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EXECUTIVE SUMMARY

Southeast Houston plays an important role in Houston's landscape and economic competitiveness. At the confluence of the nation's 36th largest airport, an extensive bayou trail network, and a dynamic collection of neighborhoods, Southeast Houston's mobility future will shape Houston's transportation decision-making and how distinct travel modes are integrated for a seamless user experience.

This Plan represents a step in the continued progress toward fostering an equitable transportation network that enhances safety for all road users, particularly in underserved communities where street safety and transportation affordability disparities persist, while simultaneously supporting our city's global economic reach. Six major concepts outline the mobility recommendations and work to answer the Plan's central questions.



- Build out of major corridors to enhance connectivity and spur development
- Facilitate more context-sensitive street design for each major corridor in the study area
- 3. **Right-size streets** and right-of-way designations
- 4. Increase high-comfort bicycle connections between Sims Bayou and the surrounding neighborhoods
- 5. Align **sidewalk and bikeway improvements** with METRO's planned high-capacity transit investments
- 6. **Prioritize improvements** related to the community's goals and objectives



PURPOSE OF THE STUDY

The Southeast Houston Mobility Plan is a comprehensive transportation study, focused on furthering the City of Houston's goals for a more healthy, resilient, and connected city established through PlanHouston and leaning on processes and technical guidance elaborated in the City's Mobility Plan. This plan allows for more in depth consideration of the existing transportation and mobility conditions, infrastructure, and development in the Southeast Houston Study Area.

The primary purpose is to identify short, medium and long-range projects, policies, and programs intended to promote better mobility for all road users, and to consider and develop a multi-modal classification for streets within the study area. This summary details the yearlong study process, from existing conditions and public engagement efforts to improvement recommendations and implementation strategies.



City of Houston Mobility Plan PlanHouston · Spend money wisely · Mobility is a key factor in a community's vitatility · Grow responsibly Costs associated with new development Sustain quality infrastructure / redevelopment must be equitably Nurture safe and healthy neighborhoods allocated. Connect people and places Access (curb cuts/medians) must be consistently and proactively managed. Support our global economy Right-of-way standards for future major · Foster an affordable city arteries must reflect "best practices," · Protect and conserve our resources fully recognize aesthetic concerns, and Communicate clearly and with anticipate peak traffic volumes at fully transparency developed conditions. Partner with others, public and private · Neighborhood concerns must be carefully balanced with the need to maintain circulation (recognize the value of connectivity/circulation). Long-term "notice" provided by Major Thoroughfare and Freeway Plan must be effectively publicized and communicated. Nonstructural approaches should be considered as well as new road construction.



Goals and Principles





CONTEXT OF THE STUDY

The Study Area is bounded by Interstate 610 to the north, State Highway 288 to the west, Beltway 8 to the south and Interstate 45 and Galveston Rd to the east. Much of this area was developed post World War II and has seen modest growth since 2000. Major destinations within the study area include:

- Hobby Airport
- Sims Bayou
- Houston Botanic Garden (proposed)

According to the Houston-Galveston Area Council, the study area is expected to increase by 50% in population, 58% in households, and 19% in employment. Traffic volumes along the roadways are also expected to increase by 44%. Much of the anticipated growth is expected to occur in the south portion of the study area. This added stress will increase existing mobility gaps and add strain on the transportation systems in the area, making it critical to identify and overcome the mobility shortcomings that residents are currently experiencing.





Hobby Airport Source: Fly 2 Houston

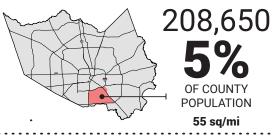


Sims Bayou at Mykawa Rd. Source: Harris County Flood Control District

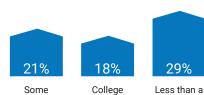


COMMUNITY SNAPSHOT 2012 - 2016

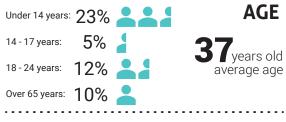
POPULATION

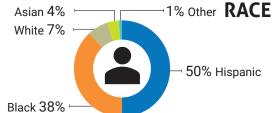


EDUCATION

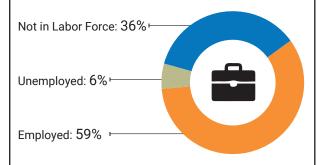


Degree or High School More Diploma





EMPLOYMENT



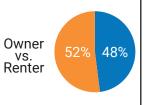
HOUSING



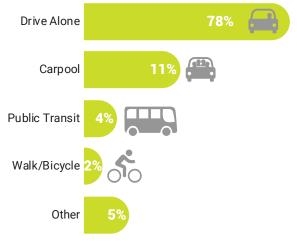
23% live below the national poverty line







TRANSPORTATION





29 minutes average travel time to work by vehicle

47 minutes average travel time to work by transit





Source: American Community Survey 2012-2016 5-year estimates Walkscore data from walkscore.com



32%

High School

Diploma / GED

PUBLIC ENGAGEMENT & PROCESS

Vision Statement

The Southeast Houston Mobility Plan addresses the dynamic mobility needs of the many communities in Southeast Houston. The Plans strategies, actions and performance measures will build on previous efforts with measurable, achievable and ambitious projects, policies, and programs that will create and reinforce connections to promote the area's economic competitiveness and well-being of its residents.

The planning process included three committee meetings, two public meetings, and six civic club meetings. A total of 120 comments were collected through the Online Public Comment Tool. Recommendations in this study were driven by the goals which were established by community leaders during the steering committee and refined through public workshops and community surveys.

What We Heard

Workshop participants were able to provide direction to goals and refine recommendations through iterative feedback throughout the life of the project. For instance, participants at the first public workshop ranked the seven overarching goals put forth by the steering committee and afforded an opportunity to suggest new goals, where higher priority was emphasized on neighborhood connections, safety, public health, and resilience objectives. Consequently, the project team and steering committee put forth a neighborhood connections station for the second workshop

where participants were able to identify their preferred type of "neighborhood connections" by a low, mid, and high ranking of precedent images as seen here and could select from the following list:

- High quality sidewalks, crosswalks, and bikeways
- Closer destinations, infill, and mixed use development
- Street connectivity
- Microtransit (flexible service / on demand)
- Bikeshare
- Scooters

The results from this exercise favored the provision better walkability and microtransit solutions, in addition to more mix of land uses and higher density development patterns.



Community Goals



RECOMMENDATIONS

The system improvement recommendations were developed through the guidance of the steering committee and refined by public input at workshops, the project survey, and an interactive mapping function. Project recommendations made in this plan fall within one of the following six categories:

Build out of major corridors to enhance connectivity and spur development

Areas in the southwest portion of the study area would benefit greatly from the build-out of planned street connections to SH 288 and to Beltway 8. This would enhance regional access for undeveloped parcels and would attract more commercial and light industrial uses to the area. In addition, extending corridors would allow for the expansion of local bus routes to the new Veterans Administration Hospital currently in development.

Facilitate more context-sensitive street design for each major corridor in the study area

The study area's major corridors are the connective tissue for the various neighborhoods and destinations that make up the study area. Each corridor has an opportunity to enhance connectivity in its own way, based on its available right-of-way, planned and future multimodal projects, and land use patterns. This study identifies the purpose each major corridor serves and how they can be leveraged to further bolster neighborhood connectivity.

Right-size streets and right-of-way designations

Many of the streets in the study area are designed to handle much heavier traffic and are overbuilt, in many cases. This provides an opportunity to transform the area by right-sizing streets and reallocating right-of-way, where possible, to enhance the public realm and activate streetscapes with wider sidewalks and bikeways. Off-street parking could also be considered near commercial uses.

Increase high-comfort bicycle connections between Sims Bayou Greenway and the surrounding neighborhoods

Sims Bayou is one of the most consequential segments in the 150 miles of linear parks and trail system the Houston Parks Board has developed to date. Expanding access to this amenity to the surrounding neighborhoods stands to make a significant improvement for households facing higher socioeconomic vulnerabilities and would facilitate more active transportation and recreation in an area of the city facing a legacy of health disparities and higher rates of chronic illness.

Align sidewalk and bikeway investments with METRO's planned high-capacity transit investments

Future plans call for an expansion of high-capacity transit in the study area. This plan identifies where sidewalk and bikeway investments can be programmed in the near and mid-term future to complement the expansion of transit. Though the exact alignments and stations are unknown at this point, there is enough information available from METRO's long-range transit plan to know the general vicinity of where new transit infrastructure will be introduced.

Prioritize improvements related to the community's goals and objectives

Prioritization in this plan is anchored by the vision and goals defined by the community in this planning process. For instance, neighborhood connections, public health, and safety are woven into the recommendations in this study but also shape the project list determined in this plan.









PURPOSE & PROCESS

The purpose of this plan is to recommend a more detailed roadway design and operations than what is identified in the City of Houston Major Thoroughfare and Freeway Plan (MTFP). This plan allows for a more in-depth consideration of the existing transportation and mobility conditions, infrastructure, and development in the Southeast Houston Area.

Existing and future conditions were used to recommend mobility improvements inclusive of freight, transit and active transportation modes, including short and long-term options, capital projects and funding.

Existing conditions related to traffic, pedestrian, bicycle, parking, demographic, and economic data as well as future land use and projected population and employment was also utilized

This section of Houston is bounded by the construction and rerouting of various roadways including Interstate 610, State Highway 288, Beltway 8, Interstate 45 and Galveston Rd. beginning in the 1950s and continuing through the 1980s.

Hobby Airport has been a major landmark in the area since 1927, with passenger flights ramping up in the 1970s.

The Sunnyside neighborhood was developed in 1912 as a community for African Americans. While many of the other neighborhoods within the study area were developed post WWII. Since 2000, most have experienced modest growth. This growth has been coupled with unconnected roads, missing

sidewalks, a mixture of auto and freight truck traffic, inconsistent transit due to low density development.

By 2045, according to the Houston-Galveston Area Council (H-GAC), population in the

study area is expected to increase by 50%,

households by **58%** and employment by

19%. Traffic volumes along roadways within the study area are expected to increase

by **44%**. Much of the anticipated growth is expected to occur in the southern portion of the study area and could further strain an already inadequate transit system.

Stakeholder input was gathered throughout the planning process from a steering committee, technical committee, and public meetings. Through participation on the Steering Committee, community leadership informed every step of the planning process from vision to implementation. The goals of this plan were formed directly from public contributions and demonstrate the priorities of this community. (Please reference Chapter 2: Public Engagement for details of the public involvement process).

This plan begins with defining the study area and describing background data on the subregion. It then explores the community vision and goals followed by the recommended improvements. The final section of this plan discusses the next steps that can be taken for short, medium, and long-term multi-modal mobility planning efforts.



Community Goals



STUDY AREA

As represented in Map 1.1, the Southeast Houston study area is bound by Interstate 610 to the north, State Highway 288 to the west, Beltway 8 to the south, and Interstate 45 and Galveston Bd. to the east

The Southeast Houston study area is unique, as many continuous roadways and residential development are located north of Sims Bayou and east of Hobby Airport. Vacant developable land and disconnected streets are located in the south-southwest portion of the study area. A major rail corridor bisects the study area north-south and is a barrier to neighborhood connectivity and regional mobility.

