamed MPO are in compliance with 49 CFR 18, "Uniform Administrative Requirements for Grants and Cooperative Agreements with State and Local Governments," as it may be revised or superseded.

Concurrence:



Signature – James Patterson

Chairman, Transportation Policy Council

Title

Houston-Galveston Area Council

MPO

July 22, 2011

Date



Signature – Jack Steele


Executive Director

Title

Houston-Galveston Area Council

Fiscal Agent

Attest:



Alan C. Clark
MPO Director

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Appendix F

Certification of Internal Ethics and Compliance Program


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H-GAC 2012-13 Unified Planning Work Program

Certification of Internal Ethics and Compliance Program

I, James Patterson, Chairman, a duly authorized representative of the Houston-Galveston Area Council (H-GAC), 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 by 43 TAC § 31.39, "Required Internal Ethics and Compliance Program" and 43 TAC § 10.51, "Internal Ethics and Compliance Program" as may be revised or superseded.

Concurrence:




Signature – James Patterson
Chairman, Transportation Policy Council

Title
Houston-Galveston Area Council

MPO
July 22, 2011

Date




Signature – Jack Steele
Executive Director

Title
Houston-Galveston Area Council

Fiscal Agent

Attest:



Alan C. Clark
MPO Director

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Appendix G

MPO Self-Certification

H-GAC 2012-13 Unified Planning Work Program

MPO Self Certification Compliance

Metropolitan Planning Organizations must certify annually their compliance with federal, state, environmental, and civil rights regulations. This document summarizes the H-GAC MPO's compliance with these regulations. The 2035 Regional Transportation Plan, the 2011-2014 Transportation Improvement Program, and the 2012-13 Unified Planning Work Program were developed in accordance with DBE, ADA, and CAA requirements. In addition, these plans met all federal requirements prohibiting lobbying, payment or influence of federal employees regarding the award of federal contracts, grants, loans, or cooperative agreements.

Metropolitan Planning:

The State and the MPO shall annually certify to FHWA and FTA that the planning process is addressing major issues facing their area and is being conducted in accordance with all applicable transportation planning requirements. The planning process will undergo joint review and evaluation by FHWA, FTA, and TxDOT to determine if the process meets requirements. The Federal administrators will take the appropriate action for each TMA to either issue certification action, or deny certification if the TMA planning process fails to substantially meet requirements. If FHWA and FTA jointly determine that the transportation planning process in a TMA does not substantially meet the requirements, they may withhold, in whole or in part, the apportionment attributed to the relevant metropolitan planning area or they may withhold approval of all or certain categories of projects. Upon full, joint certification by FHWA and FTA, all funds withheld will be restored to the metropolitan area, unless they have lapsed. For non-TMA areas TxDOT will determine whether a MPO's transportation planning process substantially meets requirements and act accordingly. (23 CFR 450.334; 49 CFR 613; USC Title 23, Sec. 134; and USC Title 49, Ch. 53, Sec's 5303 – 5306)

H-GAC MPO Response: The 2011-2014 TIP and the 2010-11 UPWP includes the MPO Self Certification, which certifies that in accordance with 23 CFR 450.334 & 450.220, TxDOT and the MPO for the Houston-Galveston, Texas City, La Marque, Lake Jackson and Woodlands urbanized areas have been conducted in accordance with 23 CFR 450.334; 49 CFR 613; USC Title 23, Sec. 134; and USC Title 49, Ch. 53, Sec's 5303 – 5306. In 1997, 2001, 2004 and most recently in November 2008, H-GAC hosted a certification review by officials from FHWA, FTA and TxDOT. Final comments from the first two reviews were received and no significant problems were encountered with the MPO planning process during the desktop review or interviews with MPO staff, TxDOT, TPC officers, or transit providers. Each of the five areas of concern were addressed during 2002. Comments on the 2004 and 2008 review indicated satisfaction with all aspects and encouraged increased due diligence with public participation.

Statewide Planning:

The process for developing the transportation plans and programs shall provide for consideration of all modes of transportation and shall be continuing, cooperative, and comprehensive to the degree appropriate, based on the complexity of the transportation problems

H-GAC 2012-13 Unified Planning Work Program

to be addressed. The State shall coordinate transportation planning activities for metropolitan areas of the State, and shall carry out its responsibilities for the development of the transportation portion of the State implementation plan (STIP) to the extent required by the Clean Air Act. The State will carry out the long range planning processes and the STIP in cooperation and consultation with designated metropolitan planning organizations, affected local transportation officials and affected tribal governments. Transportation improvement programs should include financial plans that demonstrate how the programs can be implemented, indicates resources from public and private sources reasonably expected to be made available for carrying out the programs, and recommend any additional financing strategies for needed projects. (23 CFR 450.220; USC Title 23, Sec. 135; and USC Title 49, Ch. 53, Sec's 5307 – 5311, 5323(l))

