

**Regional Transit Coordination (RTC)
Subcommittee Meeting
Houston-Galveston Area Council
3555 Timmons Lane, 2nd Floor, Conference Room B/C
Thursday October 10, 2019
9:30 -11:00 a.m.**

Agenda

1. Introductions and Certification of Quorum (8) – Vernon Chambers,
Harris County Transit, Chair.
2. Action Items:
 - Adoption of Agenda
 - Approval of RTC Subcommittee Meeting Summary of July 11, 2019
3. Public Comments
4. Information Item(s): (10 minutes or less each)
 - 4.1 Harris County Transit New Routes using Hurricane Disaster funds- Stephanie Nunez, Harris County Transit.
 - 4.2 METRO Mobile Ticketing App Update- Denise Wendler, Metropolitan Transit Authority of Harris County (METRO).
 - 4.3 Regional Express Transit Framework- Katrina Bayer, Central Houston Inc.
 - 4.4 Smart Mobility and Automated Vehicles- Alan Rodenstein, H-GAC
 - 4.5 Regionally Coordinated Transportation Plan (RCTP) Updates- Kari Hackett H-GAC -Interactive Database, Google Transit, Statewide Metrics Report
5. Agency Reports (5 minutes or less each)

Next RTC Quarterly Meeting- January 9, 2020. (Tentative) H-GAC Conference Room B/C.

REGIONAL TRANSIT COORDINATION SUBCOMMITTEE

MEETING SUMMARY

Thursday, July 11, 2019 – 2:00 P. M.

Houston-Galveston Area Council of Government Offices
3555 Timmons Lane, Suite 120, Houston, Texas 77027

(Meeting Held – Second Floor, Agency Conference Room B/C)

MEMBERS PRESENT

Rick Beverlin – City of Galveston
Vernon Chambers – Harris County
Ruthanne Haut – The Woodlands Township
Valerie Marvin – City of Pearland
Tennille Jones – Fort Bend County

ALTERNATES PRESENT

Sarah Santoy – Brazos Transit
Perri D’Armond – Fort Bend County
De’Andre J Guin Sr. – City of Conroe
Jason Jones – Houston Center for Barrier Free Living
Susan Jaworski – METRO (Phone)

OTHERS PRESENT

JD Allen – TxDOT’s Consultant (Phone)
Brenda Bustillos – TxDOT
TxDOT- Darla Walton – TxDOT
TxDOT- Barbara Walters – TxDOT
TxDOT Ex-Officio – Travis Madison
TxDOT- Paula Haley Polk
TxDOT – Dana Green
Jo Penn – Brazos Transit
Katrina Bayer – Central Houston, Inc
Vidya Menon – Fort Bend County

H-GAC STAFF PRESENT

Lydia Abebe
Kathryn Vo
Cassandra Marshall
Lucinda Martinez

BRIEFING

Overview

The RTCS Members and Alternates were presented with the following action, information and updates: Google Transit (GTFS) for Fort Bend County Public Transportation, Multimodal Platform Connect Smart, Public Transportation Agency Safety Plan for the State and Transit Awareness Program.

ACTION ITEMS

ITEM 2A. – Adoption of Agenda

Ms. Vernon Chambers, Chair, Harris County, requested a motion to adopt the agenda.
Action Item Motion Passed

ITEM 2B Approval of Meeting Summary

Ms. Vernon Chambers, Chair, Harris County, requested a motion to approve the RTC Meeting Summary for the April 11, 2019 meeting as presented.
Action Item Motion Passed

ITEM 3. Public Comments

No public comments were presented to the subcommittee

INFORMATION ITEMS

ITEM 4A. Public Transportation Agency Safety Plan Update for the State (PTASP) (JD Allen, Alliance Transportation Group, Inc)

Mr. JD Allen, Alliance Transportation Group provided a brief update on PTASP. Mr. JD Allen informed the subcommittee that public transportation is one of the safest ways to travel in the U.S. Also, transit passengers are 40 to 70 times less likely to be killed or injured when riding public transportation than driving or riding in a motor vehicle. Rates of fatalities and injury in public transportation have remained stagnant over past decade. Eighty percent of all accidents and incidents attributed to human error. Therefore, majority of error related to accidents due to organizational weaknesses.

Mr. Allen informed the subcommittee that SMS is a collaborative approach for management and labor to work together to control risk. It helps the employer bring a systematic approach to protecting passengers and employees. This helps management to identify risk and allocate resources appropriately to mitigate.

Finally, Map 21 and Fast Act Congress required operators of public transit that receive FTA funds to implement a PTASP and FTA was required to write a rule to do so and they did. It was published July 2018, will become effective July 2019, and will be required to be in place by July 2020.

ITEM 4B. Google Transit Presentation (Vidya Menon, Fort Bend Transit)

Ms. Vidya Menon, Fort Bend County Transit, informed the subcommittee that they are partnering with Google Transit. The General Transit Feed Specification (GTFS) system will have a standardized format for public transportation agencies to describe stop, route, schedule, calendar, and fare information as well as other elements for fixed route transit services. She also mentioned the creation will allow transit agencies to submit their data to developers for integration into web applications such as Google Maps Transit Trip Planner.

Ms. Vidya also mentioned the criteria that is acceptable to partner with Google Transit, if you have a fixed schedule, or a reliable schedule for frequency-based systems. You can not reserve seats and tickets must be purchased on board or at the station. It must be open to the public and the commuters may use it for their commuting purposes.

ITEM 4C. Multimodal Platform “Connect Smart” (Brenda Bustillos, TxDOT)

Ms. Brenda Bustillos, TxDOT, briefed the committee on TxDOT initiatives. TxDOT received \$8.9 million in grant from FHWA to implement a new technology application that will integrate a transportation management system for all modes to benefit carpoolers, transit and bicycle riders. She also informed the committee the new application will help to reduce congestion and improve the safety of our transportation system.

Ms Bustillos informed the committee that the TxDOT timeline to implement this program is three years. The first year, TxDOT, will develop, integrate, market, and collaborate. The second year will be focused on implementation, and outreach. The final year, TxDOT, will evaluate and continue to market the new application.

Ms. Bustillos mentioned that a version of this application is already in Austin. Also, TxDOT, has plans to reach out to Dallas and Fort Worth.

ITEM 4D. Transit Awareness Program (Lydia Abebe, H-GAC)

Ms. Lydia Abebe gave a presentation to the subcommittee on the Transit Awareness Program (TAP). The presentation consists of background information on transportation congestion, funding challenges, transit needs and gaps. A Regional Transit Engagement Series (RTES) will be used to build a dialogue with government staff, elected official, and private sector leaders in large, small and medium size communities. The engagement series has the following two phases:

Phase one- engagement is designed for local government staff, (county and municipal managers), planners, planning directors to create dialogue on regional transit and gather input.

Phase two – engagement will expand to include local, state, and federal elected officials, private sector stakeholders’ leaders, and leaders of institutions and will build on the results of Phase I and go deeper into the topics that were heard across the region.

Throughout the engagement series, surveys will be conducted to gauge public attitudes and values related to regional transit and at the end a Transit Summit will be held for the purpose of bringing it all together and it will serve as a “Call

to Action” on moving forward. At this time, Ms. Lydia mentioned that this is a new initiative and will need the help of everyone.

