



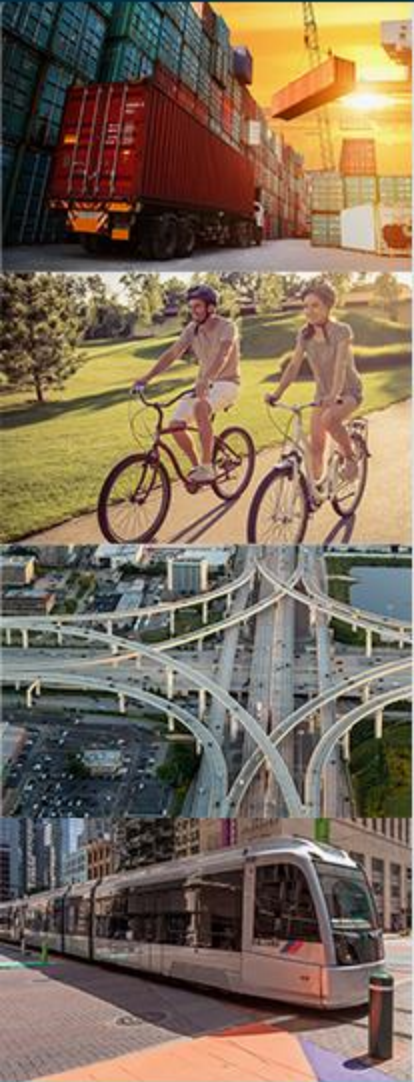
MEMBER ORIENTATION TO THE TRANSPORTATION ADVISORY COMMITTEE (TAC)



March 15, 2023



What is H-GAC?

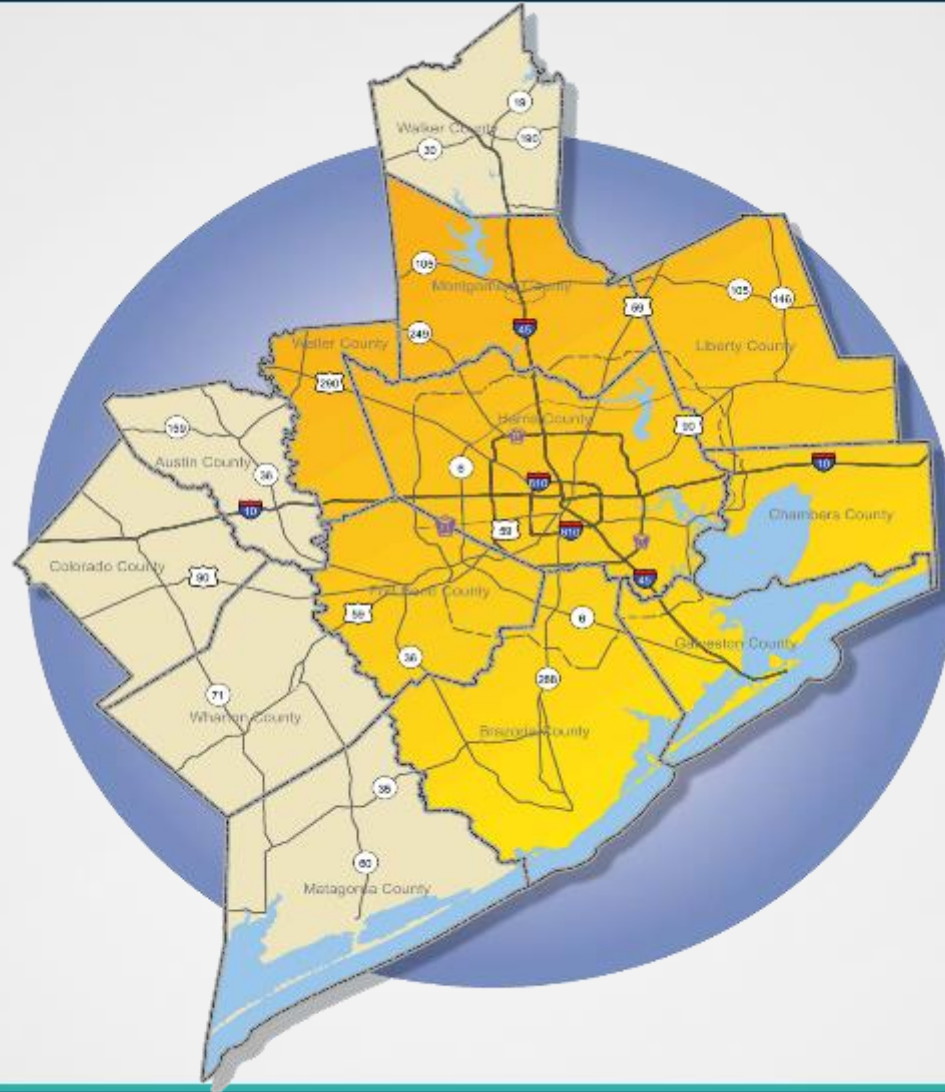


- Regional forum for cooperative action by local governments in 13 county region.
- Created by Texas, Functions Defined by State and Local Governments:
 - Area Agency on Aging (12 Counties)
 - Job Training (13 Counties)
 - Gulf Coast 911 District (8 counties)
 - HGACBuy; Energy Purchasing; SBA; and more.

Metropolitan Planning Organization

MPO Counties

- Brazoria
- Fort Bend
- Waller
- Montgomery
- Liberty
- Chambers
- Galveston
- Harris