Commercial and office uses are situated along the major corridors and adjacent to the freeway network. Many of the major corridors in the study area are defined with wide medians and ample right-of-way. The Study Area is home to many industrial and manufacturing land uses with William P. Hobby Airport as the major employment center.

Flooding is a risk throughout the City of Houston; though the Southeast Houston Study Area fared well during recent storm events. Flooding is a concern along some major roadways as well as local neighborhood streets, making travel difficult during heavy rains. The plan's recommendations are intended to achieve a vision of what the transportation network could look like in the future. Certain projects analyzed through the study process have regional implications outside the Study Area. The most notable are the construction of SH-35, the expansion of light rail transit and more frequent transit service.



Hope Farms Source: Culture Map



Hobby Airport Source: Fly 2 Houston

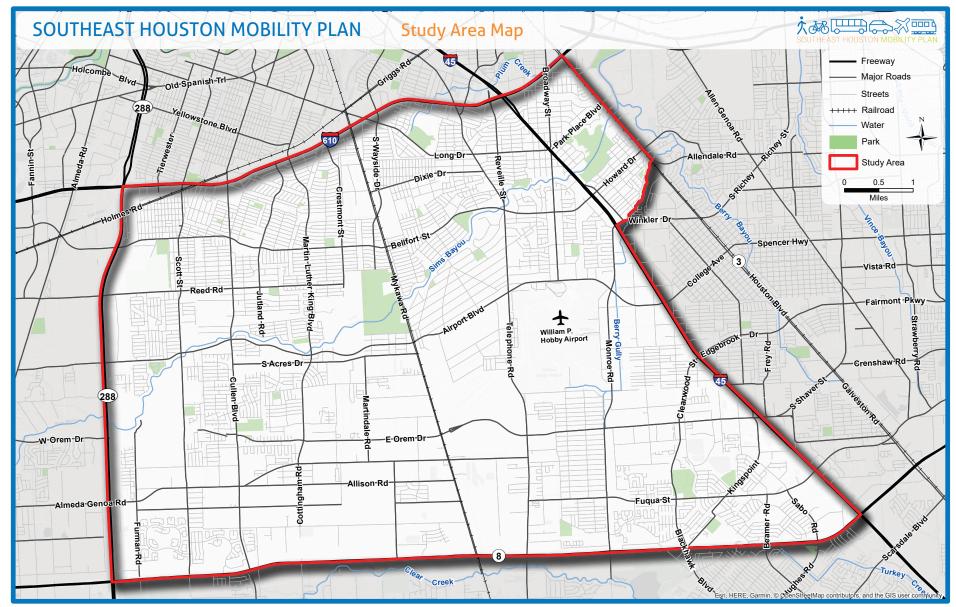


FM Law Park Source: Houston Parks Board



Sims Bayou at Mykawa Rd. Source: Harris County Flood Control District



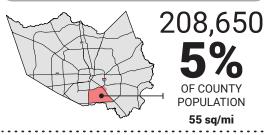


Map 1.1 - Study Area

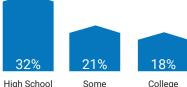


COMMUNITY SNAPSHOT 2012 - 2016

POPULATION



EDUCATION



College

Less than a High School Diploma

AGE



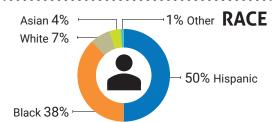
More

Under 14 years: 23% 14 - 17 years:

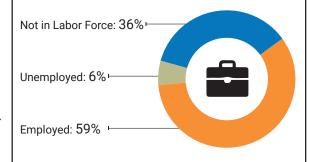
37_{years old} average age

Over 65 years: 10%

Diploma / GED



EMPLOYMENT



HOUSING



live below the national poverty line

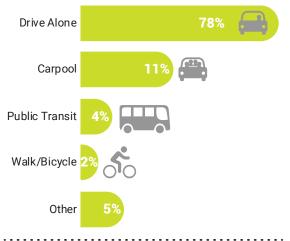


median household income

Owner vs. Renter



TRANSPORTATION





29 minutes average travel time to work by vehicle

47 minutes average travel time to work by transit





Source: American Community Survey 2012-2016 5-year estimates Walkscore data from walkscore.com



STUDY GOALS AND TOOLS

During the 2009 City Mobility Planning (CMP) process, several goals and objectives were identified that relate to this study.

CMP Goals and Objectives are listed below:

- Increased access to transit facilities
- Increased access to pedestrian facilities
- · Increased access to bicycle facilities
- Improved connectivity of the system
- Better accommodations for the movement of freight
- Cost efficiency
- Minimized travel times
- · Reliable commuting options
- · Reduction in congestion
- Minimized conflict points within the network
- Safe and secure environment for pedestrians and bicyclists
- Neighborhood traffic
- · Air quality conformity to State standard
- · Improved ability to maintain infrastructure
- Maintain a system that is energy efficient
- Improved corridor aesthetics
- Enhanced pedestrian amenities
- · Pedestrian-scaled streets
- · Facilitation of all modes of travel

This plan identified tools that can be applied where appropriate to improve mobility and accessibility throughout the Study Area. The list of tools used in this analysis can be found in the Mobility Toolbox.

As part of the study, existing plans and studies were analyzed and reviewed for previously recommended mobility and land use improvements. The information contained in these plans and studies was used as a starting point for this planning process, ensuring that the recommendations from the Southeast Houston Mobility Plan are consistent and expand upon those previous efforts.

- Our Great Region 2040
- Plan Houston
- Houston Bike Plan
- · Hobby Area Livable Centers Study
- Houston Botanic Garden Master Plan
- Houston Active Living Plan
- Stuart Park Gateway Connectivity Study
- Beyond the Bayous
- Bayou Greenways 2020 Sims Bayou Greenway
- City Mobility Planning







Beyond the Bayous

















MOBILITY TOOLBOX DEFINITIONS

Streets

- New Capacity includes widening existing roadways or using existing right-of-way to add travel lanes.
- Access Management
 describes a set of congestion
 reduction techniques that
 control where vehicles may
 enter and leave the road.
- New Streets can increase mobility and accessibility to areas that are difficult with the existing roadway system.
- Streetscape Improvements include beautification, pedestrian and transit amenities, maintenance, and wayfinding/signage.
- Local Street safety improvements include pedestrian level lighting, reduced speed limits, and sidewalk infrastructure.

Intersections

- **Turn Lane** improvements are design related traffic control techniques.
- Signal Timing allows for the coordination and sequencing of signal phases at intersections.
- Crosswalk improvements identify where pedestrians should cross the street and alert drivers to pedestrian movements.

Transit

- New Bus Routes can increase mobility and accessibility to employment centers for residents.
- **Frequency** is the elapsed time between consecutive buses on a route.
- **Shelters** provide the user with easy access to the bus, visibility, is comfortable, safe and convenient, and provides clear information.
- New Station/Stop can reduce walking times and distances while providing connectivity to neighborhoods and employment centers.
- Microtransit consists of flexible "on-demand" routing or flexible scheduling of minibus vehicles.

Pedestrian / Bicycle Facilities

- New Ride Facility can be either located on-street as a dedicated lane, shared-path or as an off-street trail.
- New Trail can be located adjacent to parks and along bayous, greenways, and utility corridors to connect neighborhoods and activity centers.
- New Sidewalks should be implemented to complete gaps in the sidewalk network and improve existing dilapidated sidewalks.
- Widen Sidewalk includes ensuring sidewalks are built to current design standards (5' minimum, 6' along major thoroughfares and transit corridor streets)

Policy

- Livable Centers/TOD Areas are places where people can live, work and play with less reliance on vehicles.
- MTFP classification of roadways provides the City the ability to secure right-of-way, coordinate projects and the long-term vision of the corridor.
- Transit Vision provides the framework for improving public transit through bus routes, bus rapid transit, light rail transit, park and ride facilities and commuter rail.

Technology

- Mobile Rideshare Apps allow users to share vehicles for trips, reducing congestion and increasing mobility (Uber, Lyft).
- Autonomous/Smart Vehicles are capable of sensing its environment and moving with little or no human input. They have the ability to communicate with other smart devices.
- Urban Transport Pods are personal rapid transit systems that are computer driven vehicles operating along guideways or traditional roadways.
- High Speed Rail operate between major population centers along dedicated right-of-way traveling at speeds greater than 125 mph.
- **Dockless Mobility** is shared micro-mobility transportation options that are accessible to all (bikes, e-bikes, and e-scooters).







ONLINE PUBLIC COMMENT TOOL

Public participation from community stakeholders is an important part of the planning process. Public participation encourages the residents in the community to have meaningful impacts in the decision-making process. As part of the study, a Public Involvement Plan and Communication Toolkit was developed for use by committee members, council members and the public. Social media postings and flyers were developed before the public meeting dates to increase communication and outreach efforts.

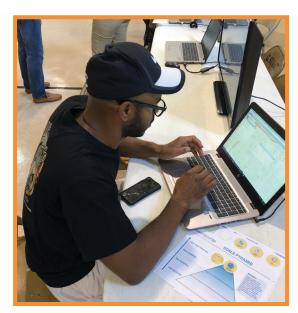
Public comments have been solicited through an online "Wikimap," a GIS portal where the public is able to access information from the City of Houston's databases, as well as data collected by the project team, and input locations of their concerns. Layers such as land use, demographics, and infrastructure can be viewed to help locate areas of concern.

During the initial phases of the study, the public was asked to provide comments related to five categories—Roadway, Safety, Pedestrian, Bicycle, or Other. Users were able to place a pin on the map as well as add written comments to express their concern.

The public was also able to provide comments regarding improvements that were presented during the second public meeting.

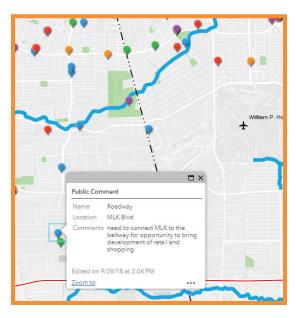
A total of **100** additional comments have been provided through the Online Public Comment tool that supplement what was heard during the public meetings and technical and committee stakeholder meetings.

A full list of public comments received throughout the plan through the Online Portal can be found in Appendix B.



Public Meeting #1, September 8, 2018.







COMMITTEE MEETINGS

COMMITTEE MEETING #1 MAY 24, 2018

The first committee meeting kicked off with an hour-long bus tour that took the committee members through the study area for an overview of existing conditions.

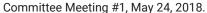
The intent was to call attention to mobility issues throughout the study area, including congestion and multimodal conflicts; the important role of Hobby Airport as a regional destination; the planned intersection treatments and greenspace by Houston Parks Board along Sims Bayou Greenway; and the need for evaluating existing intersections, sidewalks, and bus stops.