ITEM 5A. Agency Reports

Ms. Vernon Chambers, Chair, Harris County, invited committee members to briefly give updates on their agency efforts. Updates were provided by several agencies and included the following highlights:

- **City of Conroe-** New Park and Ride service started in April, ridership continues to increase. Schedules are to be adjusted in response to rider concerns on July 15. On August 19, they are partnering with H-GAC Commute Solutions for a rider appreciation and a grand opening. The grand opening will be held at the Park & Ride lot between 6am-7am. Following that will be the transportation fair, 11am-1pm, at the Conroe/ Lake Conroe Area Chamber of Commerce office. They will educate employers and businesses about the different alternatives they have in regards to transit.
- **City of Galveston-** Completed conversion of demand response system to Harris County RIDES, which is more economical so far. They are focusing on core areas where they can do better, have moved away from Commuter Park & Ride services , transferred 5 vehicles to Gulf Coast Center and will transfer 3 others. They will focus on smaller vehicles, local services, and keep growing the trolleys funded with hotel taxes. They are out of the cruise ship shuttle business. They are working on the Tier 1-Transit Asset Management Plan and will be restarting the steel wheel trollies which are being rebuilt in Iowa.
- **Houston Center for Barrier Free Living-**July is ADA awareness month and several events are planned. On July 16, Lone Star legal aid is coordinating a work shop on disability rights and housing issues. A Voters Registration drive will be held at the Multipurpose Center on West Gray on July 19th from 10am-4pm. On July 26, there will be an ADA celebration and refreshments will be served. The Housing Vouchers program with the Houston Housing Authority has done well, over 200 vouchers were issued in the past year. In August, the Abilities Expo will be in Houston.
- **Central Houston-**The Downtown 2018 Commuter Survey is now available online (at www.centralhouston.org). Results show that a significant (46%) or respondents used alternate modes, please review the report for more details.
- **Fort Bend County-**The Transit facility is about 75% complete, expecting to move in by the end of the year. They are coordinating partnership meetings with cities of Richmond and Rosenberg regarding the elimination of the point deviation routes. Instead, they will have designated area routes which will help to improve demand response services. Planning for the Westpark PR continues contingent upon an eminent domain process for one area.
- **Woodlands Township-**Due to customer requests, they expanded the service that goes to the Texas Medical Center on June 3. It will be stopping near Main and Bissonnet for riders going to the Museum District, Center for Fine Arts. They will check ridership to see how many are using it.
- **Lydia requested that RTC members interested in working with her on the Transit Awareness Program to submit their names to her.**
- **TxDOT-** Completed the call for the 5310 projects process. All recipients of funding should have been notified. TxDot will be hosting the Semiannual Operators’ meeting in Austin on July 24. TxDOT is implementing new enhancements for eGrants. Trainings will be provided through webexes and You-Tube videos available for viewing on the TxDOT website.
- **Harris County Transit-**They are waiting on Hurricane Harvey funding for expansion of routes for disaster areas. They are planning to add more routes, when the funding is made available. As Rick mentioned, the partnership in Galveston for the demand response services is going well. The agreement was expanded to \$500,000. HC RIDES will be participating at the Abilities Expo with a booth.

Next RTCS Quarterly Meeting- October 10, 2019 at 9:30AM (Tentative) H-GAC-2nd Floor, Conference Room B/C

ADJOURNMENT

Meeting adjourned at 3:35 P.M.

PTASP – 49 CFR Part 673

Public Transportation Agency Safety Plan

JD Allen, AICP, WSO-CSSD, TSSP-Rail/Bus





Presentation

- PTASP – What is it and Why do it
- PTASP Rule Making
- PTASP – Who is Affected
- PTASP – Development and Implementation
- PTASP – General Requirements
- PTASP – Specific Required Elements
- What is SMS
- NSP Safety Performance Measures

PTASP – What is it and Why do it

GOOD NEWS

- Public transportation is one of the safest ways to travel in the US
- Transit passengers are 40 to 70 times less likely to be killed or injured when riding public transportation than driving or riding in a motor vehicle

PTASP – What is it and Why do it

OTHER CONSIDERATIONS

Public transportation has more chance of catastrophic events

Several high profile events over past decade

Rates of fatalities and injury in public transportation have remained stagnant over past decade

Rates in almost all other modes have declined significantly

80% of all accidents and incidents attributed to human error

Majority of errors related to accidents due to organizational weaknesses

PTASP – What is it and Why do it

- Through MAP-21 and the FAST Act, Congress required operators of public transportation systems that receive FTA funds to develop and implement a Public Transportation Agency Safety Plan(49 U.S.C. §5329(d)).
- FTA is implementing this requirement through the PTASP final rule (49 C.F.R. Part 673).

FTA Rulemaking

49 CFR Part 670 – National Public Transportation Safety Program

- September 12, 2016
- Adopted Safety Management Systems (SMS)
- Provided FTA enhanced oversight authorities
- National Public Transportation Safety Plan

49 CFR Part 625 – Transit Asset Management

- July 26, 2016
- Compliance Date October 1, 2018

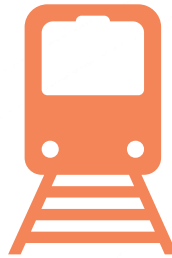
49 CFR Part 673 – Public Transportation Agency Safety Plan

- July 19, 2018
- Effective Date July 20, 2019
- Compliance Date July 20, 2020

PTASP – Who is Affected



Transit system operators that receive FTA funds (Section 5307)



All rail transit operators (regardless of funding source)



Deferred applicability for operators that only receive Section 5310 and Section 5311 funds

PTASP Development and Implementation

- Rail transit agencies and large bus operators must develop and implement their own safety plans
- States must develop a safety plans for small transit agencies
 - Operate 100 or fewer vehicles in peak revenue service
 - Transit agencies can chooses to develop their own safety plan
- Small bus operators must implement their own safety plans

General Requirements of a PTASP



Approved by
Accountable
Executive and
Board of Directors



Annual
Review/Update
(certification)

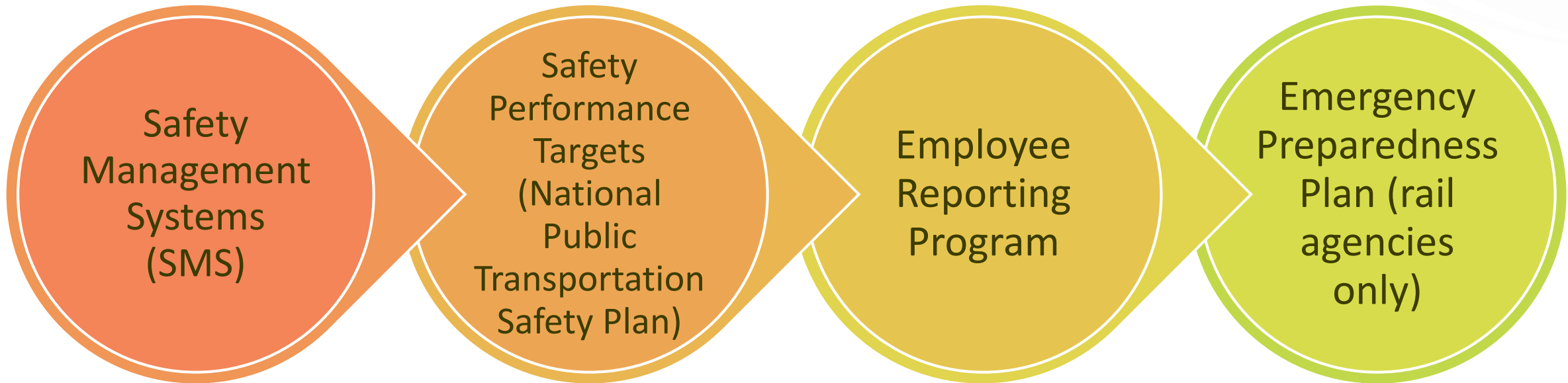


Compliance with
Public
Transportation
Safety
Program/National
Safety Plan



Assignment of
Chief Safety
Officer

PTASP – Specific Required Elements



What is SMS



Collaborative approach for management and labor to work together to control risk



Systematic approach to protecting passengers and employees



Approach for management to identify risk and allocate resources appropriately to mitigate