Additional COG Counties

- Austin
- Colorado
- Matagorda
- Walker
- Wharton

H-GAC as MPO



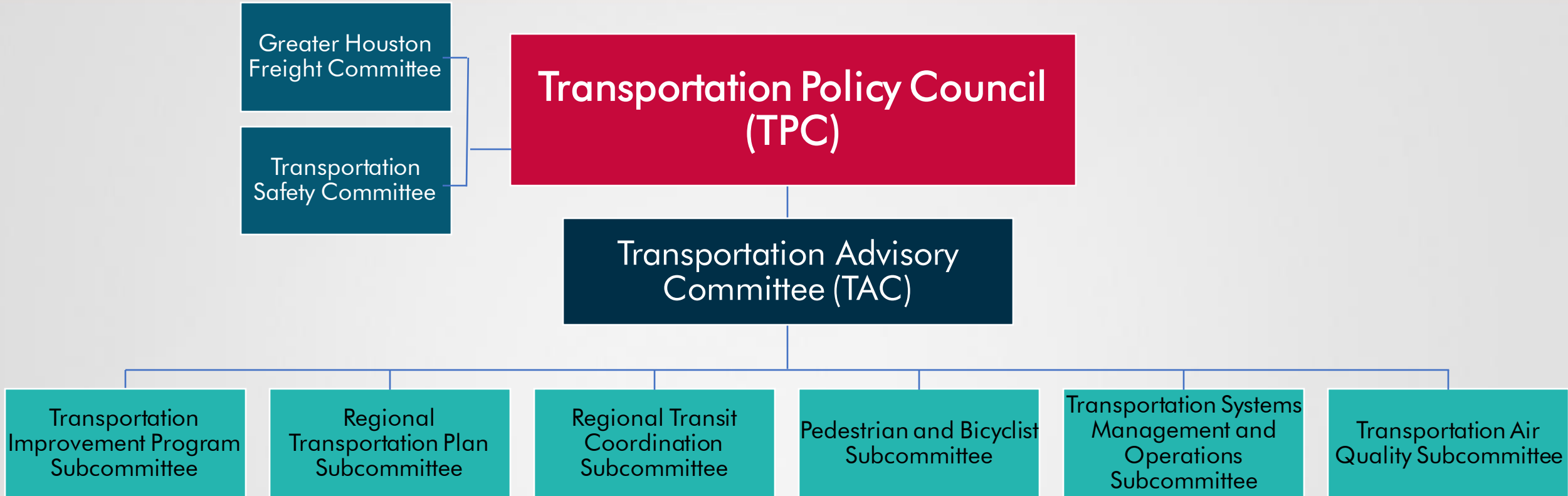
- H-GAC Board of Directors
 - 36 voting members representing:
 - 13 Counties
 - 107 Cities
 - 11 School Districts
- Serves as the Fiscal Agent for MPO
 - Responsible for providing staff support
 - Executes agreements with TxDOT, local governments, contractors

Transportation Policy Council

- Independent Policy Making Body
- Membership Largely Self-Determined
- TPC Membership
 - 28 voting, 6 non-voting (ex-officio)
 - Local Elected and Appointed Officials
 - Major Modes of Transportation
 - State Elected Officials



MPO Committee Structure



TPC Member Responsibilities

- Adopt Regional Transportation Plan
- Select or Approve Federally (and most State) Funded Transportation Projects
- Conduct Continuing, Comprehensive, Coordinated (3C) Planning
- Demonstrate Compliance with On-road Vehicle Emissions Reductions



Transportation Advisory Committee

- Advise the Transportation Policy Council (TPC) on development of the Unified Planning Work Program (UPWP), Regional Transportation Plan, Transportation Improvement Program, and other transportation planning activities.



Transportation Advisory Committee Membership

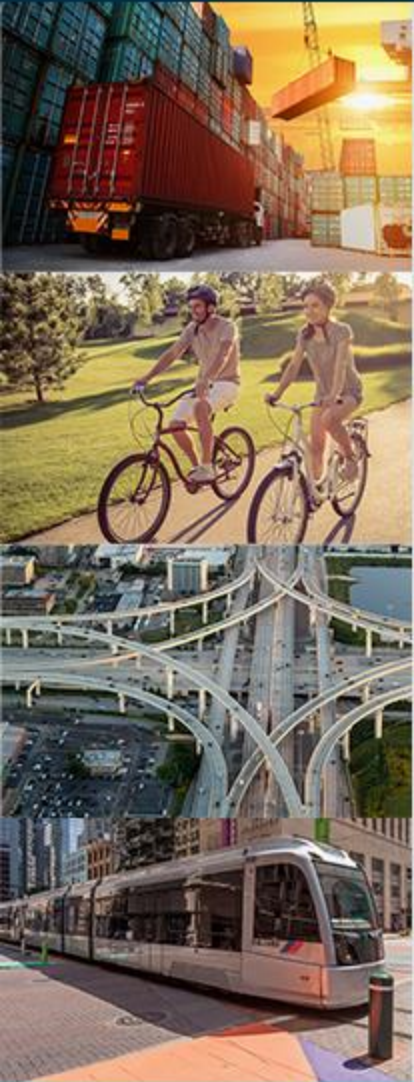
- Membership includes elected officials, agency staff, and special interest citizens
- In the event of vacancies, a new member must be appointed in same manner as previous voting member. Voting members appointed by designated agencies may submit new members at any time