After the tour, a brief presentation was followed by a group exercise that asked the following questions for input:

- What does success look like in this project?
- What are your most important mobility goals?
- What are the key transportation gaps in the community, and what major destinations should this project work to improve transportation choices to?
- What are the biggest challenges and opportunities to mobility in this area?

Full detail of the Committee Meeting #1 can be seen in Summary Report included in Appendix B.











COMMITTEE MEETING #2 JULY 24, 2018

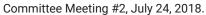
Presentations to the Advisory Committee at their midsummer meeting included project timeline status, a demonstration of the Wikimap, and project area context maps, including Bicycle Network, Capital Improvement Projects, Civic Destinations, Employment Density, Land Use, METRO Bus Routes, Major Thoroughfare and Freeway Plan, Median Household Income, Population Density, Average Daily Traffic, and Crash Density.

The consultant team shared some initial thoughts on getting the word out and scheduling the public meeting, then opened the floor to discuss the item. Participants made a series of suggestions for the advertisement and activities of the public meeting.

The consultant team presented the H-GAC employment and population growth estimates for 2015-2045. The meeting concluded with a discussion of the project goals and metrics, including Resilience, Neighborhood Connections, Regional Access, Transportation Choices, Health, and Partnerships.

Full detail of the Committee Meeting #2 can be seen in the Summary Report included in Appendix B.









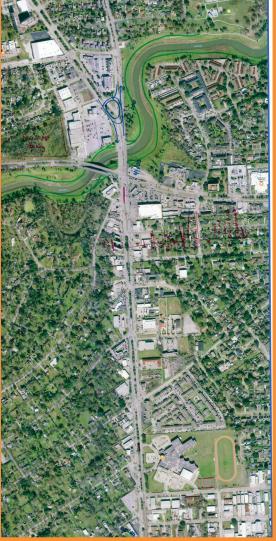


COMMITTEE MEETING #3 OCTOBER 30, 2018

The third committee meeting began with a presentation of the results of Public Meeting #1 with particular emphasis on the goals exercise, and a mapping exercise showing how various parts of the study area are or are not achieving those goals as prioritized by the public. Results of the mapping exercise are included in Appendix B.

The project team discussed which toolbox elements addressed each of the goals and concluded with a corridor exercise, where committee members noted opportunities and suggestions for project recommendations along four corridors: Airport Blvd., Bellfort St., MLK Blvd., and Telephone Rd.







PUBLIC MEETINGS

PUBLIC MEETING #1 SEPTEMBER 8, 2018

The Plan's first public meeting was held Saturday, September 8, 2018, from 9:00AM to 12:30PM at Greater St. Matthews Baptist Church within the study area in the South Park neighborhood. Over 40 people attended the meeting and provided input through a variety of stations.

The meeting consisted of interactive presentations and activities that invited attendees to share transportation challenges and concerns in their community. Residents were also encouraged to visit various workstations to contribute their thoughts and opinions on topics such as bike safety, roadway congestion, A.D.A. access, transit,

walking, intersections, and overall mobility.

The major interactive activities consisted of a Goals Pyramid, where participants were asked to sort listed goals by priority; a Picturing Trips station, where participants were asked about their typical existing and desired mode(s) of travel to destinations; a Reimagining Streets station where people could creatively design street space; and a Public Comment Map that was an analog version of the digital Wikimap described in the section above.

Over 1,000 flyers and points of contact were made and distributed in the weeks leading up to the event, including visits to area businesses, civic groups, and social media posts. Snacks and light refreshments were generously provided by the Houston Parks Board.

Full detail of the Public Meeting #1 can be seen in the Summary Report included in Appendix B.



Public Meeting #1, September 8, 2018.







PUBLIC MEETING #2 FEBRUARY 6/9, 2019

The Plan's second public meeting was held Wednesday, February 6, 2019, from 6:00PM to 8:00PM at Sunnyside Multi-Service Center in City Council District D and Saturday February 9, 2019, from 9:30AM to 11:30AM at Charlton Community Center in City Council District I.

Over 100 people attended this workshop and provided feedback through a variety of stations. The workshop consisted of a presentation and interactive table sessions focused on presenting the consultant team's findings and draft recommendations for improved mobility. Residents were encouraged to review and discuss the recommendations at different stations where they could leave public comments on their preferences related to roadway congestion, safety, public transit, and bicycle and pedestrian facilities.

Overall, participants supported the community driven results and felt the feedback from the first meeting reflected their priorities and needs. Trends emerged in participant responses, many reiterating the highest ranked goals from the first meeting. Comments providing support and further input regarding connectivity, transit access, safety and resilience were the most prominent.





CIVIC CLUB MEETINGS

As part of the public outreach component of the study, the project team and the City of Houston gave brief presentations on the project to various civic clubs and homeowners' associations in the study area. These presentations included an overview of the project purpose, its timeline and activities, and discussion of how the public could provide comments on the area's needs and the project process. A list of the meetings and dates are provided below.

- Sunnyside Civic Club Tuesday, October 9, 2018
- Meadowbrook Civic Club Tuesday, October 16, 2018
- Southeast Coalition of Civic Clubs Thursday, November 1, 2018
- Tropicana Village Civic Club Tuesday, November 13, 2018
- Glenbrook Valley Civic Club Thursday, November 15, 2018
- North Hobby Civic Club Monday, November 19, 2018







MISSION STATEMENT

The following Mission Statement was developed through stakeholder input:

"The Southeast Houston Mobility Plan addresses the dynamic mobility needs of the many communities in Southeast Houston. The Plans strategies, actions and performance measures will build on previous efforts with measurable, achievable and ambitious projects, policies, and programs that will create and reinforce connections to promote the area's economic competitiveness and well-being of its residents."

During the public outreach phase of the study, the stakeholder committee and technical committee identified the following goals.

COMMUNITY GOALS



SAFETY

Design and maintain transportation infrastructure that is safe for all users



NEIGHBORHOOD CONNECTIONS

Improve access to surrounding amenities and facilities from the existing neighborhoods



HEALTH

Promote a healthy, active lifestyle



REGIONAL ACCESS

Improve travel time and connectivity along major corridors within the study area and to major employment centers and destinations



PARTNERSHIPS

Pursue collaborative opportunities that promote inclusive, equitable investments in mobility



TRANSPORTATION CHOICES

ncrease transportation choices that meet the needs of all residents now and in the future



RESILIENCE

Incorporate urban storm water management into transportation infrastructure plan to maximize investments and create a more resilient Southeast Houston



MOBILITY PLUS ANALYSIS

The project team developed a scorecard for each of the community goals by overlaying existing conditions for each goal in CommunityViz to determine what areas have the greatest need for improvement. CommunityViz is an ArcGIS supported tool used for scenario planning, decision analytics and visualization.

On the scorecard maps, included in this chapter, darker red indicates that an area scored lower for that goal and the goal should be a higher priority when implementing improvements. Green areas scored higher and may not need as much focus for improving that goal.

Each community goal had several measures of effectiveness which includes existing and proposed conditions to obtain scores. Measures of Effectiveness are designed to correspond to the achievement of desired results.

The average score was calculated for each goal, resulting in a number ranging from 0 to 100, with 100 being a perfect score that does not need improvement.

This exercise provides insight on an areawide level of need for each goal. The improvement or "after" scorecard maps, which are detailed later in this report, illustrate how the study area could be improved if all of the recommendations were implemented.

MOBILITY +

Mobility Plus is a **community** defined process that uses **data** to evaluate & prioritize mobility **needs**



COMMUNITY

- Community input determines goals and objectives that guide the entire process
- Measures of Effectiveness (MOE) are crafted from stakeholder contributions

DATA

- Data driven analysis ensures **impartial** results
- Combining data with MOEs aids in identifying areas of need and special consideration
- A **Holistic** process reduces confusion





NEEDS

- The toolbox provides flexible solutions for mobility needs and not one-size fits all approaches
- Different tools can be applied and evaluated for their effectiveness





NEIGHBORHOOD CONNECTIONS

Improve access to surrounding amenities and facilities from the existing neighborhoods

Walkability is a crucial step to neighborhood sustainability which makes our neighborhoods more economically robust, improves the health of residents and reduces our impact on the environment. There are various neighborhood destinations including parks, schools, libraries, hospitals, community centers and multi-service centers that are located within the Southeast Houston study area (see Community Facilities Map in Appendix A). Many of these destinations are located within walking distance, however, due to the lack of a connected sidewalk network, many of these destinations are inaccessible.

Missing or disconnected sidewalks along major corridors create barriers to and from neighborhood amenities such as transit facilities, schools, and parks. Many of the disconnected sidewalks are in the southwest portion of the study area. As roadways in these areas are constructed and redeveloped, connectivity to, and enhancement of the existing sidewalk facilities should be considered (see Sidewalk Facility Map in Appendix A).

A walkshed analysis was conducted for the above-mentioned community amenities. This analysis helped determine the existing population, household and employment that is within a ¼ mile, ½ mile and 1 mile distance of these facilities (see Walkshed Maps and detail in Appendix A). This analysis will help to determine what infrastructure is necessary to increase access and walkability to neighborhood destinations.

Before

To determine the Neighborhood Connections base score, areas within a quarter mile of destinations such as schools, parks, grocery stores, community centers, libraries, hospitals, or multi-service centers were given lower scores to indicate their need for connections to other areas. Proximity to major and local roads lacking sidewalks negatively impacted the current score while areas within a quarter mile of bus stops were rated higher.

After

New roads were rated highly in the improvement score as well as new bus and transit lines. New bike lanes, paths, and sidewalk improvements were added as well to determine how the study area would score.





REGIONAL ACCESS

Improve travel time and connectivity along major corridors within the study area and to major employment centers and destinations

The Southeast Houston Study Area roadway network is characterized by an elongated street grid consisting of mostly major thoroughfares and major collectors designated on the Major Thoroughfare and Freeway Plan (MTFP) (see MTFP Map in Appendix A). Many of these roadways are defined with wide medians and ample right-of-way. Most of the corridors within the study area are of sufficient width, but portions of the following roadways are designated as proposed or to be widened:

- · Reed Rd.
- · Cullen Blvd.
- · Fugua St.
- · Almeda Genoa Rd
- · Galveston Rd.
- · Martin Luther King Blvd./Cottingham Rd.
- · Mykawa Rd.
- S. Wayside Dr.
- · Schurmier Rd.

While many of the roadways provide continuous access and mobility across the study area, there are several gaps in the network that, once completed, would improve mobility and accessibility to all users of the system. The BNSF railroad along Mykawa Rd. is a significant challenge to street connectivity and travel time. The presence of industrial and manufacturing facilities within the study area makes freight traffic more prevalent, especially along Telephone Rd, Airport Blvd., and Monroe Rd. The Sims Bayou traverses the study area and presents a challenge to street connectivity.

State Highway 35, a grade separated roadway, is currently in the design phase and its proposed location along Mykawa Rd. will present a greater challenge to accessibility and mobility within the study area. The potential impact of State Highway 35 will be considered in future recommendations for the study area.