SMS Elements



Safety Management Policy

Commitment



Safety Risk Management

Identify

Assess

Prioritize



Safety Assurance

Mitigate

Measure

Monitor



Safety Promotion

Communication

The NSP Safety Performance Measures



Fatalities

- Total amount and rate per total vehicle revenue miles

Injuries

- Total amount and rate per total vehicle revenue miles

Safety Events

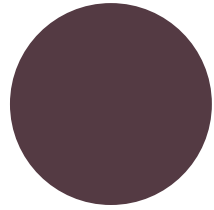
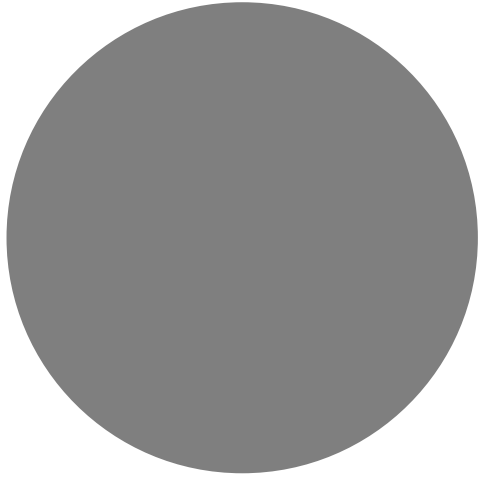
- Total amount and rate per total vehicle revenue miles

System Reliability (State of Good Repair)

- Mean distance between major mechanical failures

Voluntary Employee Safety Reporting

- **Unique** – Information you can't get any other way
- **Authentic** – Individuals who know best are directly providing the information
- **Timely** – Direct reporting overcomes time lag of mandatory reporting processes
- **Diverse** – Information from different individuals with different experiences and perspectives
- **Comprehensive** – Multiple reports over time reveal patterns, trends, and the scope of an issue



Thank You



GTFS

GENERAL TRANSIT FEED SPECIFICATION

CREATED BY: VIDYA MENON

ITS MANAGER @ FORT BEND COUNTY

7/3/2019

GENERAL TRANSIT FEED SPECIFICATION

- GTFS is a data specification that defines a standardized format for public transportation agencies to describe stop, route, schedule, calendar, and fare information as well as other elements for fixed-route transit services.
- The creation of a GTFS feed allows transit agencies to submit their information to developers for integration into web applications such as Google Maps Transit Trip Planner.

CREATING A GTFS FEED

- Gather all bus stop information
- Create stop schedule information
- Generate Time Schedules and trip order pattern
- Gather shapes for route direction
- Create calendar and miscellaneous agency information

OVERVIEWS & LINKS

- GTFS Overview
 - <https://developers.google.com/transit/gtfs/>
- National RTAP GTFS Builder Resource
 - <https://www.nationalrtap.org/Web-Apps/Support-Center/GTFS-Builder>
- MJC GTFS Builder Toolkit
 - https://www.mjcaction.com/clients_gtfs.html
- GTFS Examples
 - <https://developers.google.com/transit/gtfs/examples/overview>
- Reference Guide
 - <https://developers.google.com/transit/gtfs/reference/>
- Validation Tools
 - <https://developers.google.com/transit/gtfs/guides/tools>
- Help Center
 - <https://support.google.com/transitpartners/?hl=en#topic=3521043>

PARTNERING WITH GOOGLE TRANSIT

Who can partner with Google Transit?

Any transit agency that meet the below criteria can partner:

- 1) There must be a fixed schedule, or a reliable schedule for frequency based systems.
- 2) There must be no reservations for seats. Tickets must be purchasable on board, or at the station / boarding point.
- 3) It must be open to the public, and commuters may use it for their general travelling purpose.

VALIDATION & TESTING GTFS – COMMON ISSUES

After submitting your Agency's GTFS data to Google for review, you may be faced with a number of challenges during the validation stage of publishing your data.

Some common areas to focus on are:

- Route/Stop names must match what is published on your website.
- The service period must be more than 2 months and less than 3 years from the current date.
- Route URL should contain that route specific information.
- All shapes must travel down the correct path.
- Calendar date must be provided for service exceptions and closures during the holidays.
- Particular column entries must be under the recommended character limits.
- Route URL portions of the GTFS feed should point to the schedule and not the main service page.

GTFS TRIP PLANNER EXAMPLE

After submitting your data, feed information relative to your agency will be available for your viewing on Google. Upon entering your pickup and drop-off locations for a public transportation mode, you may be able to preview the journey information similar to what is shown on the screenshot.

The screenshot displays a mobile application interface for a GTFS Trip Planner. The top section shows the origin and destination: "AMC First Colony 24, 3301 Town Center Blvd S, ..." and "The Galleria, 5085 Westheimer Rd, Houston, TX 770...". The selected mode is public transportation, indicated by a train icon. The departure time is set to "Leave now".

Below the input fields, there are three route options:

- Option 1:** 5:22 AM (Friday) - 6:02 AM (40 min). Route: Walk > GAL1-Am > GAL2-Am > GAL5-Am > Walk. Departure: 5:27 AM from AMC. Cost: \$2.25. Duration: 11 min. Status: CONFIDENTIAL.
- Option 2:** 6:02 AM (Friday) - 6:56 AM (54 min). Route: Walk > GAL2-Am > GAL4-Am > GAL5-Am > Walk. Status: CONFIDENTIAL.
- Option 3:** 6:23 AM (Friday) - 7:18 AM (55 min). Route: Walk > GAL1-Am > GAL3-Am > GAL4-Am > GAL5-Am > Walk. Status: CONFIDENTIAL.

The "Schedule Explorer" section on the right provides a vertical timeline of the selected route (Option 1):

- 5:27 AM: Walk (About 5 min, 0.2 mi) to AMC.
- 5:56 AM: Board GAL1-Am at Bechtel TMC (29 min, 2 stops, Confidential).
- 6:02 AM: Arrive at The Galleria (5085 Westheimer Rd, Houston, TX 77056).

Cost: \$2.25. Tickets and information: Fort Bend County Public Transportation - 1 (281) 633-7433.

ADDITIONAL QUESTIONS?

Please contact Fort Bend County Public Transportation @ vidya.menon@fortbendcountytexas.gov for any further questions/queries.

Thank You!



TxDOT HOUSTON CONNECTSMART

Connecting Transportation System Management and
Operations and Active Demand Management

Houston District, Advanced Transportation Planning

- USDOT initiatives aimed at promoting the use of advanced and innovative technologies in transportation:
 - Advanced Transportation and Congestion Management Technologies Deployment (ATCMTD)
 - Funds cutting-edge transportation technologies that help reduce congestion and improve the safety of our transportation system