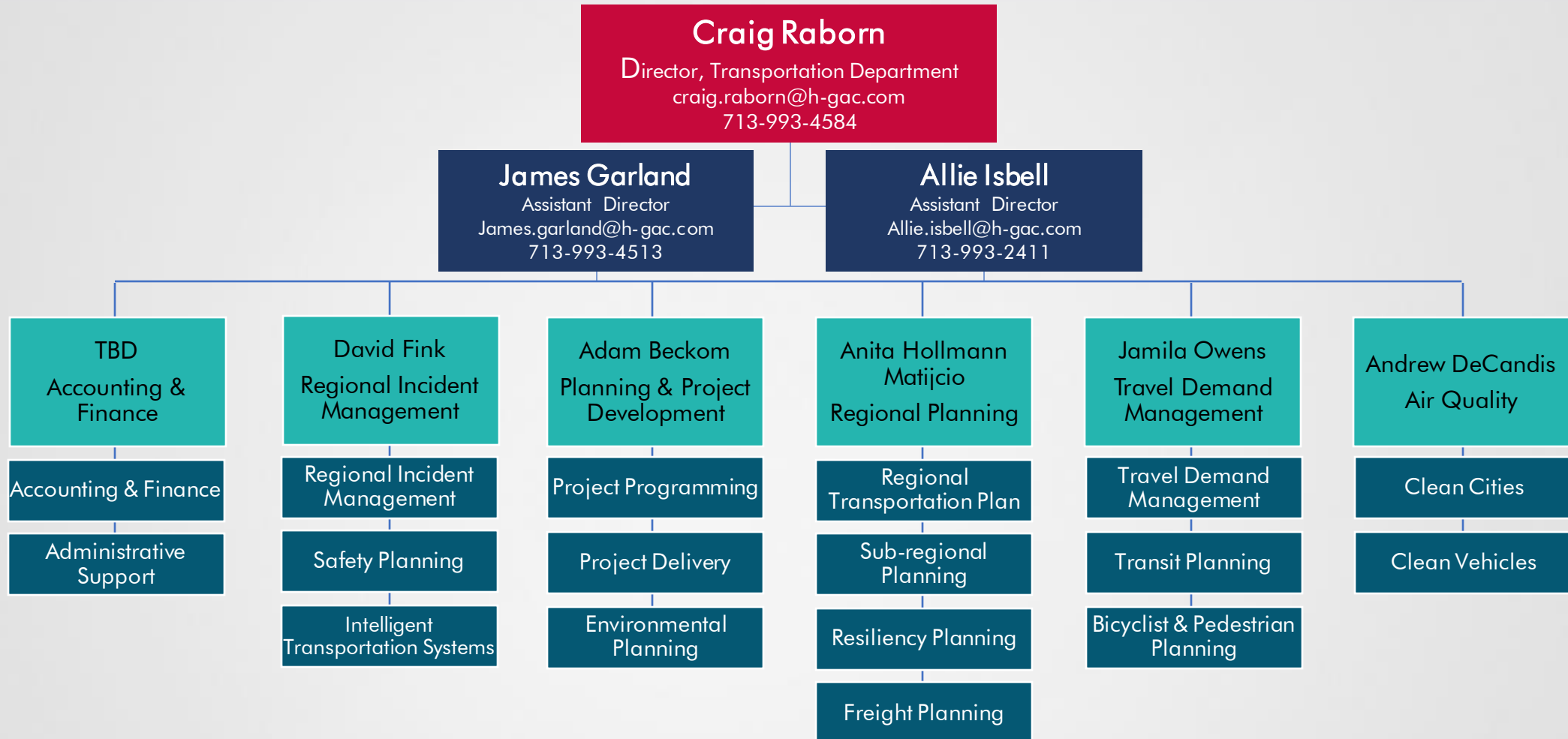
| Category or Organization | Appointing Agency | Number |
|---|---------------------|-----------|
| Cities of 50,000 or more (one each) | Each City | 10 |
| Cities less than 50,000 population | TPC | 3 |
| Regional Planning | H-GAC Board | 1 |
| Counties (one each) | Each County | 8 |
| TxDOT Districts | Each TxDOT District | 2 |
| Metropolitan Transit Authority of Harris County | METRO | 1 |
| Port of Houston | Port of Houston | 1 |
| Public Transit Agencies | TPC | 3 |
| Ports | TPC | 1 |
| Toll Roads | TPC | 2 |
| Airports | TPC | 1 |
| Environmental | TPC | 2 |
| Planning | TPC | 3 |
| Active Transportation | TPC | 2 |
| Business Interests | TPC | 2 |
| Citizen Interests | TPC | 2 |
| TOTAL | | 44 |

Transportation Advisory Committee Membership

- Voting on Action Items will be conducted by the nominated Primary or Alternate member.
- If the Primary member is not present, their designated Alternate may take action.
- Other representatives of Primary or Alternate members are welcome to attend, but may not take action during TAC meetings.



Transportation Department



Role of MPO Staff



- Support TPC and TPC committees
 - Agenda and meeting logistics
 - Communication of TPC actions
 - Minutes and other records
- Prepare Transportation Plans
- Execute Air Quality Programs
- Provide Information & Technical Analyses
- Facilitate Public Participation

Unified Planning Work Program (UPWP)



Task I: Program Management

Task II: Data Development and Maintenance

Task III: Short Range Planning

Task IV: Long Range Planning

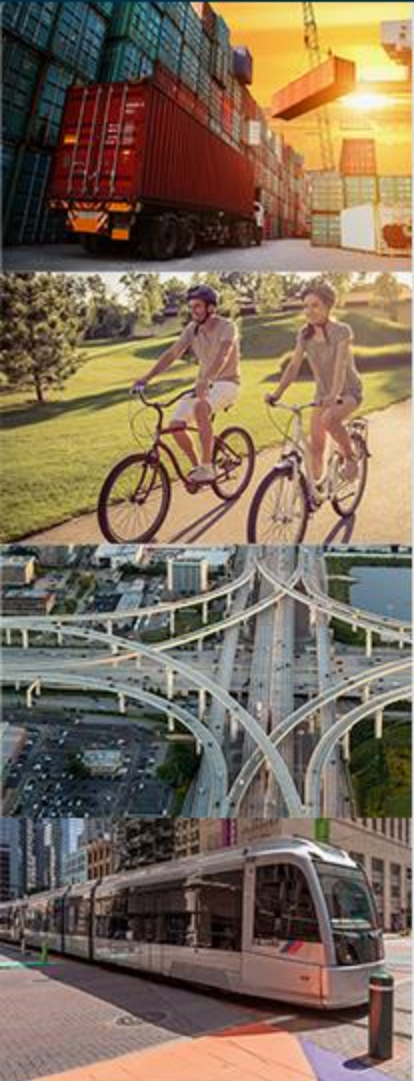
Task V: Special Planning Studies

Project Programming and Delivery



- **Transportation Improvement Program**
 - Project Selection Process
 - Amendments
 - Project Monitoring and Delivery
- **H-GAC 10-Year Plan**
- **Transportation Development Credits**
- **Regional Strategic Transportation Fund**
- **Federal Performance Measures**
- **Title VI/Environmental Justice Planning**

Project Selection Process



- Aligns project selection with RTP goals and TPC guidance
- Investment Categories
 - Regional Goods Movement, Operational Improvements/Congestion Management, High Growth Area Needs, Major Projects, Active Transportation, Transit, Resiliency & State of Good Repair, Expand, Safety
- Project Evaluation:
 - Benefit/Cost Analysis
 - Planning Factors
- Statements of Interests accepted on a rolling basis

Project Selection Classifications

Multi-Step
Project
Review
Process

Projects Needing
Further Refinement

Projects that need further refinement will not be awarded funding. These projects will be sent back to the project sponsor for further refinement before being eligible to re-compete for funding in the project selection process.

Project Placed on
Unfunded List

Projects placed on the unfunded list will not receive federal funds through the project selection process. However, these projects may be used for other funding programs (e.g., federal discretionary grant programs). Also, these projects will be reconsidered during future reviews of each investment category.

Projects Selected for
Planning Activities

Projects selected for planning efforts will be inventoried for planning funding in the Unified Planning Work Program for further planning and study. Project recommendations developed during the study will have to compete for funding in the future. They will receive additional points during project selection cycles.

Project Selected for
Development

Projects selected for development will be amended into the Regional Transportation Plan and project sponsors may continue to further develop the project. Once ready for construction, the project will be reviewed for readiness and programmed into the Transportation Improvement Program and the H-GAC 10 Year Plan. **Project development activities such as design and row-of-way may be funded and programmed in advance of construction.**

Project Selected for
Construction

Anticipate that projects selected for construction will begin in the next 2 to 10 years. Projects will be programmed into the Transportation Improvement Program and the H-GAC 10 Year Plan, and Regional Transportation Plan at the next available opportunity.