Although traffic volumes are expected to increase by 2040, level of service will still be manageable. Currently, the average travel time to work for residents employed within the study area is 32 minutes, with an average of 47 minutes travel time for those utilizing public transit.

Before

Proximity to roadways with a Vehicle Miles Traveled (VMT) over 3,000 and a Level of Service (LOS) of E or F was given a lower rating for the existing Regional Access score. These areas experience more difficulty and longer travel times when attempting to access regions outside the study area.

After

Roadways with access management and roadway rehab improvements increased the score as well as added capacity, new roadways, and new intersections. Roadway rehab is defined as structural enhancements that extend the service life of an existing pavement.



SCORECARD Before **MEASURES OF EFFECTIVENESS: Neighborhood Connections** • Connected sidewalks within 1/4 mile of Transit Stops • % Low Stress Connected Bicycle Trips • % ADA Intersections Connected sidewalks 1 mile of schools 60.26 288 TEXAS 50 100 35 TEXAS 288 TEXAS





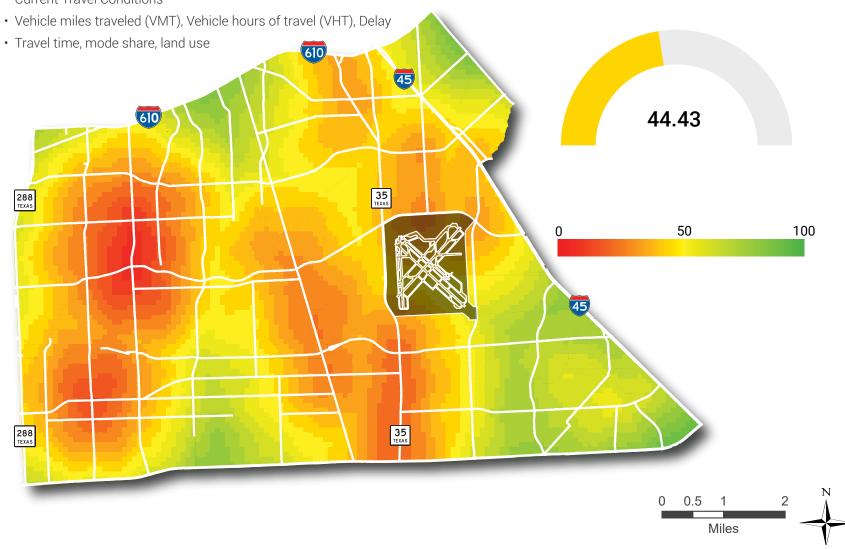
IMPROVEMENTS: Neighborhood Connections After • New Roads • Bus/Rail Transit • Bike Lanes/Paths • Sidewalk Improvements 75.45 610 288 TEXAS 50 100 288 TEXAS 35 TEXAS 0 0.5 1 Miles



SCORECARDMEASURES OF EFFECTIVENESS: Regional Access



• Current Travel Conditions

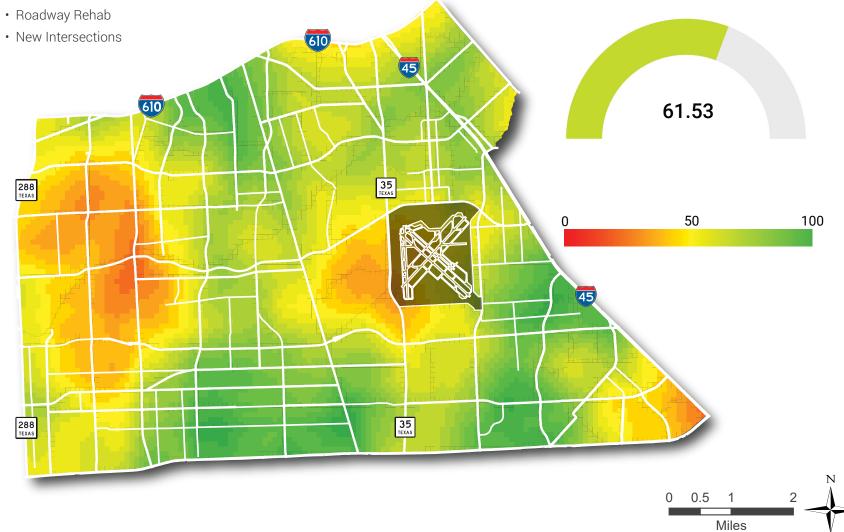




IMPROVEMENTS: Regional Access

- Access Management
- Added Capacity
- New Road







After



TRANSPORTATION CHOICES

Increase transportation choices that meet the needs of all residents now and in the future

17 transit routes are located within the Southeast Houston Study Area that provide service locally and regionally to destinations such as Downtown and the Medical Center. The core bus routes utilize the Scott St., Martin Luther King Blvd., Broadway St. and Bellfort St. corridors (see METRO Map in Appendix A). High ridership bus stop locations can also be seen on the map in the appendix.

While most of the neighborhoods in the study area are served by at least one transit route, there is a lack of service and frequency in the overall study area. The Hobby Airport Transit Center serves as the primary origin/destination for many of the local bus routes operating through the study area. One Park and Ride facility is located within the study area along Fuqua St. and IH 45 and an additional facility is located just outside the study area along Monroe Blvd. and IH 45.

While no light rail is present within the study area, the extension of the Green Line and Purple Line is being considered to provide access to Hobby Airport. This is an important transportation element that will be considered in evaluation of the recommendations in the study area.

LINK Houston provided transit ridership data related to the 2017 Houston-Galveston Area Council (H-GAC) Regional Transit Onboard Origin and Destination Study. This study identified the regional transit trip characteristics and rider profile along each transit system that operates within the H-GAC eight-county region.

Transit rider and trip characteristics for the study area are described as follows:

of all passenger trips surveyed required 1 or more transfers during their trip from origin to destination.

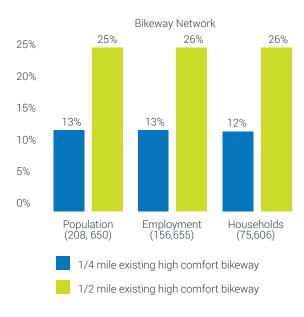
of passengers responding to the survey reported walking to access the bus stop.

43% of passenger trips surveyed were work-related trips.

of local bus transit respondents indicated that they would not make the trip if transit were not available.

47% of respondents would ride with someone else and 13% would drive themselves.

69% of local bus transit respondents take local transit 5 or more days a week.





Additionally, there are a limited number of bicycle facilities in the Southeast Houston Study Area. These facilities are primarily located in the north portion of the study area above Sims Bayou and are designated as high-comfort facilities by the recently completed City of Houston Bike Plan. Through this planning effort, high-comfort existing bicycle facilities were identified as well as programmed, short-term, and long-term recommended projects (see Bicycle Facilities Map in Appendix A).

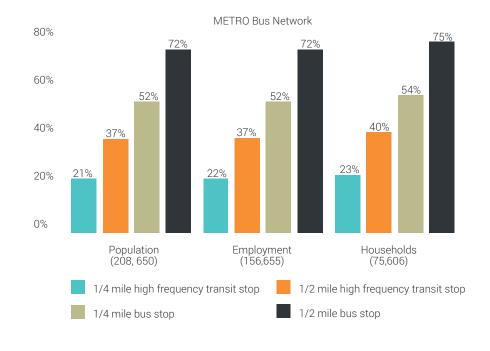
Analysis of the existing bicycle network indicates the need to increase the number of bicycle facilities that provide access to the Sims Bayou Greenway. There is also a lack of continuous north-south connections between Southeast Houston and adjacent communities. Consideration should also be given to interstate crossings under surrounding freeways.

Before

The Transportation Choices base score was determined by looking at areas within a quarter mile of bus stops, areas within a quarter mile of bicycle routes, and the overall proximity to sidewalks. These areas were rated higher on Transportation Choices. The population and employment density of each block group was also utilized to determine what areas should receive a higher priority for improvements.

After

Proximity to new bus and rail transit networks were included in the new scorecard as well as new bike lanes and paths. Improved and new sidewalk connections were also included.

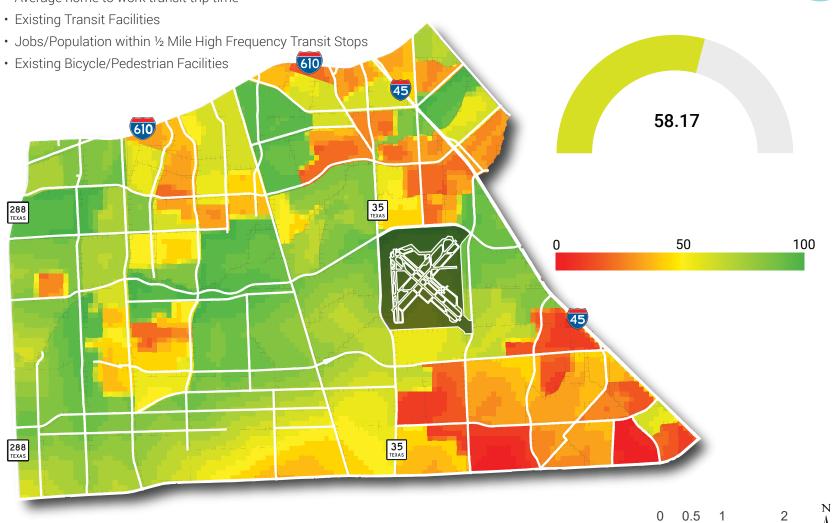




SCORECARDMEASURES OF EFFECTIVENESS: Transportation Choices



• Average home to work transit trip time





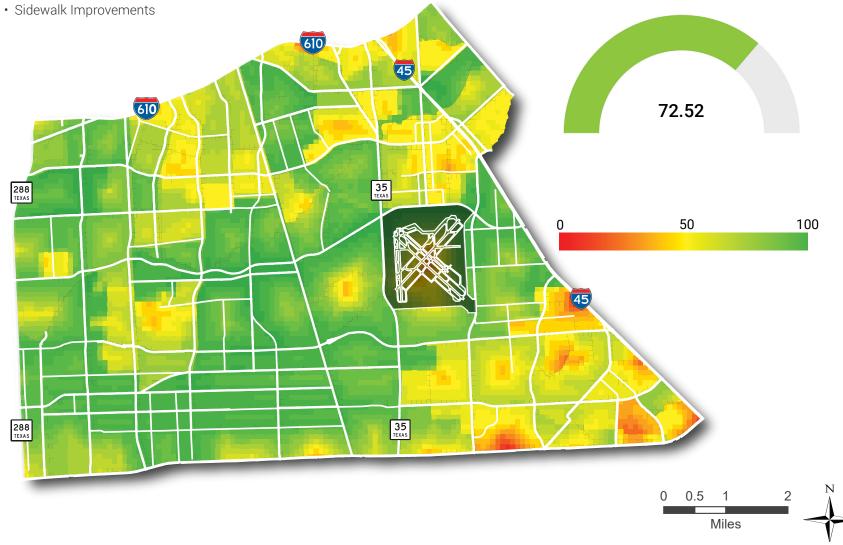


IMPROVEMENTS: Transportation Choices

- Bus/Rail Transit
- Bike Lanes/Paths









SAFETY Design an

Design and maintain transportation infrastructure that is safe for all users

Crash data within the study area was obtained from the Texas Department of Transportation (TxDOT) Crash Records Information System (C.R.I.S.) database between 2013 and 2018. (see Crash Density Map in Appendix A). Based on TxDOT crash data, a total of 11,672 recorded crashes occurred along the major corridors within the study area as shown in the Corridor Crash Characteristics table in Appendix A.