- Houston District Grant
 - Three year implementation program

Houston ConnectSmart

an integrated platform providing solutions for managing congestion by bridging



*Transportation
Systems
Management
and Operations
(TSMO)*

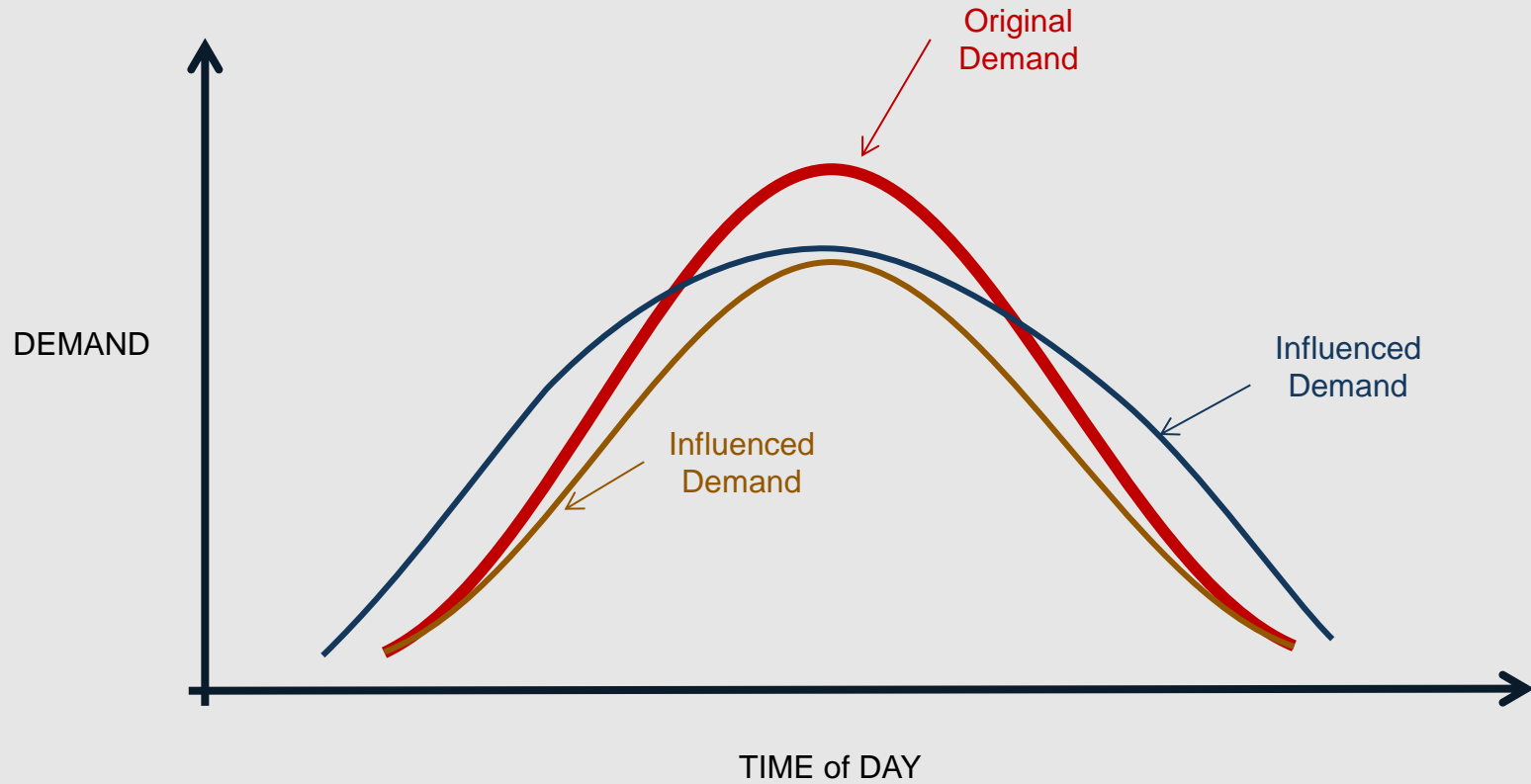
ConnectSmart
Platform



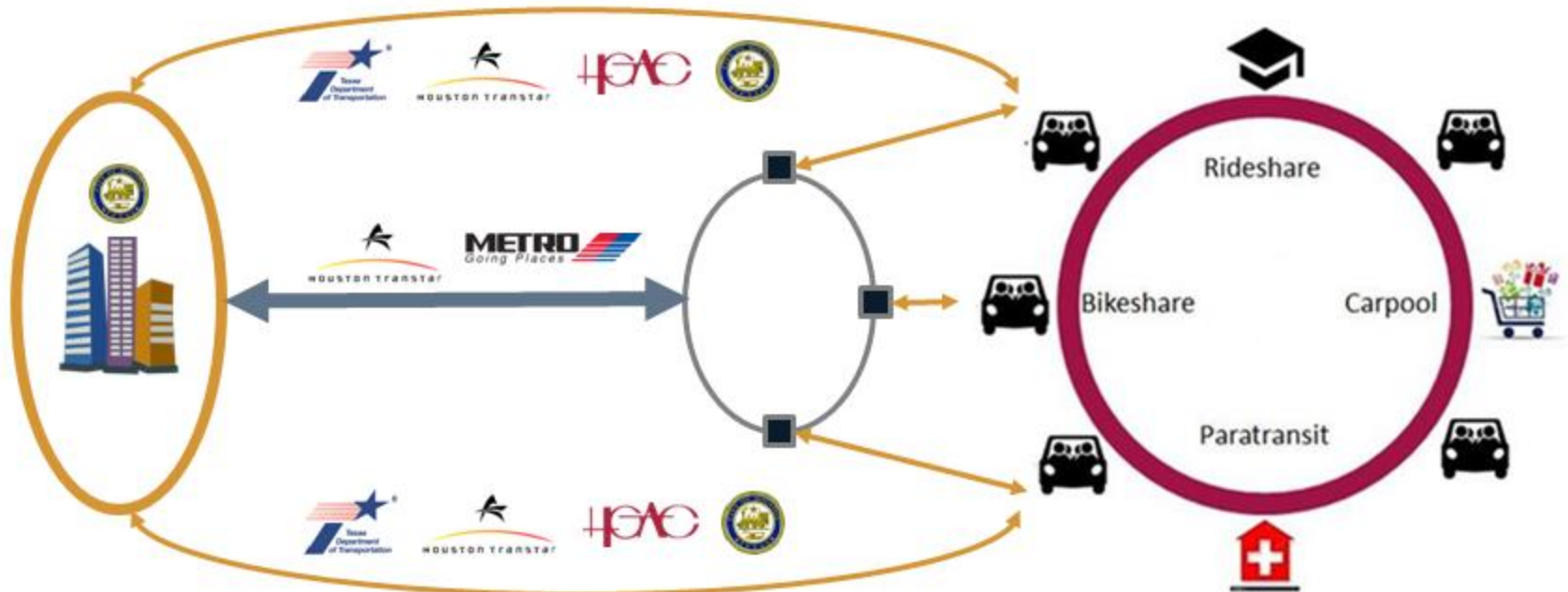
*Active Demand
Management (ADM)*

*Making Houston
Less Congested and
More Connected*

Bridging TSMO and ADM (cont.)



Houston ConnectSmart – Multi-Modal Active Demand Management



Transport Operator(s), Asset(s) and Service(s)

Houston ConnectSmart – Partners (P4)

- Prime Agency



- Public Partners



- Private Partners

- Developers, transportation/mobility providers, technology providers

- Academic Partners

- To provide research and innovation

- State Contracts with Partners
- Area: Houston Region
 - Ancillary services deployed in two pilot areas (Energy Corridor and Central Business District)
- Timeline: 3-year Project
 - Year 1: develop platform and integrating traffic data / marketing and outreach plan
 - Year 2: implementation and roll out / marketing and outreach
 - Year 3: evaluate and expand / continue to market
- Partnerships
 - P4: Public, Private, Professor (Academia) Partnerships

- This project serves as the springboard for:
 - Future regional comprehensive public-private collaborations
 - Future mobility management methods
- Inclusive, scalable, adaptive, and robust for future application and expansion.
- Sustainable business models for financial sustainability.
- Commuter awareness and behavior change is the key for the success and beyond.



THANK YOU

TXDOT HOUSTON CONNECTSMART (FHWA ATCMTD 2016 Award Recipient)