Regional Planning Team



Anita Hollmann Matijcio
Regional Planning

Regional Transportation Plan

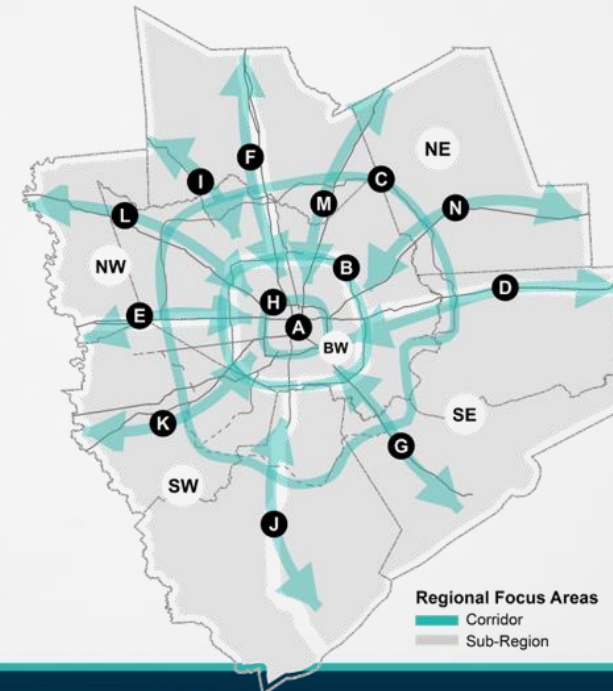
Sub-regional Planning

Resiliency Planning

Freight Planning

RTP Update: The Transportation Future for Our Region

Public Review Period
March 15 – April 17, 2023
h-gac.com/rtp



Regional Planning Team



Anita Hollmann Matijcio
Regional Planning

Regional Transportation Plan

Sub-regional Planning

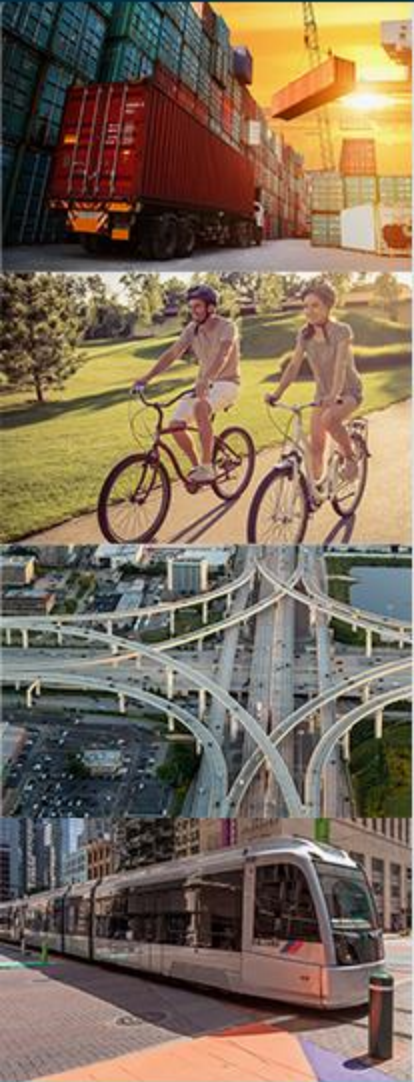
Resiliency Planning

Freight Planning

Subregional Planning: Smaller Area Studies

- ✓ Mobility Plans
- ✓ Livable Centers*
- ✓ Corridor Studies
- ✓ Thoroughfare Planning

Regional Planning Team



Anita Hollmann Matijcio
Regional Planning

Regional Transportation Plan

Sub-regional Planning

Resiliency Planning

Freight Planning

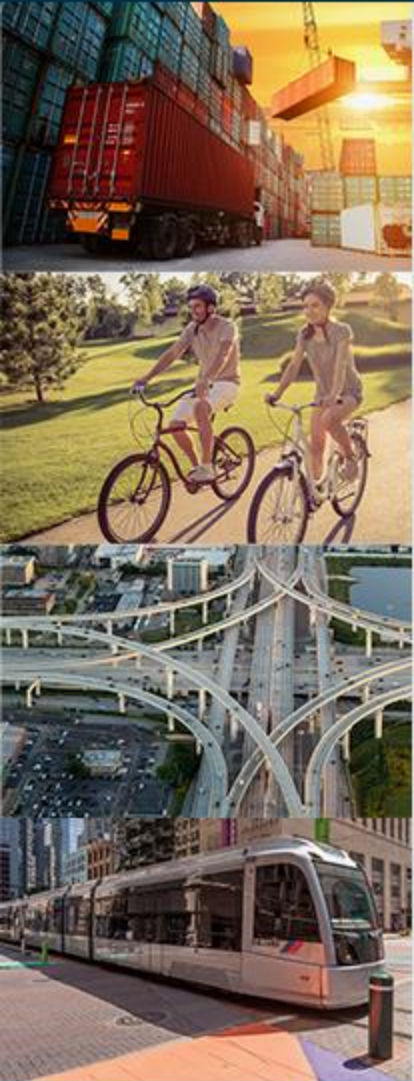
Freight Planning

- ✓ Regional Goods Movement Plan (RGMP)
- ✓ Greater Houston Freight Committee (GHFC)
- ✓ Houston Area Rail Transformation (HART)
- ✓ State/Local Partner studies

Resiliency Planning

- ✓ 2021 Pilot Study Resilience & Durability to Extreme Weather
- ✓ Regional Resilience Tool
- ✓ Regional Resilience Plan (coming soon)

Travel Demand Management Overview



Focus- Encourage shifts in the way we travel to improve efficiency of how we use of our transportation networks

- Provide planning and implementation support for **shared and active modes** of transportation
- Conduct **outreach and education** about these options (bike, walk, vanpool, carpool, transit, telework) and other demand management strategies