1% of the vehicle crashes during that period resulted in a fatality.

65% of the vehicles crashes were driveway or intersection related while only

3% involved a pedestrian or cyclist.

Top Intersections for Vehicle Crashes

- Bellfort at Telephone
- Bellfort at Broadway
- · Reed at Cullen
- · Almeda Genoa at Rowlett
- Almeda Genoa at Telephone

Top Intersections for Ped/Bike Crashes

- · Broadway at Bellfort
- · Reed at Cullen
- · Bellfort at Cullen
- · Wilmington at Cullen
- Telephone at Fairway

An intersection stress level analysis was completed to determine the pedestrian comfort on roadway crossings throughout the study area. Traffic signal-controlled intersections were only analyzed for the quality of pedestrian crossing infrastructure. Many of these intersections are located along roadways with a functional classification of 'major thoroughfare' or 'major collector'. Each intersection was scored based on the following characteristics: speed limit, through lanes, crosswalk, ADA compliant ramps, median refuge and right turn lane.

Intersection stress level 1 represents the most comfortable pedestrian environment. Intersection scoring is additive depending on the missing infrastructure. Intersection stress level 5 represents the most stressful pedestrian environment, with intersection crossings at high speed, long crossing distances, and inadequate infrastructure to facilitate a comfortable pedestrian crossing.

The most stressful intersections are located along high-volume roadways throughout the study area such as Telephone Rd, Airport Blvd., Galveston Rd, IH 45 Frontage Rd, and Mykawa Rd. The least stressful intersection crossings are at locations throughout the study area with lower volumes and traffic speeds as well as improved pedestrian infrastructure.

Before

The existing Safety score was determined by looking at vehicle crash hot spots as well as pedestrian and bicycle related crashes. Areas with higher densities of crashes and fatalities were given lower ratings for this goal. Intersection stress level was also considered with lower stress levels receiving higher Safety scores and higher stress levels receiving lower scores. Intersection stress level is defined as a rating based on roadway design, traffic volumes, and pedestrian elements.

After

Intersections with safety enhancements were weighted highly positive in the improvement score as well as roadways with access management and road diets.



Promote a healthy, active lifestyle

As discussed in previous sections regarding neighborhood connections and transportation choices, proximity to bicycle facilities and parks provide study area residents with an opportunity to have a healthy, active lifestyle.

In 2016, according to the Centers for Disease Control and Prevention (CDC),

39% of the population within the study area is considered obese.

38% of the population within the study area have no leisure-time physical activity among adults.

16% of the population within the study area do not have good physical health.

32% of the population within the study area is located ½ mile from a park while

25% are located within ½ mile of existing bicycle facilities.

Before

The percent of the population that is disabled or obese was considered for the Community Health score. Areas with higher rates of disability or obesity were categorized with a lower score. Proximity to sidewalks and bike routes added to a higher Health score.

After

The improvement score was determined by looking at the proximity of new bike lanes and paths, as well as new and improved sidewalks.



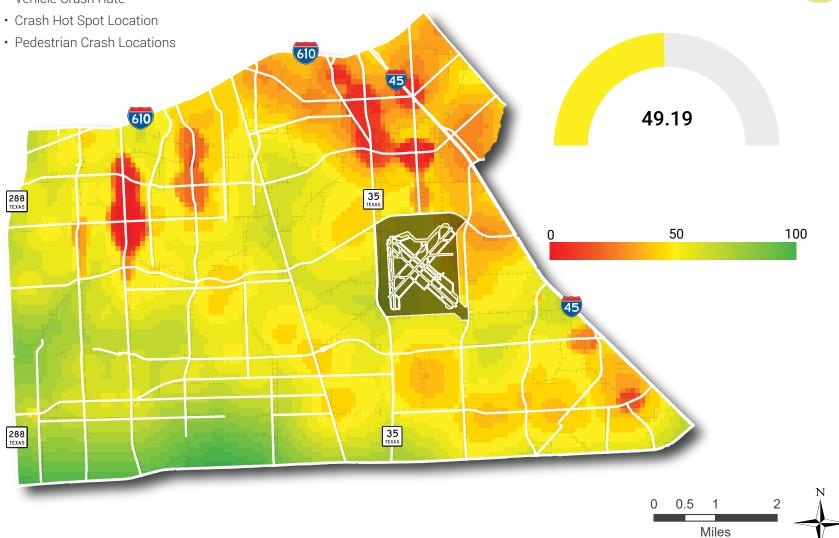
Source: Asakura Robinson. Hike at The Hill on Sims Bayou. Image Credit: David A. Brown



SCORECARDMEASURES OF EFFECTIVENESS: Safety



Vehicle Crash Rate

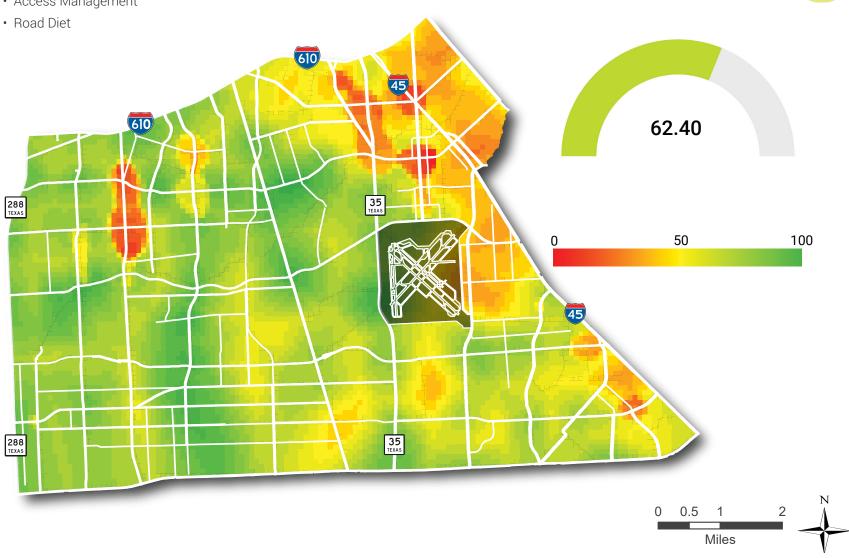




IMPROVEMENTS: Safety

- Intersection Safety Improvements
- Access Management





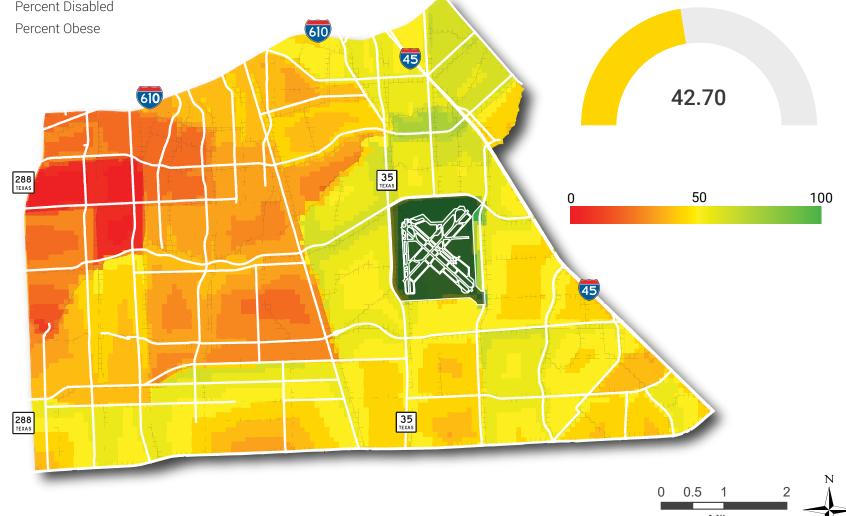


After

SCORECARD









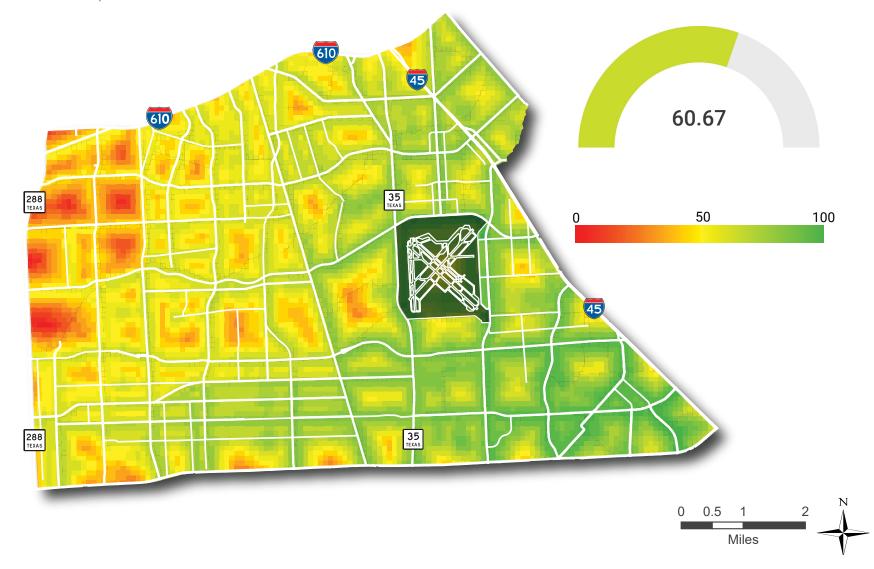




IMPROVEMENTS: Health

- Bike Lanes/Paths
- Sidewalk Improvements









PARTNERSHIPS

Pursue collaborative opportunities that promote inclusive, equitable investments in mobility

The City of Houston Capital Improvement Plan (CIP) outlines the City's infrastructure improvement strategy and organizes projects by priority, project capacity and timing. The process for infrastructure related projects can be broken into two phases: programming phase and the planning phase. See CIP and TxDOT Project Map in Appendix A that represents active projects that are in the CIP and TxDOT projects that are either finalizing for construction or construction is scheduled.

Several projects are currently in the design/ construction phase that will have significant impacts to mobility and accessibility within the Southeast Houston Study Area:

 State Highway 288: this project involves the construction of toll lanes within the existing grassy median, direct connector improvements at IH-610 and Beltway 8, new overpasses at select at-grade intersections, and improved access to Texas Medical Center. Many of the improvements will provide increased mobility for residents within the Study Area traveling to regional destinations.