Advanced Transportation Planning | TxDOT Houston District

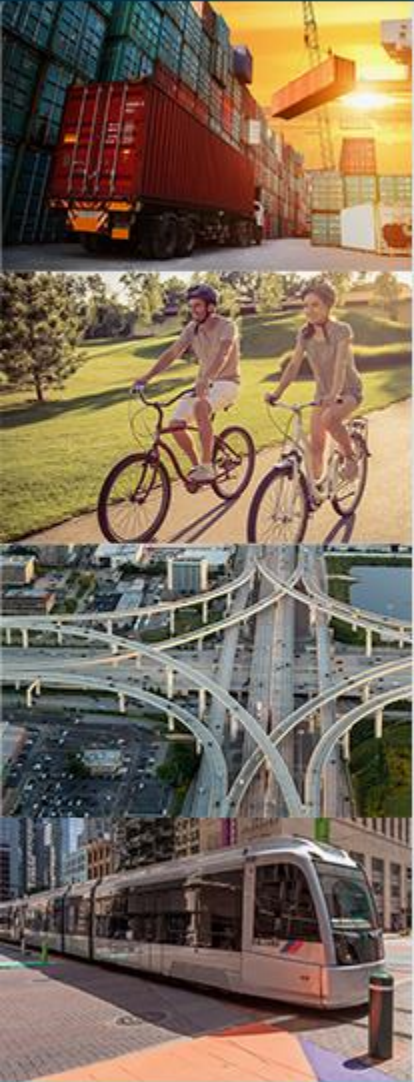


Transit Awareness Program



July 11, 2019
RTC Subcommittee Meeting
Lydia Abebe

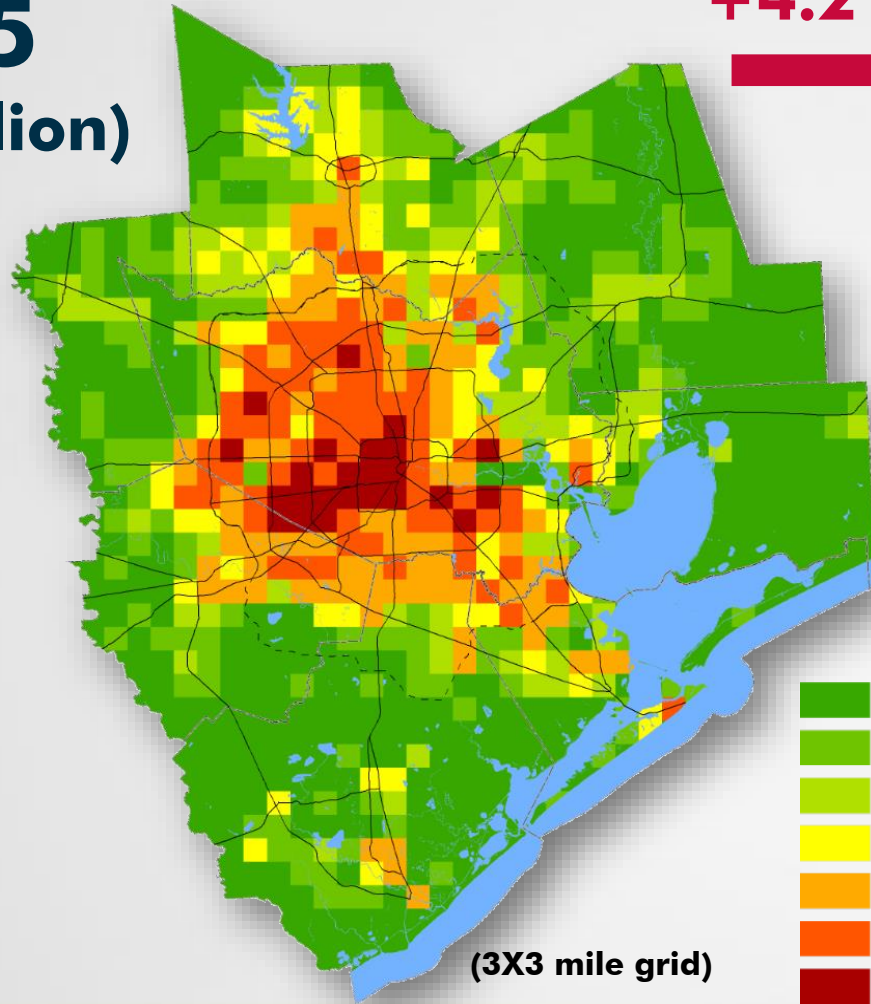
Background/ Key Challenges



- Regional population growing
- Increasing traffic congestion
- Aged and diverse population
- Little or no bus expansion
- No source of dedicated local funding

2015/2045 Household Population

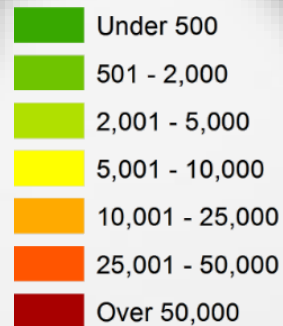
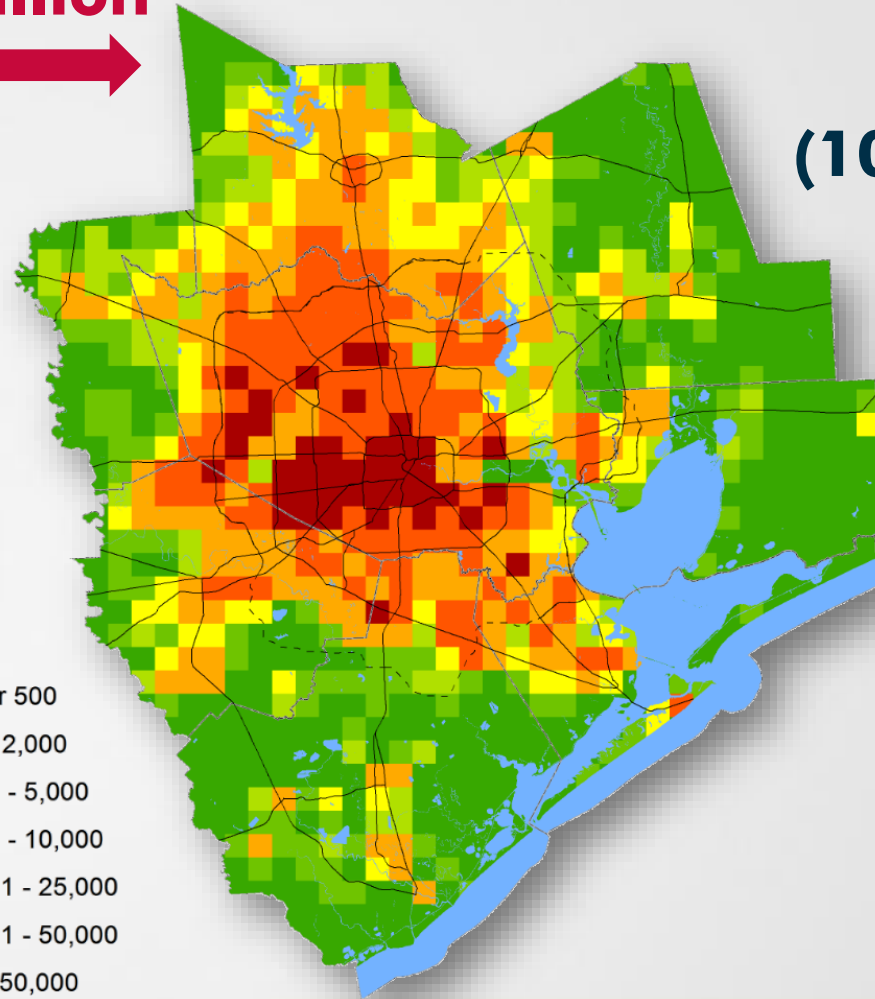
2015
(6.54 Million)