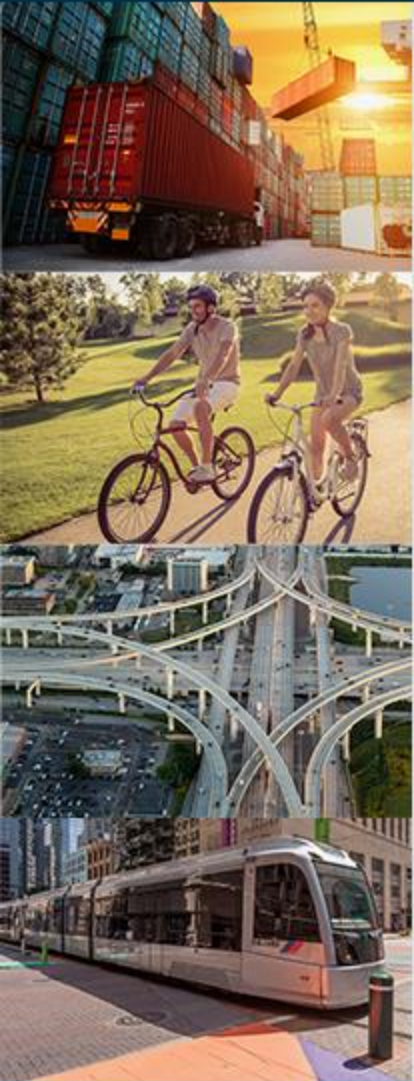
Travel Demand Management Planning Projects



- **Transit Planning** (Coordinated Transportation, High-Capacity Transit, *Local* Transit) Seven current.
- **Active Transportation Planning** (2045 Active Transportation Plan, *Local* Active Transportation, Safe Routes to School) Eight current.
- **Congestion Management Planning.** Update Pending

Travel Demand Management Implementation, Outreach and Education Projects

- **Commuter and Transit Pilot Program** (launch new transit or first/mile solutions)
- **Commuter Solutions** (free services for employers, universities, others)
- **Bike Safety Classes** (motorists and bicyclists)

A composite image featuring a digital interface for commute cost comparison, a photo of a person in a safety vest talking to a cyclist, and a photo of a bus with people boarding.

Slide to change your commute and reduce your impact.

| Mode | Days |
|-----------------------|--------|
| Carpool | 1 day |
| Vanpool | 0 days |
| Bus | 1 day |
| Bicycle/Telework/Walk | 0 days |

YOUR COMMUTE COSTS
\$
Nice job, you could save \$2,112.48 per year, or a 62% reduction.

EMISSIONS IMPACT
☁️
You also reduced CO₂ emissions by 2,791 lbs. of CO₂ per year, a 59% reduction.

Back Next

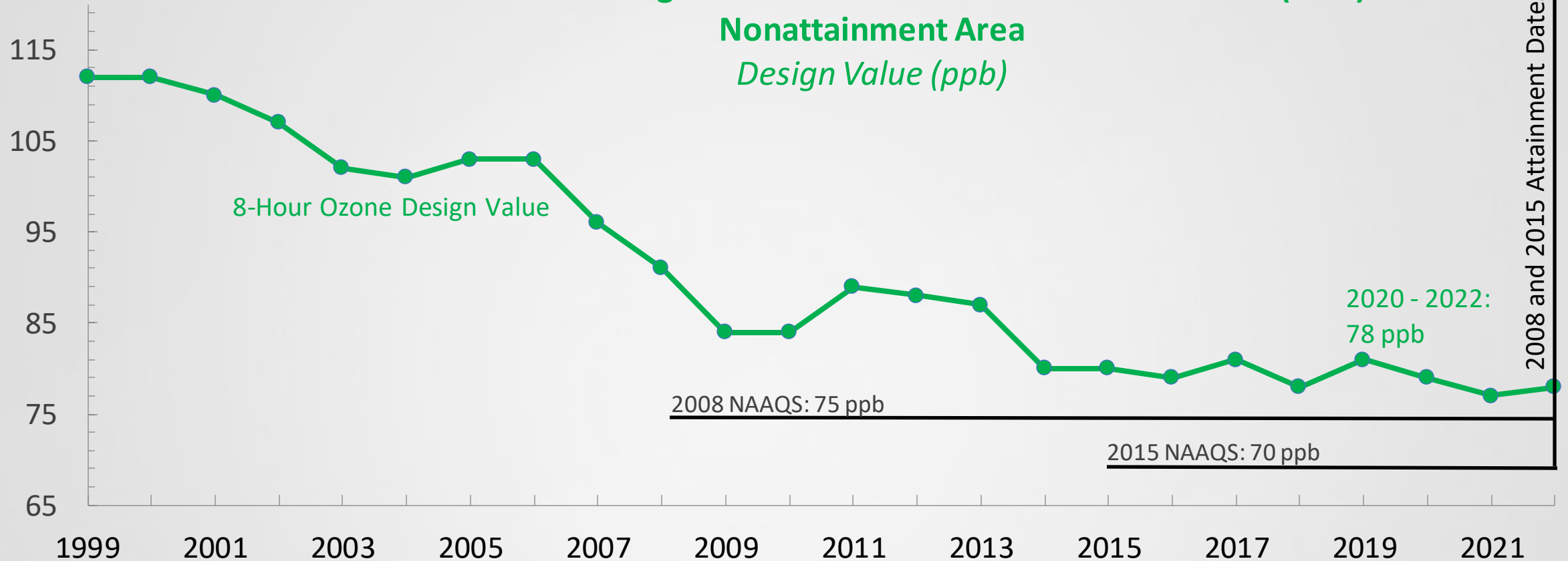
THE WOODLANDS EXPRESS
www.woodlandstransit.com
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Regional Air Quality Planning

8-Hour Ozone Design Values for Houston-Galveston-Brazoria (HGB)

Nonattainment Area

Design Value (ppb)