- State Highway 35: Currently in the design phase from University of Houston (UH) to Bellfort St., is expected to begin construction in 2022-2023. Further design is expected to start in about a year or two on the segment south of Bellfort St. to Alvin. This is planned to be a 4-6 lane freeway with construction expected in 2029-2030.
- IH 45 at Broadway Intersection: This intersection has been identified through public comment and stakeholder input as a dangerous intersection. The project is currently in the Schematic Design phase which will produce a Recommended Alternative for the intersection.

Before

The study area was rated on the percent below poverty for each block group with higher rates of poverty receiving lower scores to indicate that more assistance is needed. Areas with the highest use of bicycle, public transit, or walking as means of transportation were also given lower ratings to indicate the need to prioritize partnerships.

After

CIP and TxDOT Projects were given high scores when determining the improved partnerships score. Roadway rehab, new roads, new intersections, and signal head improvements were also included.





RESILIENCE

Incorporate urban storm water management into transportation

As indicated through public and stakeholder input, flooding along local roadways is a concern.

29% of the study area is either classified in the floodway, or part of the 100-year flood zone or 500-year flood zone

According to the City of Houston 311 Data, there have been 228 flood related service requests within the study area in the last year.

20% occurred during the Hurricane Harvey related flood event.

Another indication of resilience is the quality of the roadway and design standards. Pavement Condition Index (PCI) Rating was gathered through the City of Houston for the study area (see Pavement Condition Index Map in Appendix A). The PCI rating is based on the type, severity, and extent of the roadway segment. The PCI provides the city with the present condition of the pavement surface and helps determine the location and type of necessary treatments.

The following roadway corridor segments were ranked as a major rehabilitation repair strategy:

- Cottingham Rd.: Almeda Genoa Rd. to Schurmier Rd.
- Fuqua St.: Mykawa to S. Wayside Dr.
- Kingspoint Rd.: Fuqua St. to Beltway 8

In addition to the pavement condition index, open ditch vs. curb and gutter roadways were also analyzed. This analysis was used to determine which roadways meet the City of Houston Design Standards according to the Infrastructure Design Manual. Those roadways that do not meet the design standards were prioritized for improvements.

31% of the roadways within the study area have open ditch drainage. A majority of the open ditch drainage network is located along local streets, however, there is still a large percentage of major roadways that have open ditch drainage.

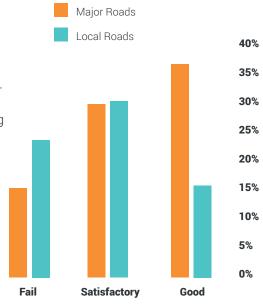
Before

To determine the Resilience score, the 100year flood plain was prioritized as the area most needing resilience assistance. The 500year flood plain was also considered, as well as the location of 311 calls related to flooding issues.

Pavement Condition Index Serious/Failed Very Poor Poor

After

Intersection safety improvements and roadways with access management and road diets were given higher ratings for resilience improvement. A road diet is a transportation planning technique to reduce the number of travel lanes or the width of a roadway.

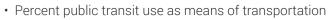




SCORECARD MEASURES OF EFFECTIVENESS: Partnerships



- Percent below poverty
- Percent bicycle use as means of transportation









IMPROVEMENTS: Partnerships

- Roadway Rehab
- New Road
- New Intersections





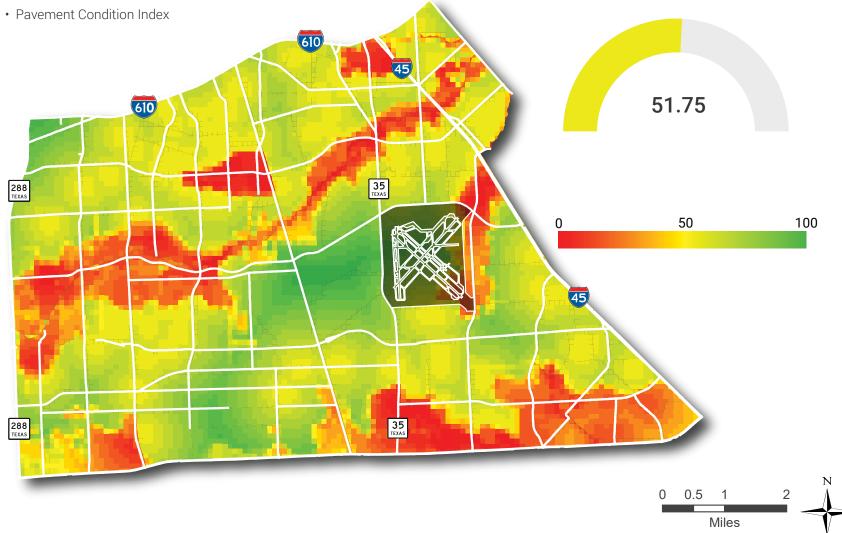
After



SCORECARDMEASURES OF EFFECTIVENESS: Resilience



- 100- and 500- year floodplain
- 311 flooding data



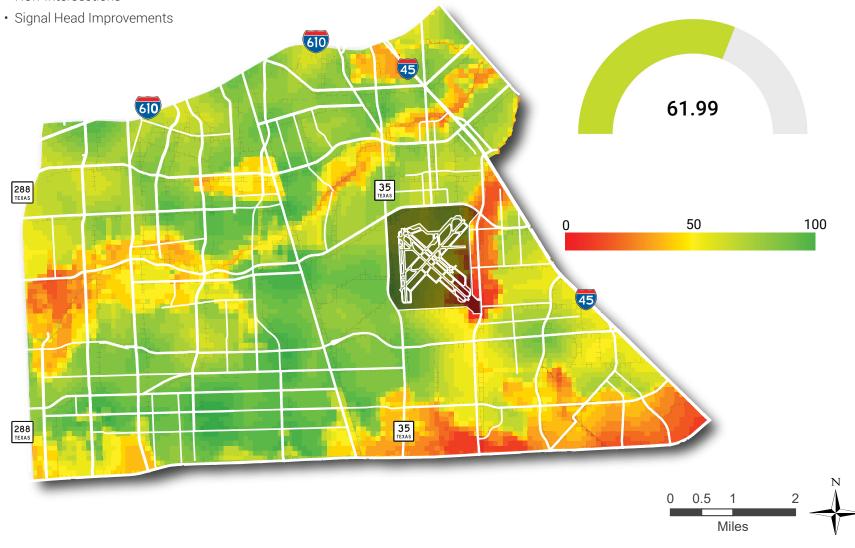


IMPROVEMENTS: Resilience

- Roadway Rehab
- New Road
- New Intersections













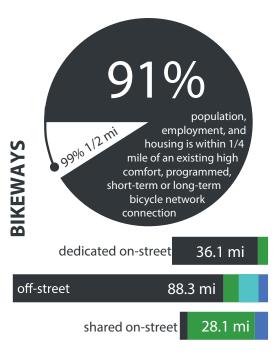


IMPROVEMENT RECOMMENDATIONS

This chapter represents the multimodal system improvement recommendations for the study area including vehicular, pedestrian, bicycle and transit facilities.

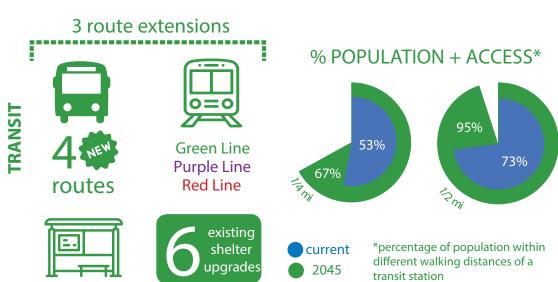
Through advisory committee engagement and public feedback, these improvements represent the needs of the Southeast Houston community.

An overview of the recommendations can be seen in the following graphics.



existing programmed short-term long-term







Major Thoroughfare and Freeway Plan (MTFP)

As explained in the Community Vision and Goals – Regional Access section of this report, the MTFP is the City of Houston's guiding document for future corridors. Based on the functional classification, the MTFP provides the City with the necessary information required to develop the corridor for future capacity and mobility needs. Through the MTFP, City staff have the ability to secure right-of-way, coordinate projects and include pedestrian/bicycle connections along a corridor.

The recommendation for the Southeast Houston study area is to focus on build-out of major corridors as well as identification of local roads that serve as minor collectors.

The updated MTFP map, shown in Map 4.1, identifies corridors to better serve the communities' needs. Existing analysis including future land use, traffic volumes, planned road improvements and public comments were all taken into consideration in the reclassification or expansion of corridors.

The detailed corridor sheets, included later in this chapter, provide a full list of recommendations by corridor based on project team analysis.

Multimodal Classification

A multimodal transportation network will allow residents within the Southeast Houston study area to travel safely between destinations regardless of their mode, age, ability or financial resources. In 2009, the City developed the multimodal classification and related roadway cross sections based on functional class, land use, right-of-way, number of lanes, and traffic volume. The Multimodal Classification can be found in Chapter 10 – Appendix A of the City of Houston Infrastructure Design Manual.

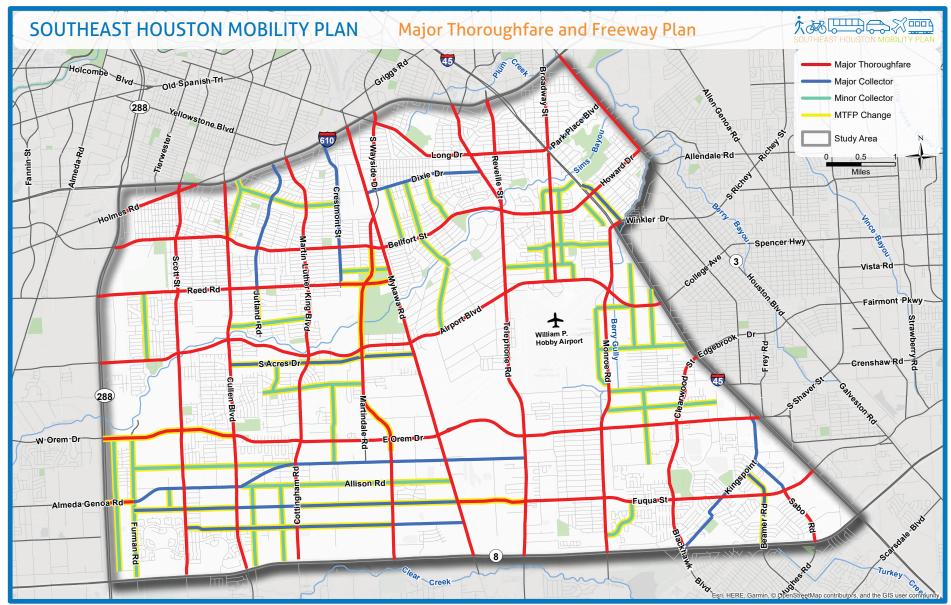
The Multimodal Classification provides the opportunity for the design engineer to determine context sensitive design principles along each corridor given existing right-of-way. Context sensitive design is defined as development of roadway projects that are aligned with the existing and future land use context along a corridor. This also incorporates the role a particular corridor plays in the region's multimodal transportation networks. The Multimodal Classification map, shown in Map 4.2, represents the proposed MTFP network.