+4.2 Million



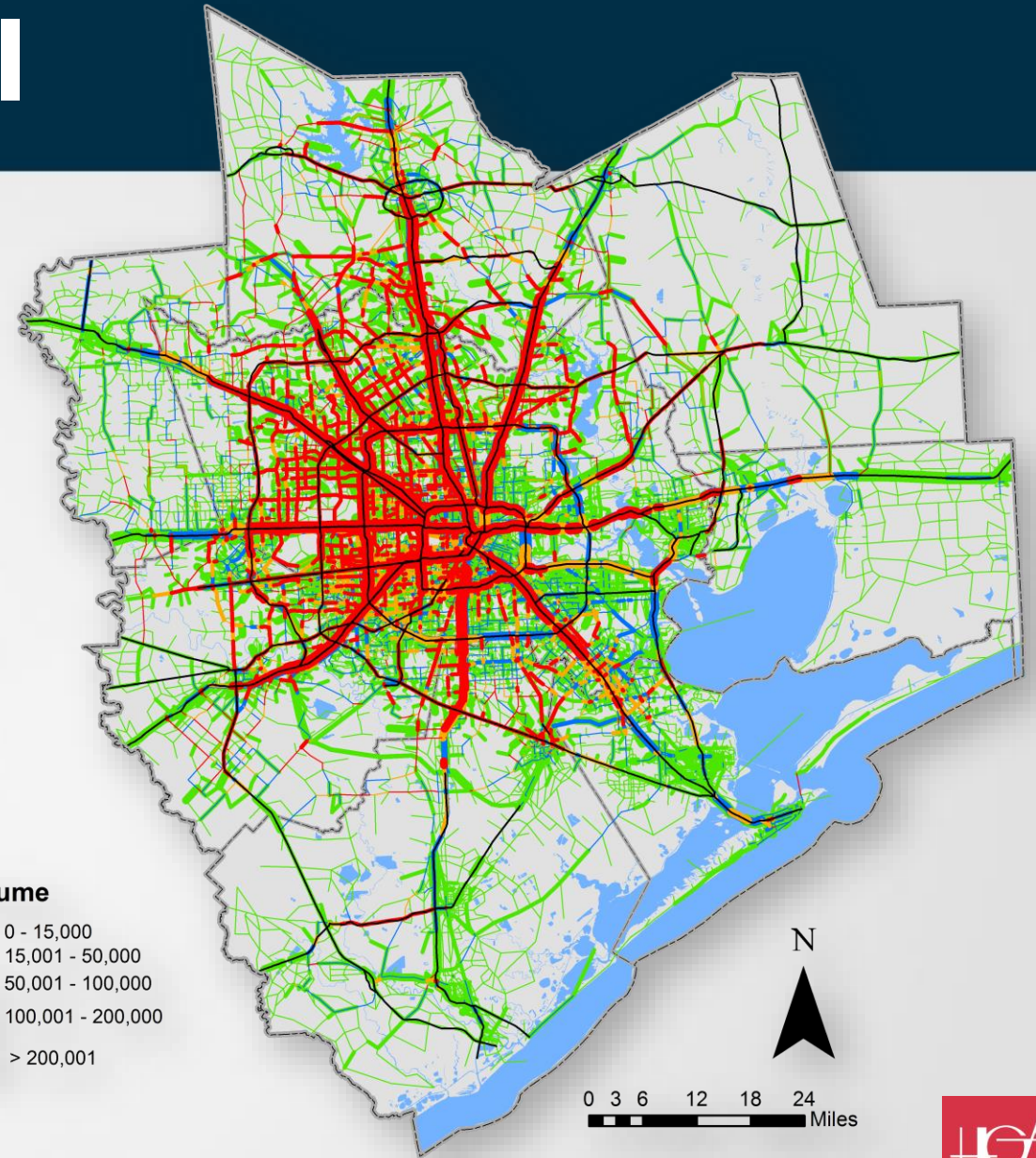
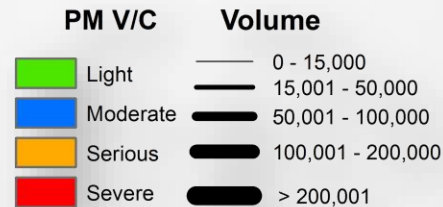
2045
(10.76 Million)



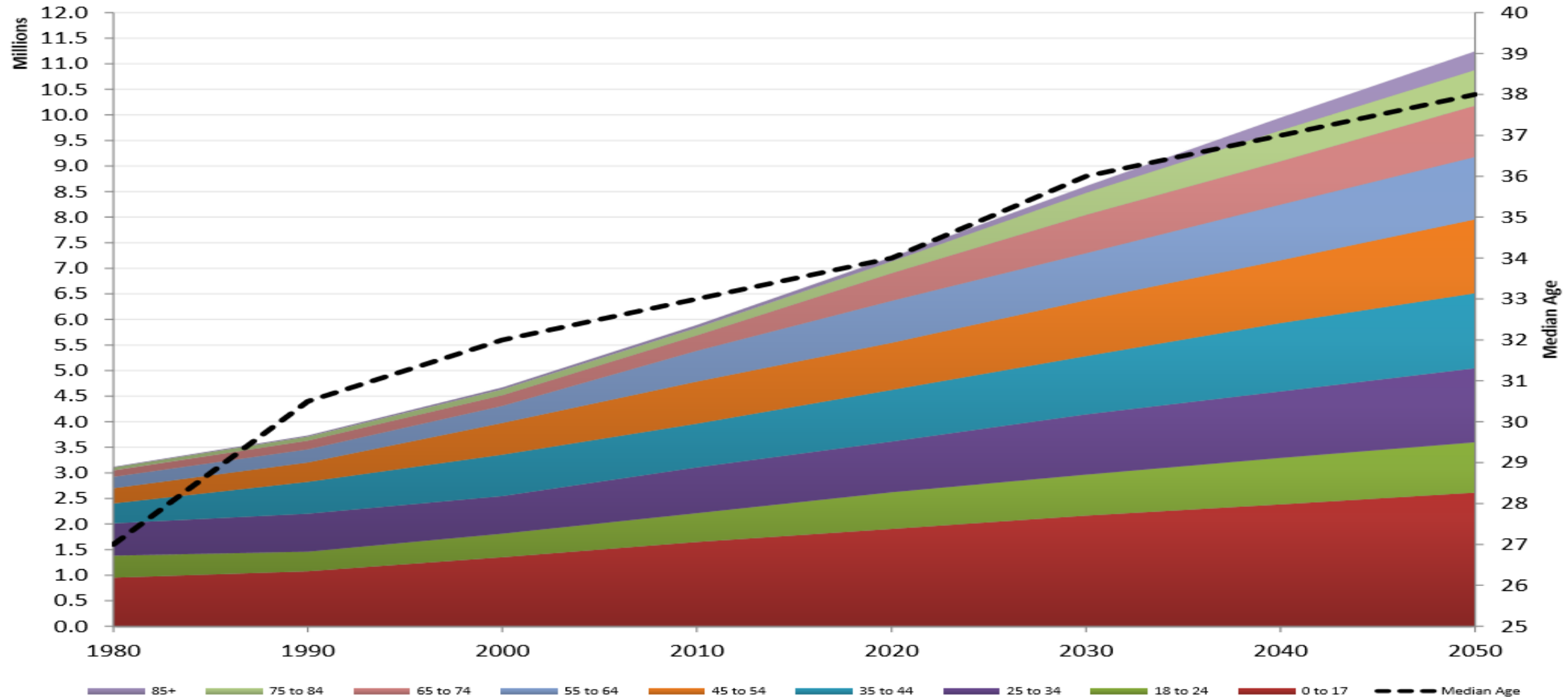
(3X3 mile grid)