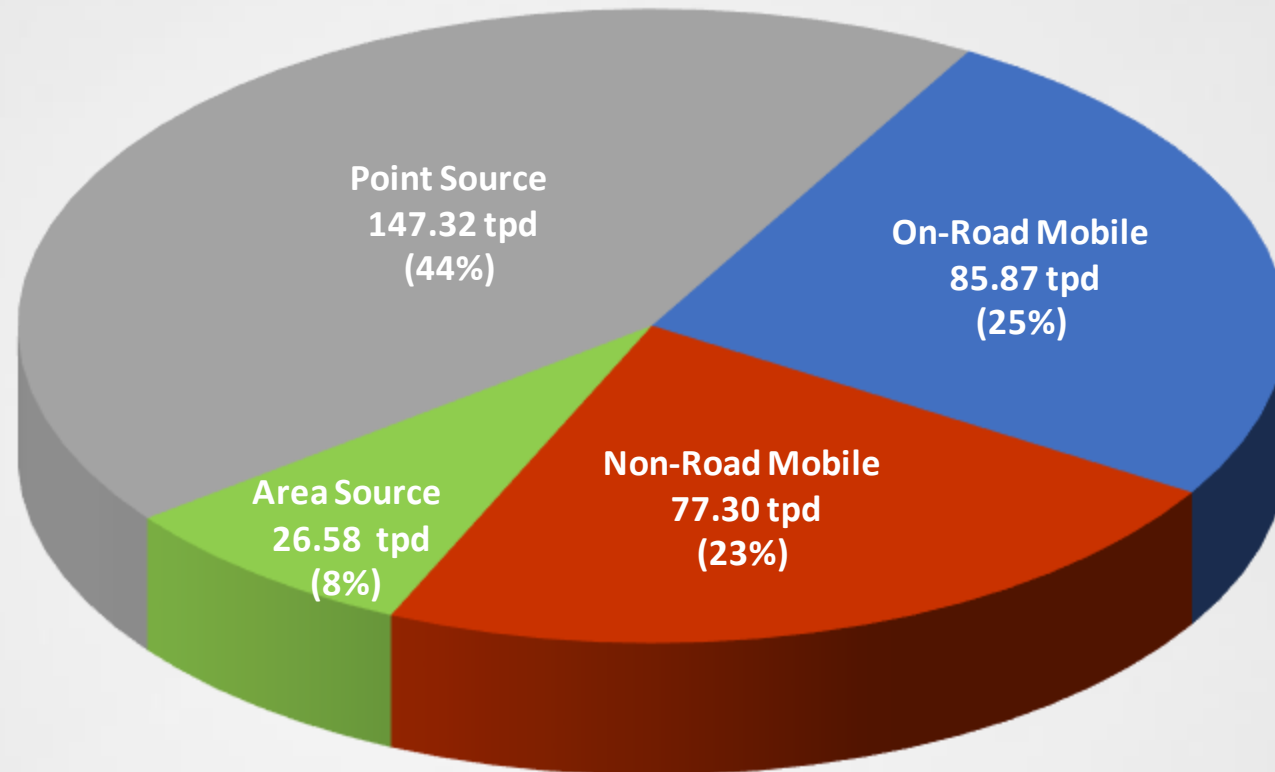


*2008 NAAQS includes eight counties: Brazoria, Chambers, Fort Bend, Galveston, Harris Liberty, Montgomery, and Waller

*2015 NAAQS includes six counties: Brazoria, Chambers, Fort Bend, Galveston, Harris, and Montgomery

Regional Air Quality Planning

2017 Estimated HGB NOx Inventory

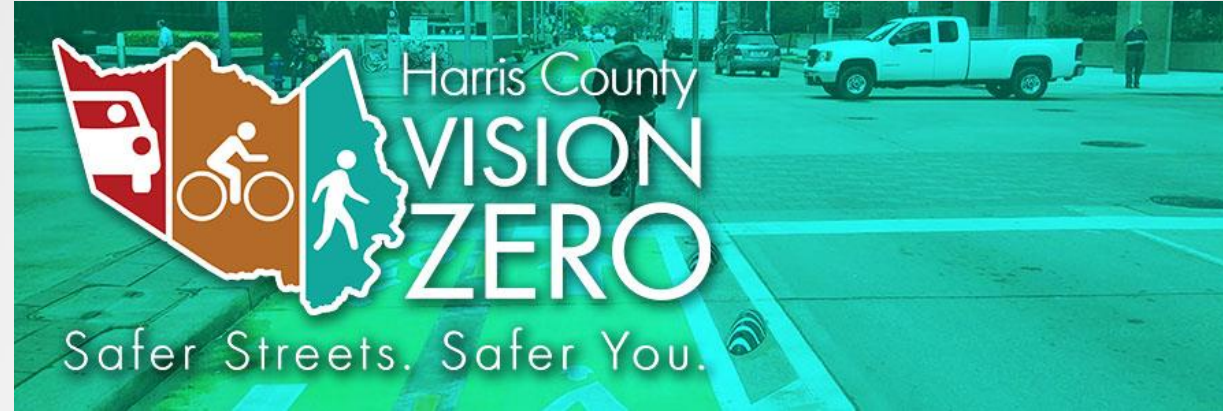
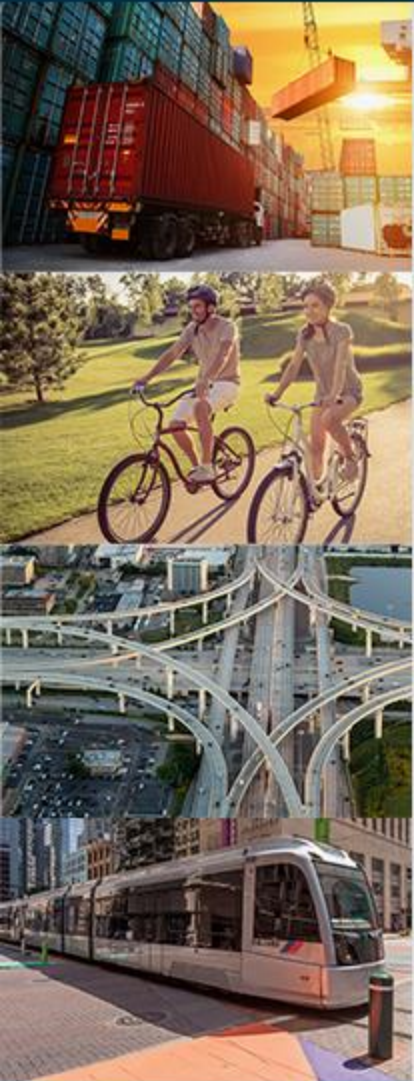


Source: Texas Commission on Environmental Quality

Regional Air Quality Planning

- Work to and assist the region's efforts to improve air quality and attain national standards.
- Conceptualize, develop, and administer emission reduction programs
- Administer grant incentives to fleets, fuel providers, owner operators, government and other public entities
- Provide staff support to H-GAC's air quality committees and sub-committees

Supports State and Regional Efforts



Hurricane Evacuation

- Update Emergency Evacuation Traffic Management Plan in collaboration with State and regional partners
- Hurricane Preparedness/Zip Zone Awareness Public Outreach Campaign
- Maintain Web Based Evacuation Map
- Develop standard operating procedures for evacuation monitoring



Transportation Systems Maintenance and Operations (TSMO)



- Maintain regional ITS architecture to federal standards
- Maintain and update Regional Inventory for Signals, ITS and Fiber
- Hold bi-monthly TSMO subcommittee Meetings
- Support the Project Calls for ITS projects