Based on the analysis of the multimodal classifications in the Southeast Houston study area, it is recommended that right-of-way designations be reevaluated. Many of the corridors within the study area have wider designations than what is proposed in the Infrastructure Design Manual.

The following roadways in the study area are designated as TxDOT Freight Network and are the preferred freight truck routes:

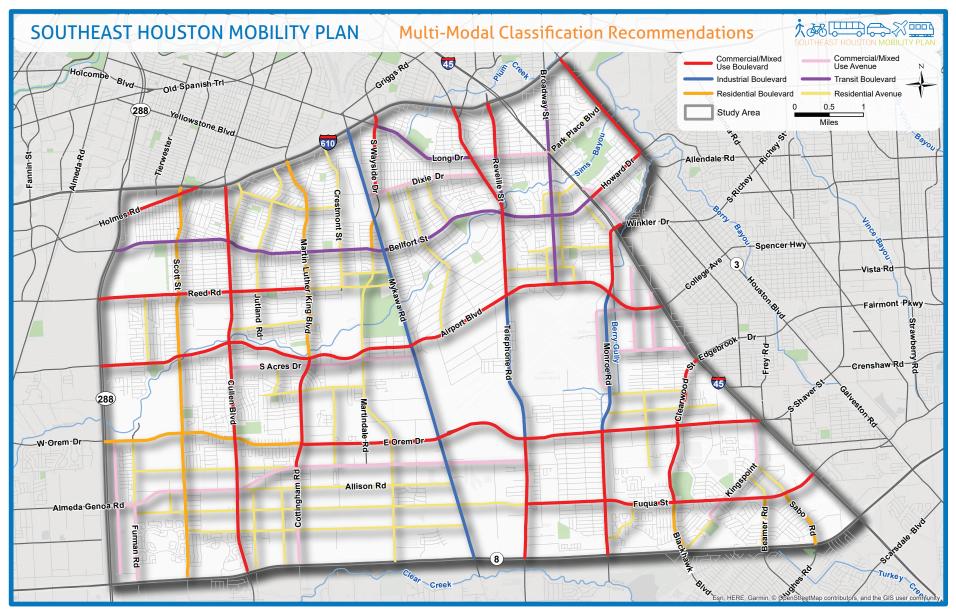
- · Cullen Blvd.
- · Telephone Rd.
- Mykawa Rd. (north of S. Wayside Dr.)
- IH 610
- IH 45
- SH 288
- Beltway 8





Map 4.1 - MTFP Recommendations





Map 4.2 - Multi-Modal Classification Recommendations



Roadway Improvements Intersection Enhancements

As identified through stakeholder engagement and public comments, regional access and neighborhood connections are important to the Southeast community. In order to provide a multimodal approach to mobility, many of the roadways throughout the study area were identified for various levels of improvement, including:

- Access Management
- Added Capacity
- ADA Ramps/Crosswalks
- New Roadway
- Road Diet
- · Build to COH Standard (substandard street)
- MTFP Change

Each of these roadways are identified in Map 4.3 and coincide with the Multimodal Classification Map and the Major Thoroughfare and Freeway Plan Map.

Substandard streets are identified as roadways that currently do not meet the City of Houston design standards.

The resulting network of new and redeveloped roadways would provide increased connections to neighborhood and regional destinations as well improve walking and bicycling among area residents.

Intersection improvements throughout the Southeast Houston study area include a multimodal approach in which all modes (automobile, pedestrian, bicycle, and bus transit) can be accommodated in the design of the intersection. Each user of the network should feel safe and have a comfortable experience when passing through the intersection.

Although a traditional traffic engineering approach was not conducted for this study, safety improvements, design guidelines and locations of new intersections were identified throughout the study area. Many of the intersections throughout the study area are characterized with median refuge areas, wide crossings and non-ADA complaint ramps and sidewalk accessibility.

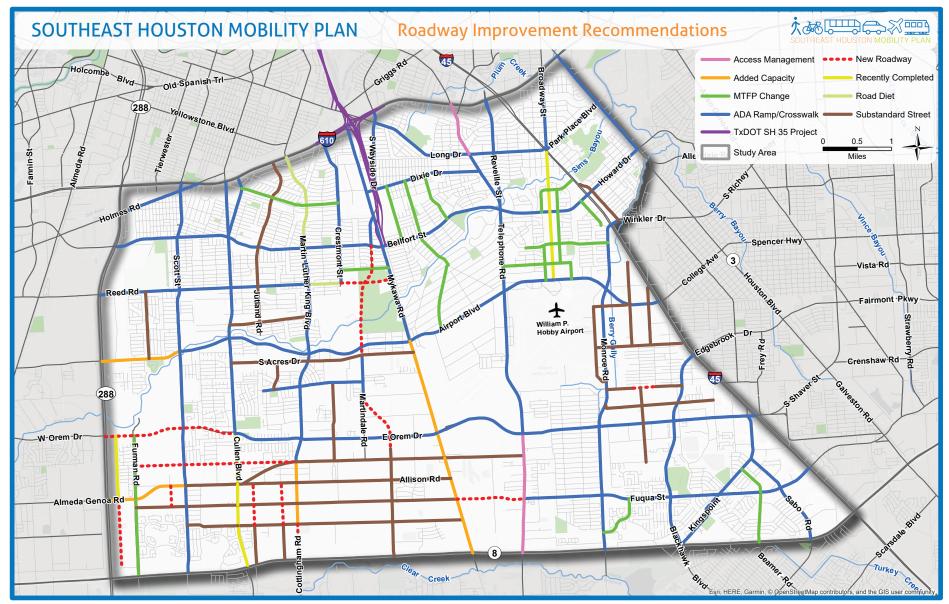
The project team identified improvements based on several variables including the Intersection Stress Level analysis which included identification of ADA compliant ramps, existing and projected traffic volumes, crosswalk markings, number of lanes, MTFP and future development.

Map 4.4 indicates the intersections that need improvements to facilitate the movement of all modes.









Map 4.3 - Roadway Improvement Recommendations





Map 4.4 - Intersection Improvement Recommendations



Bicycle and Pedestrian Improvements

The study area lacks existing high-comfort bicycle facilities, but opportunity for improvement is evident. Wide boulevard roadways, in addition to future buildout of streets, have the potential to create a well-connected bicycle network. Consistent with the City of Houston Bike Plan, recommendations were made for the study area based on available right-of-way, speed, traffic volumes, crash data and opportunity for redesign of existing roadways. These recommendations can be seen on Map 4.5.

The Sims Bayou provides the greatest asset in developing the off-street trail network as it traverses east-west across the study area and provides potential connections north-south to various destinations. Trailheads, a point at which a trail begins, or gateway connections have been identified along the Sims Bayou Greenway that provide better access from on-street facilities and increase visibility for all users.



The following bicycle facility types were recommended throughout the study area:

- Off-Street Bike Path a connection for people walking and bicycling outside of street right-of-way, often with grade separation from cross traffic.
- Side Path a path alongside a street but outside the roadway curbs, either shared by bicyclists or pedestrians walking.
- Separated Bike Lane dedicated street space for bikes separated from traffic with physical raised delineators
- Bike Lane dedicated street space for bikes separated from traffic with striping
- Neighborhood Shared Street low speed, low volume residential street shared by motor vehicles and marked with MUTCD D11-1 "Bike Route" designation sign. Also referred to as Neighborhood Bikeway if additional treatments are used to manage speed and volume.

In contrast with the Houston Bike Plan, side paths were considered to be an off-street facility and thus garnered the "green" color designation. A more detailed engineering analysis should be completed along each corridor to determine appropriate bicycle facility recommendations.

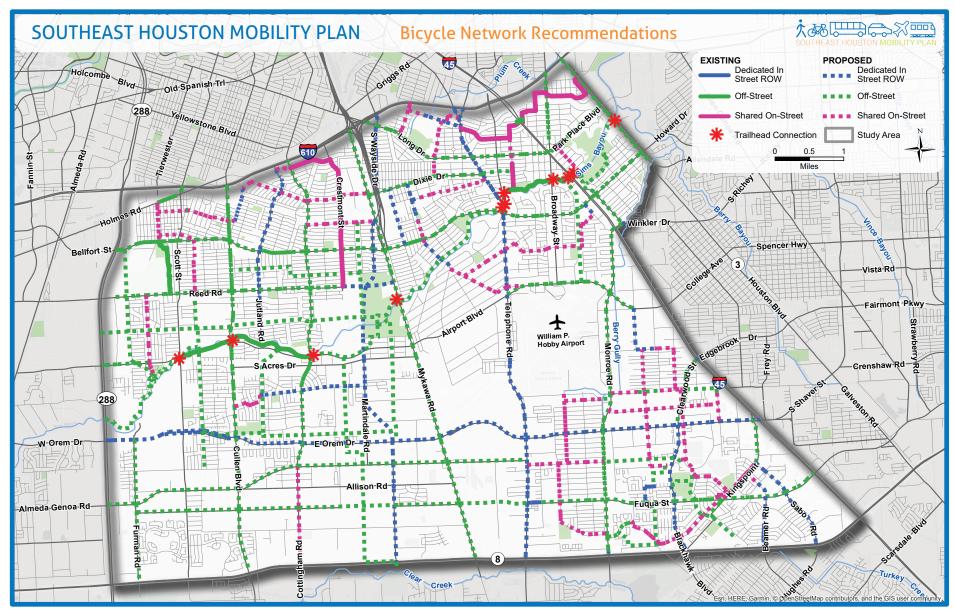
In addition to bicycle improvements throughout the study area, sidewalk improvements were analyzed to improve accessibility and mobility. Through the community vision and goal setting and public input from various meetings, neighborhood connections was among the top ranked priority.

It is important to have a well established sidewalk network to promote walkability to nearby destinations.

The Pedestrian Connectivity Map, Map 4.6, identifies improvements and gaps in the sidewalk network along existing and proposed roadways in Southeast Houston. Sidewalk improvements on the map indicate a need for a sidewalk to be built to city standards. While there may be a sidewalk present along the roadway, the condition and width makes it an unpleasant and uncomfortable experience. The purple shaded areas represent areas with a cluster of neighborhood destinations, including schools, parks, businesses, and community centers. These areas should be studied further for enhancements to sidewalk connectivity.







Map 4.5 - Bicycle Network Recommendations





Map 4.6 - Pedestrian Connectivity Recommendations



Transit Vision

The transit network provides coverage to a majority of the population in the study area, as seen in the Existing Conditions section. However, a lack of transit options exists in the south and southeast portions of the study area due to disconnected roadways and low density. The following factors were considered when evaluating specific corridors and areas for transit improvements:

- Existing Land Use
- Proposed Land Use
- Residential, Employment and Household Density
- Transit Ridership
- Connection and Partnership Opportunities

As shown in Map 4.7, two transit types are represented in the transit network recommendations including Local Bus Service and Light Rail Transit (LRT). Many of the local bus route recommendations are extensions of the existing local bus service and would provide service to destinations mentioned by stakeholder committee members.