H-GAC MPO Response: The Unified Planning Work Program (UPWP), the Regional Transportation Plan (RTP) [UPWP Subtask 4.1], and the Transportation Improvement Program (TIP) [UPWP Subtask 3.1] have been developed in accordance with the consideration of all modes of transportation and shall be continuing, cooperative, and comprehensive to the degree appropriate. Further, the RTP and TIP include financial summaries of the projects scheduled for implementation within their respective timeframes. A new element was added to the 2035 RTP in Appendix F in response to the State HB 3588 requirement for regional transit service planning and coordination between the Health and Human Services Division and the Texas Department of Transportation. A regional transit coordination plan was submitted to TxDOT in December 2006 and the highest priorities from that plan are being implemented incrementally. A subcommittee to the Technical Advisory Committee has been formed to guide that implementation process.

Title VI, Civil Rights Act of 1964

Title VI prohibits exclusion from participation in, denial of benefits of, and discrimination under federally assisted programs on grounds of race, color, or national origin. Title VI assurance regulations were also executed by each State, prohibiting discrimination based on sex or disability. (USC Title 23, Sec. 324 and USC Title 29, Sec. 794)

Environmental Justice

In support of Title VI regulations, each Federal agency must identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority and low-income populations. State Highway agency responsibilities are to develop procedures for the collection of statistical data (race, color, religion, sex, and national origin) of participants in, and beneficiaries of State highway programs, i.e., relocatees, affected citizens and affected communities. Recipients of federally assisted programs shall keep documentation, for federal review, demonstrating extent to which members of target populations are beneficiaries of such programs. (EO 12898, 23 CFR 200.9 (b)(4), and 49 CFR 21.9 (b))

H-GAC 2012-13 Unified Planning Work Program

H-GAC MPO Response: In conjunction with the 2025 & 2035 RTP development, regional and subregional environmental and socioeconomic analyses were conducted, including Title VI & Environmental Justice Accessibility. 1.) Summary of average travel times to jobs and other trip purposes by mode for low-income and minority travelers compared to others; 2.) Assessment of the social impacts of transportation projects in low-income and minority areas; and 3) the development of a Transit Need Index to identify transit need in the region. Staff is revisiting the Environmental Justice analysis, taking into consideration the newly-available 2010 Census results.

Disadvantaged Business Enterprises in Planning Projects

The Disadvantaged Business Enterprise (DBE) program ensures equal opportunity in transportation contracting markets, addresses the effects of discrimination in transportation contracting, and promotes increased participation in Federally funded contracts by small, socially and economically disadvantaged businesses, including minority and women owned enterprises. The statute provides that at least 10% of the amounts made available for any Federal-aid highways, mass transit, and transportation research and technology program be expended with certified DBEs. (TEA-21, Pub. L. 105-178, Sec. 1101(b); CFR 49, Subtitle A, Part 26)

H-GAC MPO Response: In accordance with FTA/FHWA/FAA annual reporting requirements, H-GAC filed its 2008-2009 DBE Plan with the Federal Aviation Administration on November 12, 2008, for fiscal years 2008 and 2009. The DBE goal was updated in October 2010 from 19% to 22%. The MPO utilizes the Texas Unified Certification Program [TUCP] as its source for DBE certification.

Americans with Disabilities Act of 1990:

Programs and activities funded with Federal dollars are prohibited from discrimination based on disability. Compliance with the applicable regulations is a condition of receiving Federal financial assistance from the Department of Transportation. (Pub. L. 101-336, 104 Stat. 327 as amended; 49 CFR Parts 27, 37 and 38)

H-GAC MPO Response: Section 2.08 of the H-GAC Personnel Policies, as amended on April 21, 2009, cites the MPO's compliance with the American Disabilities Act of 1990. In addition, the H-GAC was instrumental in assuring its place of business, 3555 Timmons Lane, complies with all ADA requirements. All meetings, funded with Federal dollars or as part of doing business, are held only in ADA compliant facilities. Accessibility Consultants Incorporated performed a building property evaluation in March 1992. As of December 31, 2000, all noted discrepancies were corrected. As of December 31, 2001, ten additional handicapped spaces were added to the level 5 covered area of the parking garage. The most recent inspection was conducted in April 18, 2007. As a result of this inspection, all restrooms on the H-GAC floors have been updated to become ADA compliant during late 2008 and early 2009.

H-GAC 2012-13 Unified Planning Work Program

Restrictions on influencing certain Federal activities:

No appropriated funds may be expended by the recipient of a Federal contract, grant, loan, or cooperative agreement to pay any person for influencing a federal employee regarding the award of Federal contracts, grants, loans or cooperative agreements. (49 CFR, Part 20)

H-GAC MPO Response: Sections 3.04 Outside Activities, 3.05 Gifts and Gratuities, 3.06 Conflict of Interest, and 3.07 Political Activity of the H-GAC Personnel Policies, adopted April 21, 2009, cites the MPO's compliance with the Restrictions on Influencing certain Federal Activities.