2045 Projected Travel

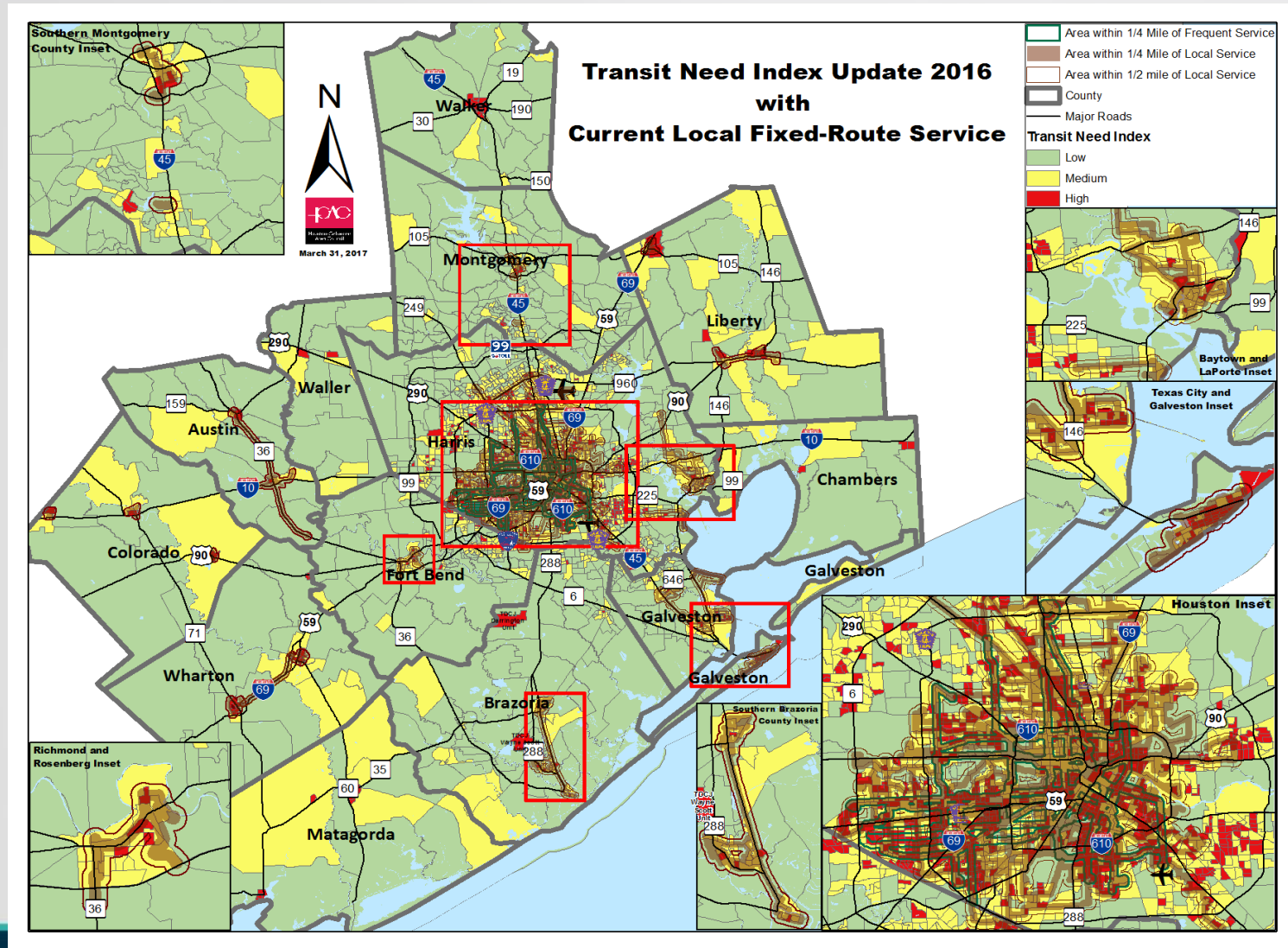
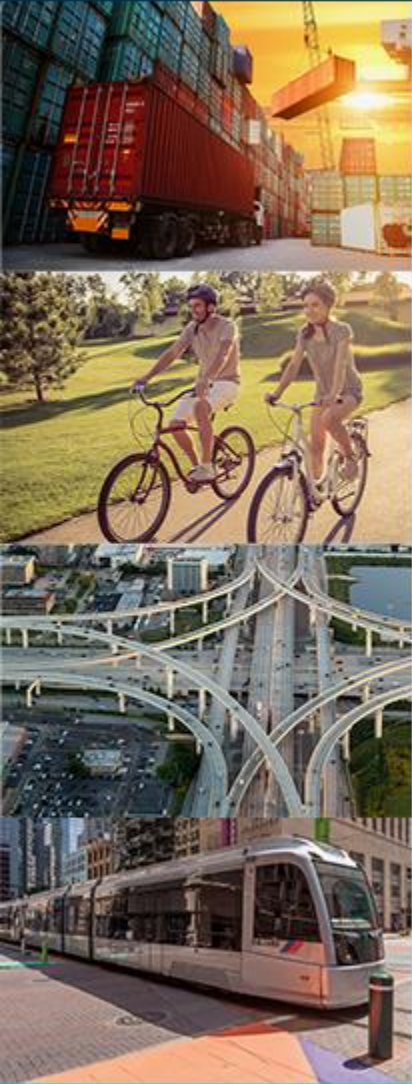
2045 Congestion



Age Composition of the Population



Transit Need Assessment Analysis



Transit Awareness Program

- Transit Awareness Program
- Empower and engage
- Speak with “One Voice”
- Improve collaboration and coordination
- Engage diversity and inclusiveness

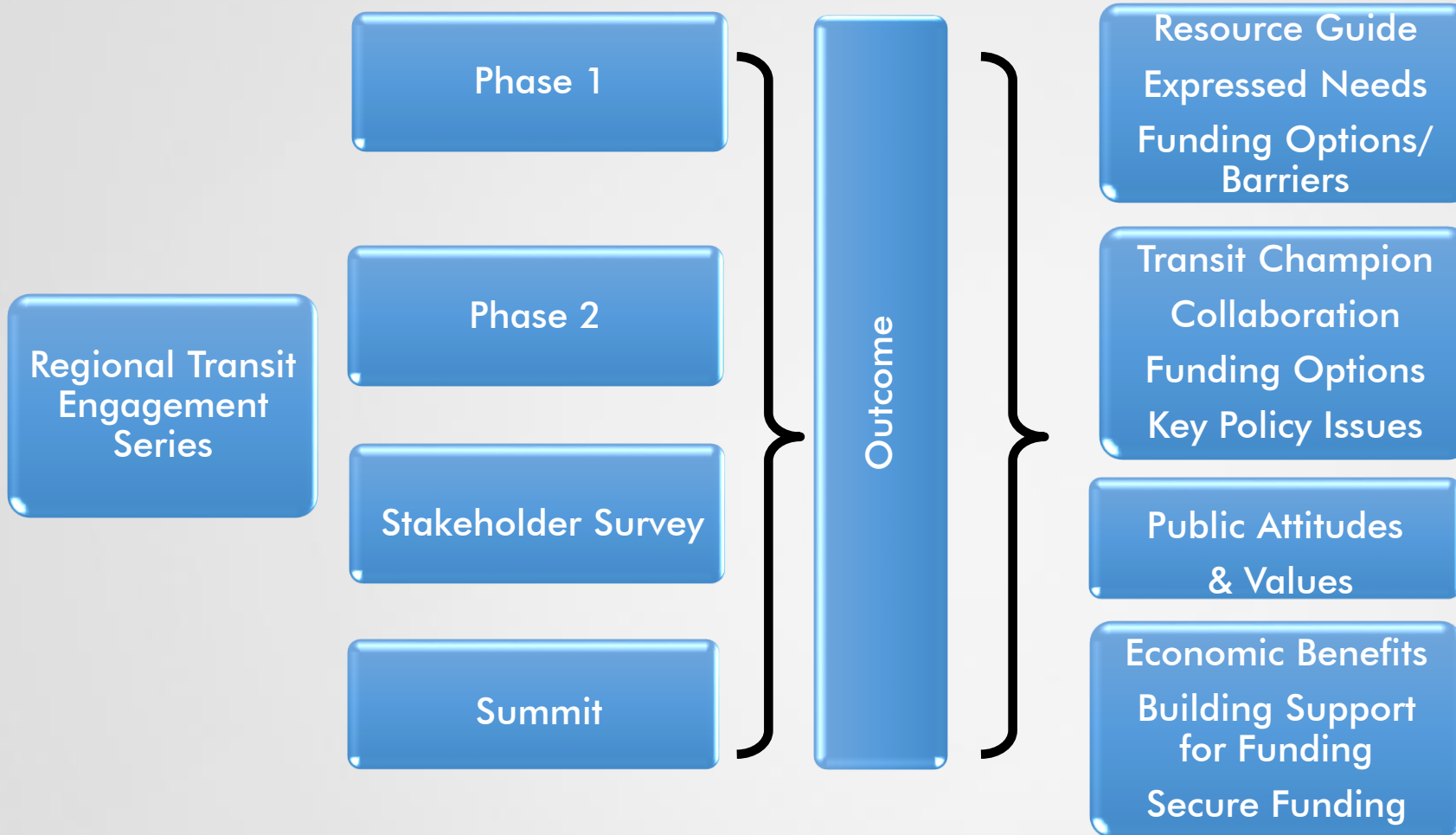


Strategies



- Implement Regional Transit Engagement Series:
 - Facilitated focus group meetings
 - Workshops/forums
 - Strategic surveys
 - Summit
- Objectives:
 - Develop and strengthen regional relationships
 - Understand local desire for transit
 - Harvest insight from key stakeholders