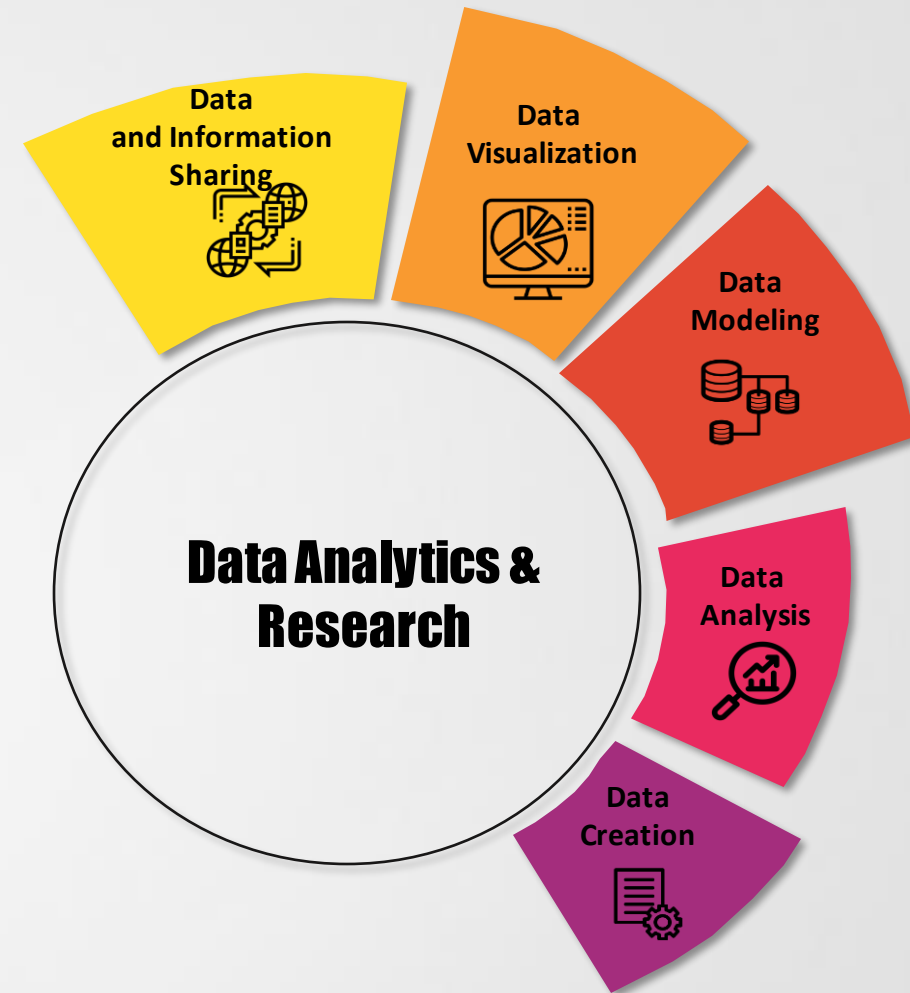
Regional Incident Management

- Operate a Quick Clearance Towing (Tow and Go™) program.
- Monthly Traffic Incident Management Meetings

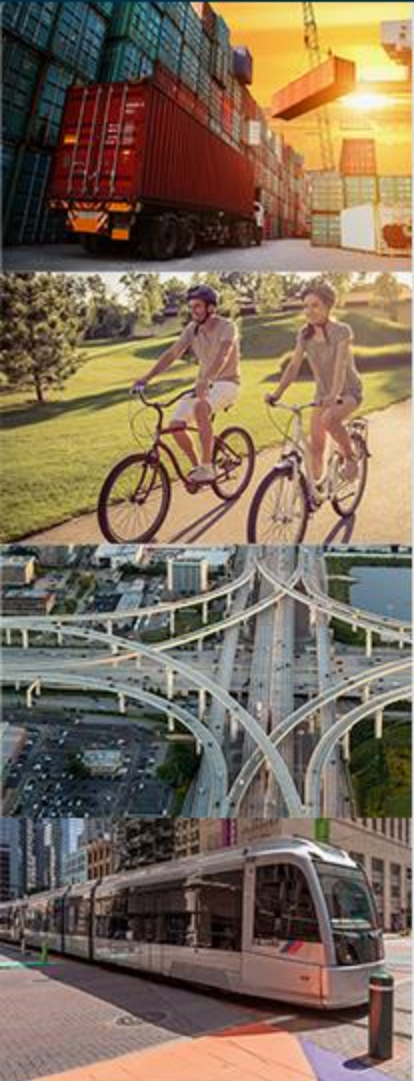


Data Analytics and Research-Overview

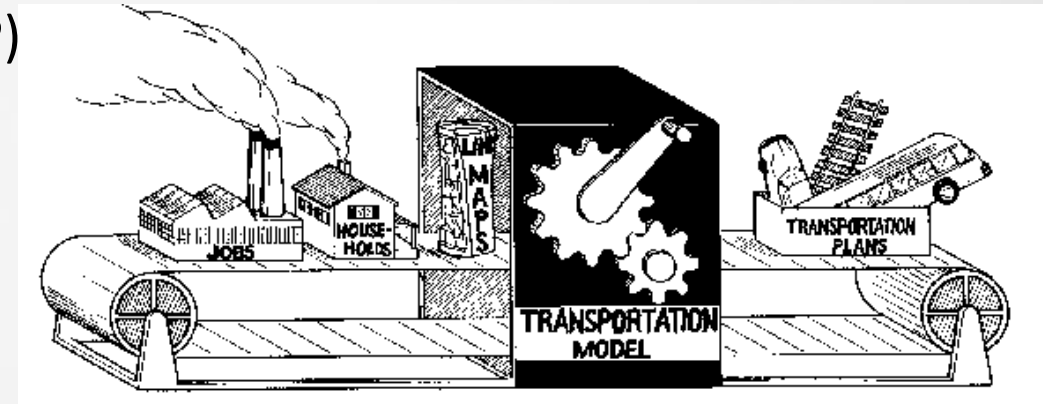
- Data Analytics and Research Department uses data and technology to support informed decision-making across the H-GAC region.
- The Department provide technical and analytical support to Transportation and Community planning studies.
- Expertise in
 - **Data analysis and visualization**
 - **Socioeconomic modeling**
 - **Transportation modeling**
 - **Air Quality Modeling**