Clean Air Act: Air Pollution Prevention & Control:

All State and local transportation officials will take part in a 3-C planning process in non-attainment areas to determine which planning elements will be developed, adopted and implemented to maintain or improve the air quality for said area. In non-attainment areas that include more than one state, the affected states may jointly undertake and implement air quality planning procedures. Activities not conforming to approved plans will not be financially supported by the Federal government. Priority of funding will be given to those projects or programs that achieve and maintain national primary ambient air quality standards. (42 USC, Ch. 85, Sec's. 7408, 7410, 7504, 7505a 7511, 7512, 7506 (c) and (d) and 7604; 49 USC, Ch. 53, 23 USC, Sec. 134)

H-GAC MPO Response: UPWP Subtasks 1.2, 2.1, 3.1, 3.2, 4.1, 4.2, 4.3, and 4.4 address various aspects of the CAA requirements, including public outreach, SIP development, air quality conformity attainment, financial constraints, alternative modes of travel, and contributions to maintaining national primary ambient air quality standards.

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Appendix H

Public Outreach Efforts for the 2012-13 Unified Planning Work Program

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H-GAC 2012-13 Unified Planning Work Program

Public Outreach Efforts for the 2012-2013 Unified Planning Work Program

The Draft 2012-2013 Unified Planning Work Program (UPWP) was made available to the public on June 9, 2011, which began the 30-day comment period scheduled to end officially on July 11, 2011. A public meeting was held on June 29, 2011 at the offices of the Houston-Galveston Area Council. The following items document the Public Outreach efforts and public comments received:

Advertising

Paid advertising in the Chronicle purchased: Wednesday, June 8, 2011

Advertised: Thursday, June 9, 2011

Sent to Texas Register: Thursday, June 9, 2011

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Meeting alert/Press Release emailed to other interested persons (481), TAC members (66), TPC members (56), and RAQPC members (27) & RAQPC alternates (10): June 9, 2011

Document Distribution

A draft of the 2012-2013 UPWP was sent to TxDOT prior to June 1, 2011 as requested. A copy of the draft 2012-2013 UPWP was placed on the H-GAC webpage on June 8, 2011. Printed copies of the draft UPWP were distributed to all Transportation Policy Council members on April 29, 2011. Copies of the draft 2012-2013 UPWP were made available to all Technical Advisory Committee members on April 13, 2011.

Public Meeting [open-house] – June 29, 2011

The public meeting was held on June 29, 2011 in Conference Room A at the offices of the Houston-Galveston Area Council from 5:30 p.m. to 7:00 p.m.. There were nine persons present, including H-GAC staff. The agenda of the public meeting included a brief introduction and PowerPoint presentation. An audio tape of the open-house exchange is on file in the H-GAC offices. During the presentation, the audience was encouraged to ask questions and provide comments.

Mr. Brandt Mannchen of the Houston Regional Group of the Sierra Club provided public comment at the meeting. In reviewing his comments, the concept of a regional transportation glossary was discussed that would provide descriptions of the various programs and agencies involved with transportation in the Houston-Galveston area.

The meeting ended at 7:00 p.m., after which everyone departed.

Other Comments Received

H-GAC received a set of comments from the Gulf Coast Rail District and the City of Houston after the Technical Advisory Committee (TAC) meeting mailout. The following comments were provided to the TAC at its July 13, 2011 meeting:

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Comments from the Gulf Coast Rail District

GCRD Comment #1

4.1. b 1 - Develop implementation plan for the recommendations discussed in the Regional Transit Framework, including regional transit planning, coordination, integration, and financing for a regional transit framework.

The Gulf Coast Rail District requested the opportunity to participate in the Regional Transit Framework Study and respectfully requests that it be included in any future analyses. It is essential that as plans for commuter rail are refined, all potential partners be included in discussions regarding operations and funding. By definition, commuter rail extends beyond the METRO service area, so potential transit partners and elected local officials must develop consensus on priorities and potential funding sources.

H-GAC Response

H-GAC has welcomed the Gulf Coast Rail District's involvement in the initial phase of the Regional Transit Framework Study and looks forward to working with the GCRD, as well as other transit partners and elected officials, in the development of an implementation plan for the recommendations discussed in the Study.

GCRD Comment #2

5.2.a2 - Completion of feasibility analysis in exploring alignment issues and new or upgraded track alternatives along the Eureka, Palestine and Galveston Subdivisions to handle commuter trains as listed in the H-GAC American Recovery & Reinvestment Act Funds project list.

Last year, H-GAC was directed by TPC to review rail accessibility of previously studied potential Downtown Intermodal Terminal sites. The Working Group established to guide H-GAC has agreed on a preferred site. H-GAC is nearing completion of the initial assessment of rail accessibility. The Gulf Coast Rail District (GCRD) respectfully requests that the additional analysis of heavy rail access to downtown referenced in the draft UPWP be led by the GCRD. The above reference to ARRA funded projects specifies commuter rail work already underway by GCRD. Consistency will be essential for both feasibility and cost effectiveness.