Transit Awareness Program

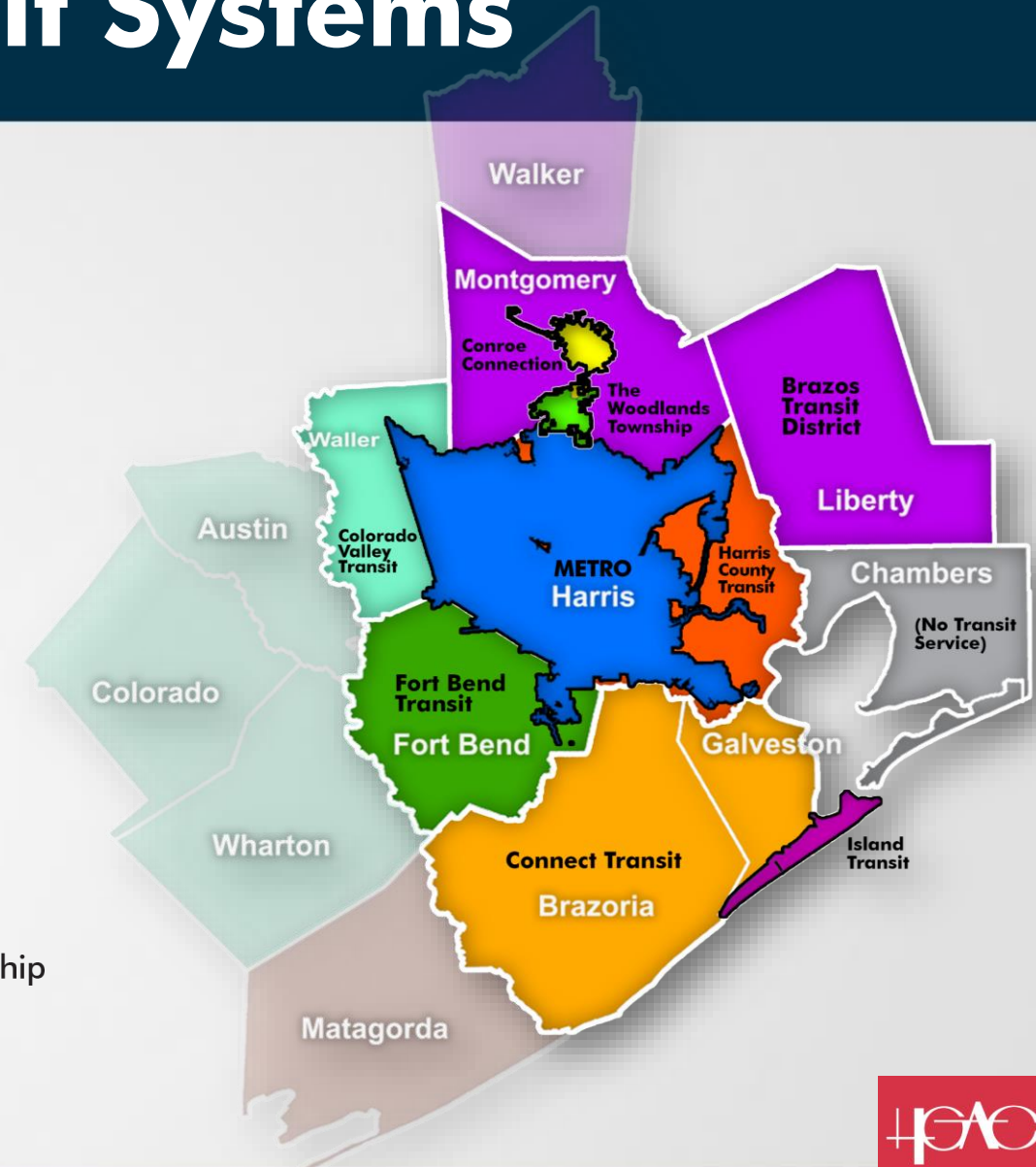


METRO & Regional Transit Systems

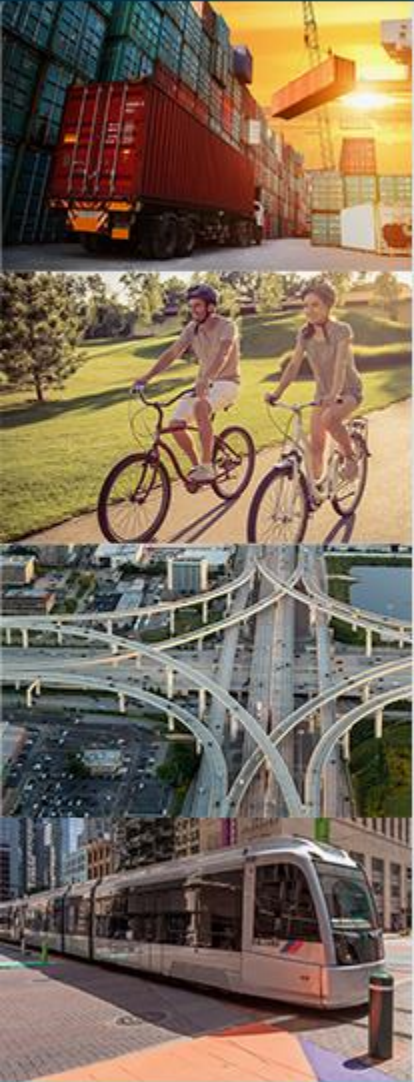
- 9 total transit providers
- 6 now provide Commuter Bus/Park and Ride
- Regional Transit is non-METRO

REGIONAL TRANSIT PROVIDERS

 Brazos Transit District	 Conroe Connection
 Colorado Valley Transit	 Harris County Transit
 Connect Transit	 METRO
 Fort Bend Transit	 The Woodlands Township
 No Transit Service	 Island Transit



Potential Pilot Projects



Fixed/Flex Local Services:

- Pasadena
- Channelview
- League City
- Sugar Land
- Pearland
- Stafford & Mission Bend

Commuter Bus Services:

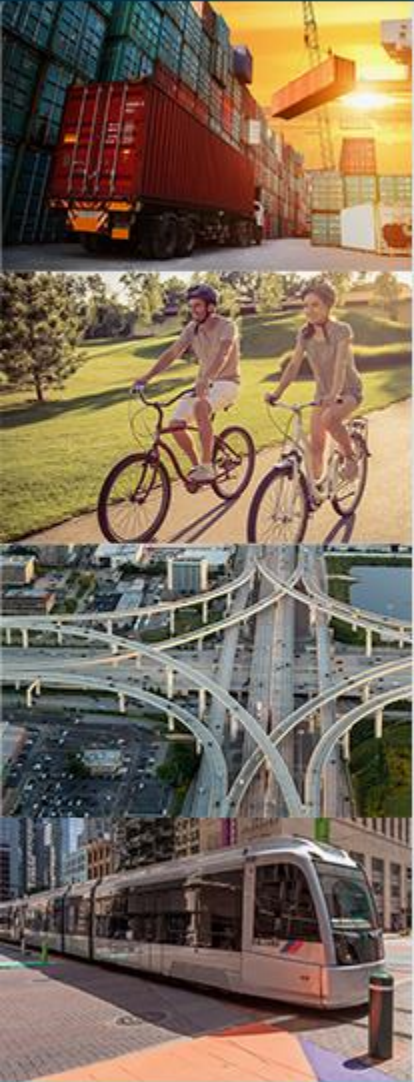
- IH 69 Fort Bend to CBD
- Westpark to CBD, Westpark to Energy Corridor
- Fulshear to Energy Corridor
- 288/Highway 6 to CBD

Regionwide Supporting Concepts



- Seamless Regional Fare
- Transit Marketing and Education Program
- Universal Accessibility
- First Mile/Last Mile
- Transit-friendly design/parking
- Automated Vehicles

Call for Actions



- Develop criteria to prioritize projects
- Set-up interest group (team) meetings
- Identify citizen groups, grassroots organizations, local governments
- Develop invitee list
- Decide meeting places
- Develop questions for the dialogue