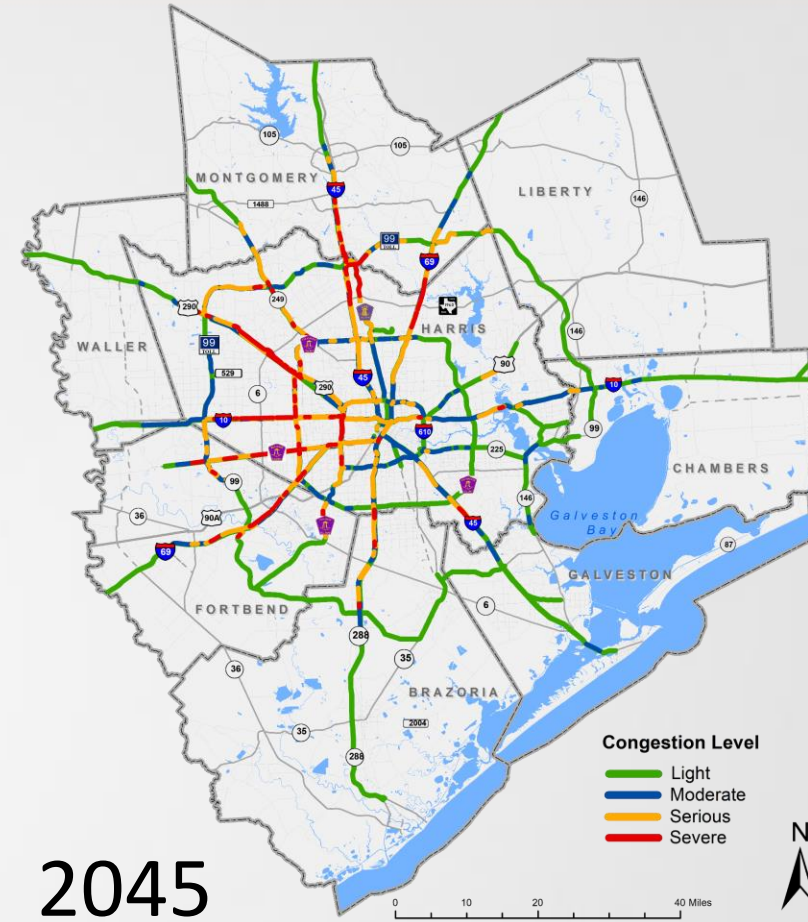
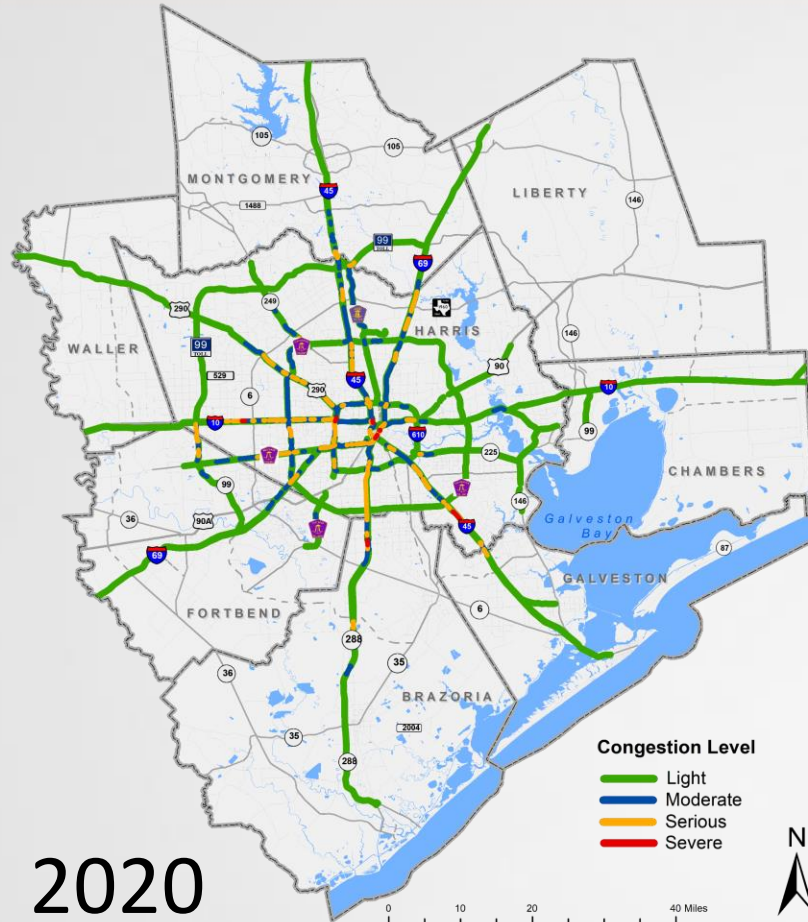
Supporting Transportation Studies



- Provide decision-makers with the information for transportation planning such as mobility studies, project prioritization, alternative studies, B/C analysis, environmental analysis and safety analysis.
- Modeling application examples
 - Regional Transportation Plan (RTP)
 - Air quality conformity
 - Corridor planning studies
 - Subregional mobility studies
 - Transit studies
 - Freight studies



Congestion Maps - 2020 & 2045 Freeway and Tollway 4-Hr PM Peak Period



PM Peak period traffic volumes are used to develop these congestion maps for years 2020 and 2045 because the PM Peak traffic volumes represents better traffic spread of other tree times of days (AM, MD-Day & OV-Night).

Interactive Web Mapping Applications for Transportation Planning



The screenshot shows the H-GAC website interface. At the top, there is a navigation bar with the H-GAC logo and 'Houston-Galveston Area Council' text. To the right are icons for 'Residents', 'Business', and 'Government', and a 'H-GAC Resources' button. Below the navigation is a search bar with the text 'Search H-GAC' and a 'Search' button. The main content area is titled 'Interactive Web Applications' and includes a paragraph describing the page's purpose, instructions on how to use the application thumbnails, and a disclaimer. A 'List of Filters' section contains several red buttons: 'Show All', 'Census', 'Employment', 'Environment', 'Growth Forecast', 'Land Use', 'Planning', 'Transportation', 'Water Quality', and 'External Apps'. Below this is a 'List of Applications' section with three application thumbnails: 'Job-To-Job Flows in the', 'Houston MSA Job-to-Job Flow Explorer', and 'Demographic and Socio-Economic'. On the right side of the page, there are several sidebar sections: 'Interactive Web Applications' with a link to the 'Interactive Planning Tools Seminar Series', 'Contact Us' with the email 'CEGIS@h-gac.com' and phone number '713-627-3200', 'DataLab on Social Media' with a 'Find us on Facebook' link, and 'H-GAC News & Events' with a 'See More' button.



www.h-gac.com/go/apps

<https://datalab.h-gac.com/>