H-GAC Response

Product 4.1.b2 under Subtask 4.1, Long-Range Planning provides funding for continuation of investigation of commuter rail access to the Houston Central Business District. The exact scope of work will depend on the outcome of current studies and direction provided by the Transportation Policy Council. H-GAC looks forward to working with the GCRD as this work progresses. The GCRD may very well be the most appropriate lead agency for this work. However, staff recommends deferring identifying agency roles for the conduct of this next phase of work until its scope has been further defined.

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Comments from the City of Houston

COH Comment #1

Page 4-2 -To develop more Livable Centers plans and projects, assisting local governments in creating quality mixed-use places that reduce dependence on single-occupancy vehicles.

Local governments must be included in any planning study that contemplates use of or changes to the public right-of-way within their jurisdiction. This will ensure that visions and projects proposed to the public in the Livable Centers plans are feasible. The focus on reducing dependence on single-occupancy vehicles warrants incorporation of current and future traffic volumes into any Livable Centers planning process. Given limited funding availability, additional Livable Centers funds should be balanced between implementation of study recommendations and planning studies that demonstrate feasible implementation strategies. While the economic downturn continues, planning studies and implementation projects should focus on urban areas to spark redevelopment, or at a minimum, keep areas from decline.

H-GAC Response

H-GAC will continue to proactively seek partnership with local governments in any Livable Centers planning. The 2012-13 UPWP funding for Livable Centers reflects funding decisions made by the Transportation Policy Council prior to FY 2012. No new Transportation Planning Funds have been allocated for this activity.

COH Comment #2

4.1.b1 - Develop implementation plan for the recommendations discussed in the Regional Transit Framework, including regional transit planning, coordination, integration, and financing for a regional transit framework.

Financing of a regional transit framework that may exceed current funding levels will require direct participation by elected officials accountable to the public. Any plan by H-GAC and the TPC to support and promote development of a regional transit system that cannot be developed and operated with known funding sources must be thoroughly discussed among regional leaders so that next steps are clearly defined.

H-GAC Response

We concur.

COH Comment #3

4.1.c4 - Work within the METRO service area to develop an integrated subregional/and-use and transportation, which will assist in the development of projects for the RTP.

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The majority of the METRO service area is within the City of Houston limits. Subregional land use and transportation planning within the City of Houston must include the City of Houston to ensure that proposed RTP projects are feasible.

H-GAC Response

Item 4.1.c4 will be reworded to better reflect the nature of the sub-regional study, which involves connecting bicycle and pedestrian facilities to transit routes. In regards to the involvement of the City of Houston in the study, the City, along with all communities within the METRO service area, will be included in the development of the sub-regional plan.

COH Comment #4

4.4.a6 -Acquire consultant assistance to conduct research on metrics regarding sustainable mobility projects based on a peer review of best practices and existing research.

Much research has already been done on this subject and should be readily available through sources such as TRB. The Regional Sustainable Community Planning Grant will be developing various transportation mode metrics for the region over the next three years. Consultant assistance should be justified.

H-GAC Response

H-GAC staff will look into existing studies regarding metrics development and assessment. If the work has been conducted by other sources, we will look into utilizing those efforts and remove this product from the UPWP.

COH Comment #5

Page 5-2 - The completion of access management studies for ... Houston's Greater East End Management District.

City of Houston Planning and Development and Public Works and Engineering departments are supportive of the efforts of the GEEMD in moving forward with a study to better understand the transportation and mobility needs of the community through a sub-area planning study. This should be completed prior to discussion about access management and any such implementation proposals.

H-GAC Response

H-GAC, after very recent conversations with the City of Houston, is working to modify the scope of the Greater East End access management study to be a sub-regional planning study. This will be reflected in the UPWP.

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COH Comment #6

3.1.a1 - Continue the development and improvement of the online TIP/RTP project information database to allow for enhanced project tracking and access by member agencies (Consultant Assistance Required).

Recommend that a stakeholders group of member agencies and representatives from the Transportation Improvement Program sub-committee participate in the development of the information database.

H-GAC Response

H-GAC will work with both the TIP and RTP Subcommittees in the development of the TIP/RTP Project Information database to help ensure that the information contained is accessible and understandable.

COH Comment #7

5. 1.a4 - Research and analyze crash data from TxDOT's Crash Record Information System (CRIS) and assist agencies in assessing problem locations with CRIS data.

Utilizing crash data is only one tool available to local agencies to evaluate and assess problems and without context could skew or misdirect findings. HGAC should only initiate research and analysis of crash data within a given jurisdiction upon a request from that jurisdiction.

H-GAC Response

H-GAC staff currently uses crash data to conduct analyses upon request and to assist in developing its safety program. Crash data developed by H-GAC is also used by project sponsors seeking state and federal project funding assistance. H-GAC also conducts a State of Safety overview on an annual basis to provide a relatively-general assessment of various components of traffic safety in the region. A few years ago, H-GAC compiled a list of intersections experiencing a large number of crashes and included it in its annual State of Safety Report. However, due to subsequent discussions, it was decided to stop including this information because the list presented an incomplete assessment of the crash experience for those intersections listed. H-GAC will continue to work with those communities and organizations who wish to improve their traffic safety situation upon request.

COH Comment #8

While the UPWP document provides the sources of funding under the various tasks outlined, there is no backup information related to the expenditures that form the basis for the funding requests. No real evaluation of the costs/benefits of the efforts, tasks or projects proposed can be determined without an understanding of those costs. Consideration to including anticipated expenditures in an Appendix would be beneficial.

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H-GAC Response

The UPWP, as presented, is based on the format provided to H-GAC and other MPOs throughout the state by TxDOT. Budgeted expenditures by task and subtask are listed at the end of each task and combined in the Funding Summary listed on Page 6-1. H-GAC, upon request, will gladly provide members of TAC and TPC a detailed categorical breakdown of its expenditures for their review.

The UPWP activities requiring contractor assistance are typically secured through a competitive, negotiated procurement process. Detailed budgets for these contractor/consultant activities will be available upon completion of the procurement.

Modifications to the Draft Document

Based on comments received from the public, member agencies and TxDOT, as well as further input and changes made internally, H-GAC Staff made every effort to incorporate all changes or suggestions wherever it seemed appropriate, applicable, and the necessary resources were available. Actual comments, emails, and corrections are on file at the offices of the H-GAC and are available upon request. Modifications to the document are as follows:

- Adoption date changed to July 22, 2011,
- Spelling, spacing, and grammatical errors were corrected throughout the document,
- Acronyms were spelled out where first introduced in the document,
- Task 2.1 budget for Transportation Planning Funds was increased \$31,750 to reflect revised operational cost estimates, and reflected in the Task 2 Funding Table,
- In Task 3.2, Island Transit's two-year FTA 5307 figures were reduced by \$200,000 with a corresponding \$50,000 reduction in local funds, and reflected in the Task 3 Funding Table in response to revised figures provided by Island Transit,
- In Task 4.1, added a Product 4.1.b2 to study options for bringing commuter rail into the Inner IH-610 Loop,
- Reworded Product 4.1.c4 under Task 4.1 to better reflect the sub-regional study, which involves connecting bicycle and pedestrian facilities to transit routes.
- Task 4.1 budget for Transportation Planning Funds was increased \$200,000 to reflect additional work product and revised operational cost estimates, and reflected in the Task 4 Funding Table,
- Removed Task 5.2, Product 5.2.a7, Greater East End Access Management Study and moved it to Task 4.1, Product 4.1.c5, converting it into a sub-regional planning study,
- The overall Funding Summary Table on Page 6-1 was modified to reflect the above-mentioned expenditure changes,
- The Federal Transit Administration's FTA 5303 funds were reduced by \$9,254 to reflect new FY 2012 figures received from TxDOT,
- Overall Transportation Planning Funds available decreased by \$9,254,
- Overall Transportation Planning Funds programmed increased by \$331,750

Appendix I

2012-2013 UPWP Adoption Resolution

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Resolution

NO. 1101 – UPWP

ADOPTING THE 2012-2013 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 U.S. Department of Transportation, prior to the funding of any planning or capital grant project within an urban region, requires the preparation and adoption of a Unified Planning Work Program (UPWP) describing transportation planning activities to be accomplished during FY 2012-2013; and

WHEREAS, the 2012-2013 Unified Planning Work Program addresses the needs for planning Administration/Management, Data Development and Maintenance, Short Range Planning, the Metropolitan Transportation Plan, and Special Studies, identifying 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 2012-2013 Unified Planning Work Program and in accordance with 23 CFR Part 450.334 and 450.220 of the SAFETEA-LU.

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

- The 2012-2013 Unified Planning Work Program (UPWP) for Transportation Planning is hereby adopted; and
- Cost overruns of up to 25 percent at the activities task level are allowable, provided that the totals as shown in the Funding Summary on Page 6-1 of the 2012-2013 UPWP are not exceeded.

PASSED AND APPROVED this 22nd day of July 2011, at a regularly called meeting of the Transportation Policy Council for the Houston-Galveston Transportation Management Area.

APPROVED:


James Patterson, Chairman
Transportation Policy Council

ATTEST:


Tom Reid, Secretary Ed Emmett, 1st Vice Chairman
Transportation Policy Council

2012-2013 UNIFIED PLANNING WORK PROGRAM (UPWP)

Background

The 2012-2013 Unified Planning Work Program (UPWP) describes the metropolitan transportation planning activities to be conducted during the 2012-2013 Fiscal Years (October 2011 - September 2013) for the Houston-Galveston Transportation Management Area (TMA). Some of the planning highlights for this new UPWP include:

- The development of a new TIP and RTP project tracking system.
- The development of a Regional Incident Management Strategic Plan and Assessment
- Develop the 2040 Regional Transportation Plan (RTP), with a proactive public involvement process, an enhanced public information campaign, performance-based evaluation criteria, and safety and security related projects.
- A Subregional Planning Initiative to provide a community-based focus and a major input into the 2040 RTP.
- Development of a Regional Bikeway Plan that correlates with the 2040 RTP and emphasizes regional connectivity for all modes of travel.
- An assessment of options for bringing commuter rail into the Inner Loop
- The development of a long-range traffic safety plan to be integrated into the 2040 RTP
- The completion of access management studies for FM 1764 in Texas City, BF 1960 in Humble, SH 105 in Montgomery County, and Murphy Road in Missouri City
- Completion of the Regional Goods Movement Study

Current Situation

The draft 2012- 2013 Unified Planning Work Program (UPWP) was posted on H-GAC's website on June 8, 2011, beginning the 30+ day comment period, ending on July 11, 2011. A public meeting was held on June 29, 2011 at the offices of the Houston-Galveston Area Council from 5:30pm to 7:00pm. Comments and corrections have been addressed and documented in Appendix H of the 2012-2013 UPWP and posted on the TPC web page: www.h-gac.com/transportation/. The Technical Advisory Committee (TAC) approved submission of the UPWP with noted corrections from public comments to TPC for final approval on July 13, 2011.

Requested Action

Request TPC approval of the attached Resolution to adopt the 2012-2013 UPWP.

Appendix J

Transportation and Air Quality Planning Acronyms and Phrases

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H-GAC 2012-13 Unified Planning Work Program

Transportation and Air Quality Planning Acronyms

A

AADT	Annual Average Daily Traffic
AASHTO	American Association of State Highway and Transportation Officials
ACS	American Community Survey
ADA	Americans with Disabilities Act
ADT	Average Daily Traffic
Advanced-Practice	Incorporating updated modeling practices or theories being used by other MPOs in the USA when applicable.
AE	Annual Element
AERCO	Area Emission Reduction Credit Organization
APO	Average Passenger Occupancy
APTA	American Public Transportation Association
AQC	Air Quality Compliance
AQCRs	Air Quality Control Regions
AQMA	Air Quality Maintenance Area - Areas noted by the EPA that have a potential for, or that presently exceed, the National Ambient Air Quality Standards
ARRA	American Recovery and Reinvestment Act of 2009
ATOM 2	A modified version of the Atomistic Model - Disaggregate Trip Distribution Model of the TTDP
AVL	Authorized Vehicle Lane
AVN	Division of Aviation, TxDOT
AVO	Average Vehicle Occupancy

B

BER	Basic Emission Rate
Biennial	Every two years or every other year
BMS	Bridge Management System
Brazos Transit	Former name, now referred to as "The District"
BNSF	Burlington Northern & Santa Fe Railroad Company
BRINSAP	Bridge Inventory, Inspection, and Appraisal Program
BWC	Best Workplace for Commuters

C

3-C Planning Process	Continuing, Comprehensive and Coordinated; 3-C planning process required by TxDOT
CAA	Clean Air Act of 1970, and its related Amendments of 1990
CAFÉ	Corporate Average Fuel Economy
CAGR	Compound Annual Growth Rate
CBD	Central Business District
CDP	Census Designated Places
CEI	Cost Effectiveness Index
CFR	Code of Federal Regulations
CIP	Capital Improvement Program
CMAAQ	Congestion Mitigation Air Quality
CMA	Congestion Mitigation Analysis (formerly known as SOV Analysis)
CMP	Congestion Management Process
CMS	Congestion Management System
CMSA	Consolidated Metropolitan Statistical Area – <i>The Houston-Galveston-Brazoria CMSA consists of the Houston PMSA (Chambers, Fort Bend, Harris, Liberty, Montgomery, and Waller counties), the Galveston-Texas City PMSA (Galveston County), and the Brazoria PMSA (Brazoria County)</i>
CNG	Compressed Natural Gas

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CO	Carbon Monoxide
COG	Council of Governments
CPTED	Crime Prevention Through Environmental Design
CRIS	Crash Record Information System
CRP	Consolidated Road Program
CT	Census Tract
CTMS	Computerized Traffic Management System
CTPP	Census Transportation Planning Package
CTR	Center for Transportation Research, University of Texas at Austin

D

D-2	Division of Aviation, TxDOT
D-10	Division of Transportation Planning, TxDOT
D-11	Division of Public Transportation, TxDOT
DEIS	Draft Environmental Impact Statement
DEMO	Demonstration grant - funding of an experimental program
DERC	Discrete Emission Reduction Credit
DIME	Dual Independent Map Encoding - A technique of creating a geographic base file (replaced by TIGER files)
DOT	Department of Transportation

E

EA	Environmental Assessment
EJ	Environmental justice
E+C	Existing Plus Committed
EIS	Environmental Impact Statement
EPA	U.S. Environmental Protection Agency
ERC	Emissions Reduction Credit
ERP	Emissions Reductions Plan
ETR	Employer Trip Reduction

F

FAA	Federal Aviation Administration
FAHPM	Federal Aid Highway Program Manual (replaced by FAPG)
FAI	Federal Air Interstate System
FAP	Federal Aid Primary System
FAPG	Federal Aid Policy Guide (replaces FHPM)
FAS	Federal Aid Secondary System
FAU	Federal Aid Urban System
FBI	Federal Bureau of Investigation
FCFF	Federal Clean Fuel Fleet
FFGA	Full Funding Grant Agreement
FHWA	Federal Highway Administration
FIP	Federal Implementation Plan
FMA	Federal Maritime Administration
FMVCP	Federal Motor Vehicle Control Program
FONSI	Finding of No Significant Impact
FRA	Federal Railroad Administration
FRN	Federal Register Notice
FTA	Federal Transit Administration (formerly UMTA)

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G

GCFRD	Gulf Coast Freight Rail District
GCHSR	Gulf Coast High Speed Rail
GCSPR	Gulf Coast State Planning Region
GIS	Geographic Information Systems
GRH	Guaranteed Ride Home
GSU	Geographic Statistical Unit

H

HAOS	Houston Area Oxidant Study
HB&T	Houston Belt & Terminal Railroad Company
HBW	Home-Based Work
HC	Hydrocarbons
H-GAC	Houston-Galveston Area Council
H-GRTS	Houston-Galveston Regional Transportation Study - Part of TxDOT, Houston District
HOT	High Occupancy Toll
HOV	High Occupancy Vehicle
HPMS	Highway Performance Monitoring System
HPR	Highway Planning and Research
HRT	Heavy Rail Transit
HUD	U.S. Department of Housing and Urban Development

I

IH	Interstate Highway
I/M	Inspection/Maintenance Program (for vehicle emission controls)
IMS	Intermodal Management System
IPG	Intermodal Planning Group
ISTEA	Intermodal Surface Transportation Efficiency Act of 1991
ITS	Intelligent Transportation System
IVHS	Intelligent Vehicle Highway System (outmoded term)

J

K

L

LEV	Low Emission Vehicle
LMRT	Local Match for Rural Transit
LMT	Local Match for Transit
LNG	Liquefied Natural Gas
LOM	Level of Mobility (traffic volume/roadway design capacity)
LOS	Level of Service
LRP	Long-Range Transportation Plan
LRT	Light Rail Transit

M

MCA	Major Corridor Analysis
MCS	Major Corridor Study (Alternatives Analysis or Feasibility Study), replaces MIS
MEC	Major Employment Center
MERC	Mobile Emission Reduction Credit

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METRO	Metropolitan Transit Authority of Harris County
MIS	Major Investment Study, replaced with MCS
MOBIL5a	EPA's Mobile Emissions Factor Model, (X = 5)
MOBIL6	EPA's Mobile Emissions Factor Model, (X = 6)
MOSERS	[Mobile Source Emissions Reduction Strategy] Methodology for TCM quantification
MOU	Memorandum of Understanding
MOVES	Motor Vehicle Emissions Simulator
MPO	Metropolitan Planning Organization
MTP	Metropolitan Transportation Plan (formerly Long Range Transportation Plan)
MVEB	Motor Vehicle Emissions Budget

N

NAAQS	National Ambient Air Quality Standards
NAFTA	North American Free Trade Agreement
NARC	National Association of Regional Councils
NASP	National Airport System Plan
NEPA	National Environmental Protection Act
NHS	National Highway System
NHTSA	National Highway Traffic Safety Administration
NOx	Nitrogen Oxide
NPRM	Notice of Proposed Rule Making

O

O₃	Ozone
O&D	Origin and Destination
O&M	Operation and Maintenance
OPD	Overall Program Design - A budgetary document of H-GAC

P

P&M	Preservation & Maintenance
P&P	Park and Pool
P&R	Park and Ride
PASS	Principal Arterial Street System (TxDOT)
PCB Program	Planning Capacity Building (PCB) Program of FTA and FHWA
PDP	Project Development Plan
PE	Preliminary Engineering
PEMS	Portable Emissions Monitoring System
PI	Public Information
PIP	Public Involvement Plan
PL 112	FHWA Planning Funds
PM	Particulate Matter (suspended solids)
PMS	Pavement Management System
PMSA	Primary Metropolitan Statistical Area
PMT	Personal Miles Traveled (daily or annually)
PPM (B)	Parts Per Million (Billion)
PPP	Public Participation Plan
PRT	Personal Rapid Transit
PS&E	Plans, Specifications and Estimates
PTF	Public Transportation Fund (State of Texas)
PTMS	Public Transportation Facilities and Equipment Management System
PTN	Division of Public Transportation, TxDOT
PTRA	Port Terminal Railroad Authority

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R

RAASP	Regional Airport/Airspace System Plan
RAP	Reliever Airport Plan
RAQPC	Regional Air Quality Planning Committee
RCAP	Regional Commute Alternatives Program, known as H-GAC's Commute Solutions Program
RCTSS	Regional Computerized Traffic Signalization System
RFP	Request for Proposal
RFQ	Request for Qualification
RMP	Regional Mobility Plan
ROP	Rate of Progress
ROW	Right-of-way
RSAS	Regional Strategic Arterial System
RSC	Regional Safety Council
RTNA	Regional Transportation Needs Assessment
RTP	Regional Transportation Plan

S

8 Planning Factors	... used in RTP development
SEP	Supplemental Environmental Plan
SAFETEA-LU	<u>S</u> afe, <u>A</u> ccountable, <u>F</u> lexible and <u>E</u> fficient <u>T</u> ransportation <u>E</u> quity <u>A</u> ct – A <u>L</u> egacy for <u>U</u> sers - Transportation Reauthorization Act for 2003-2009
SH	State Highway
SIP	State Implementation Plan – Plan detailing pollution controls for achieving attainment status required of TCEQ by the U.S. EPA through the CAAs of 1972 and 1977
SMP	Statewide Mobility Program (Build-it Section of TxDOT's UTP)
SMS	Safety Management System
SO₂	Sulfur Dioxide
SOV	Single Occupancy Vehicle
SPP	Statewide Preservation Program (Maintain-it Section of TxDOT's UTP)
SPR	State Planning and Research (a category of funding used by TxDOT)
SRP	Short-Range Transportation Planning
STF1	Summary Tape File 1
STF3	Summary Tape File 3
STIP	State Transportation Improvement Program
STP	Surface Transportation Program
STOL	Short Takeoff and Landing Aircraft
STRAHNET	Strategic Highway Network

T

TAC	Technical Advisory Committee to the Transportation Policy Council
TACB	Texas Air Control Board (Replaced by the Texas Commission on Environmental Quality)
TAFF	Texas Alternative Fuel Fleet Program
TASP	Texas Airport System Plan
TAZ	Travel Analysis Zone
TCAA	Texas Clean Air Act
TCEQ	Texas Commission on Environmental Quality (formerly known as the TNRCC)
TCMs	Transportation Control Measures
TCP	Transportation Control Plan (as envisioned by EPA to reduce mobile source emissions enough to meet the NAAQS)
TDM	Travel Demand Modeling; also Transportation Demand Management

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TDP	Transit Development Program
TEA-21	Transportation Equity Act for the 21 st Century (Enacted June 9, 1998; replaces ISTEA)
TEMPO	Texas Metropolitan Planning Organizations
TERP	Texas Emissions Reduction Plan
The District	Formerly Brazos Transit
THTS	Texas Highway Trunk System
TIGER	Topologically Integrated Geographic Encoding and Referencing (replaced DIME files)
TIP	Transportation Improvement Program
TIRZ	Tax Increment Reinvestment Zone
TMA	Transportation Management Area
TMO	Transportation Management Organization
TMS/H	Traffic Management System for Highways
TNRCC	Texas Natural Resource Conservation Commission, renamed TCEQ Sept. 1, 2002
TOPICS	Traffic Operations to Increase Capacity and Safety
TPC	Transportation Policy Council
TPD/Y	Tons per day/year
TPF	Transportation Planning Funds (FHWA PL-112 and/or FTA 5303 funds)
TIPI	Transportation Public Involvement Plan
TP&P	Division of Transportation Planning & Programming, TxDOT
TRACS	Texas Review and Comment System
TRC	Texas Railroad Commission
TSM	Transportation Systems Management
TTC	Texas Transportation Commission
TTDP	Texas Travel Demand Package
TTI	Texas Transportation Institute - A division of Texas A&M University
TxAQS 2000	Texas 2000 Air Quality Study
TxDOT	Texas Department of Transportation (formerly known as the Texas Highway Department)

U

UA/UZA	Urbanized Area
UPRR	Union Pacific Railroad
UPWP	Unified Planning Work Program
USC	United State Code
USDOT	United States Department of Transportation
UTP	Unified Transportation Plan
UTPS	Urban Transportation Planning System - Computer programs for transportation planning

V

V/C	Volume to Capacity
VHT	Vehicle Hours Traveled
VMEP	Voluntary Mobile Emissions Reduction Program
VMT	Vehicle miles traveled (daily or annually)
VOC	Volatile Organic Compound

Z

ZEV	Zero Emission Vehicle
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