These local bus route extensions include:

- Cullen/Hirsch 29
- Scott 54
- MLK/Lockwood 80

New local bus routes along Airport Blvd., East/West Orem Dr., and Fuqua St. would be classified as Crosstown Bus Service to improve connectivity and provide access to employment centers. These Crosstown Bus Routes would provide access to Missouri City Park and Ride as well as the Fuqua Park and Ride with connectivity to local destinations and connecting large residential communities.

A Community Connector is also proposed as a short-term solution to areas that experience limited transit accessibility. A Community Connector bus service would provide personalized, curb-to-destination service to residents seven days a week. This area is in the southeast portion of the study area bounded by Telephone Rd. to the west, Beltway 8 to the south, IH 45 to the east and Almeda Genoa Rd. to the north.

Along with improved local bus service, the extension of light rail transit to Hobby Airport is also an important transit mobility improvement in the study area. Light rail transit to Hobby Airport has been discussed since METRO Solutions 2003 referendum and continues to be a significant transit opportunity. The METRO Red, Green, and Purple LRT Lines can be used to extend service to Hobby Airport. Further analysis by METRO would need to be conducted to determine final route alignment and station locations.

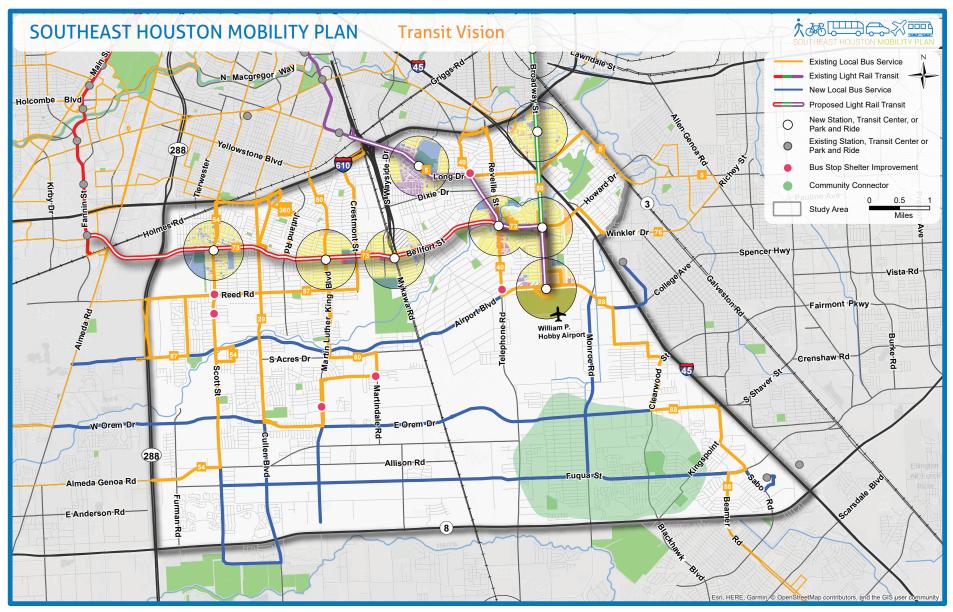
With the expansion of the transit network within the study area, pedestrian enhancements, such as ADA compliant curb ramps, sidewalks, crosswalks and lighting should also be considered as a priority to increase mobility. Bus stop location enhancements including shelters, benches and trash receptacles should also be considered along these new and enhanced local bus routes.

The following existing local bus stop locations were identified for shelter improvements based on daily ridership:

- Martin Luther King Blvd. at Fairgreen Ln.
- · Selinsky Rd. at Martindale Rd.
- · Scott St. at Reed Rd.
- Telephone Rd. at Park Place Blvd.
- · Scott St. at Dawson Ln.
- Telephone Rd. at Fauna St.







Map 4.7 - Transit Vision



SH 35 ALTERNATIVE SCENARIO ANALYSIS

As of May 2019, TxDOT has completed the feasibility study and has acquired funding to extend Spur 5 southeast to IH 610 (referred to as the SH 35 corridor). In addition, TxDOT is exploring the potential to extend this corridor South along the Mykawa Rd. and Union Pacific Railroad facilities.

As part of the study, the City of Houston is exploring the mobility outcomes as it relates to the goals of the Southeast Mobility Plan. The H-GAC regional travel demand model was modified to include the two build scenarios:

- Scenario 1: SH 35 Build to Bellfort St.
- Scenario 2: SH 35 Build to Pearland

H-GAC conducted the travel demand forecasting within the Study Area. The Travel Demand Model is a tool for comparing alternative scenarios within a planning horizon to understand better the dynamics of future employment and population growth and their effect on the roadway network.

The consultant team determined that an update to baseline demographic information was needed, especially adjacent to the Mykawa Rd. corridor. This corridor is significant as the proposed SH 35 is expected to impact population and employment growth in the Study Area.

Fifteen separate traffic analysis zones (TAZ) were analyzed along the east and west side of the Mykawa Rd. corridor. Quantitative data analysis was paired with qualitative information on likely future land use of developed and undeveloped land parcels within

each TAZ to 2045. Local knowledge of market forces shaping future land use in these zones was simultaneously considered with the likely impact on forecasted population, households and job numbers in the zones created by the future freeway.

There are some significant constraints to current and future development along the corridor: FEMA floodplains are the primary obstacle as well as utility and railway infrastructure.

Updated demographic information was then processed using the scenario approach within the H-GAC travel demand forecasting methodology, and results were produced based on network assumptions for that model year.

Map 4.8 and Map 4.9 illustrate the PM Level of Service (LOS) based on the two scenario model runs. LOS was determined based on the volume to capacity ratio of the existing 2045 model roadway network.

LOS refers to speed, convenience, comfort, and security of transportation facilities and services as experienced by users (LOS A-best to LOS F-worst).

Flow is the output of demand performance, measured in number of vehicles.

Vehicle Miles Traveled is an indicator of system performance measuring the total amount of vehicular travel in a region based on distance traveled.

Vehicle Hours Traveled is an indicator of system performance measuring the total amount of vehicular travel in a region based on total time spent traveling. Weighted Average Flow is an indicator of system performance measuring the average vehicle flow weighted by lane mile (i.e. Average flow per lane mile).

Weighted Average VMT is an indicator of system performance measuring the average vehicle miles traveled by lane mile.

Delay is the difference between the actual travel time on a link and the free-flow travel time. Serves as a measure of congestion.

Travel characteristics from both scenarios can be seen below.

Scenario 1:

Total Flow - 7,909,188

Total Vehicle Miles Traveled - 2,641,610

Total Vehicle Hours Traveled - 88,355

Weighted Average Flow - 1,713 vehicles

Weighted Average VMT - 572 vehicle miles

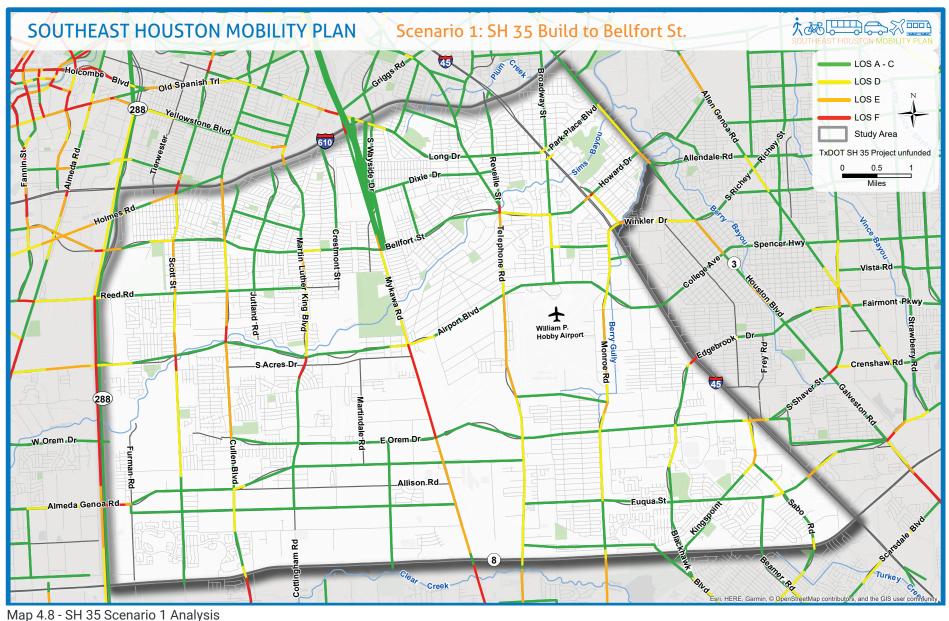
Total Delay - 17,766 hours

Scenario 2:

Total Flow - 7,416,029
Total Vehicle Miles Traveled - 2,642,322
Total Vehicle Hours Traveled - 84,820
Weighted Average Flow - 1,604 vehicles
Weighted Average VMT - 571 vehicle miles
Total Delay - 16,245 hours

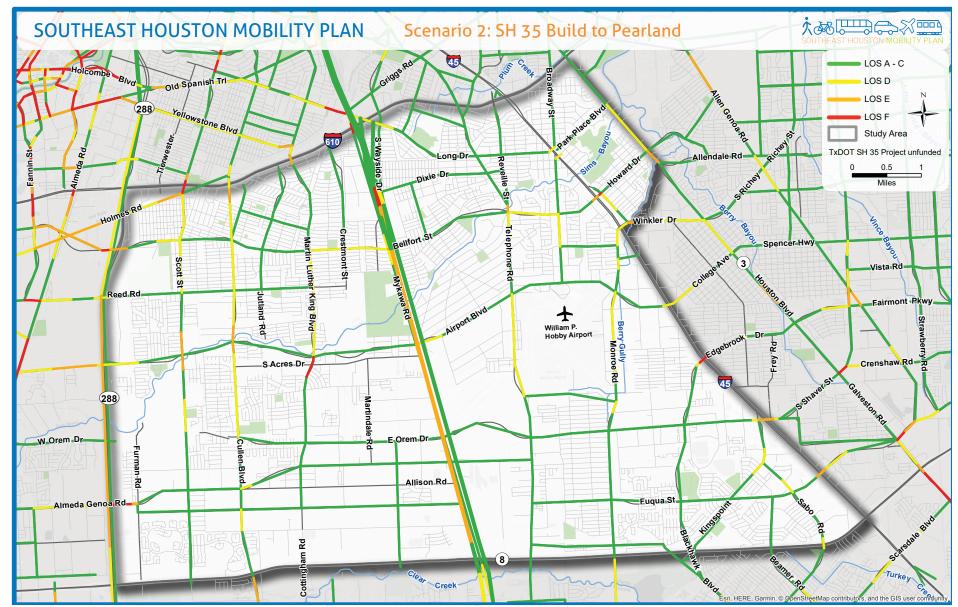
It is recommended to further study the impacts of both scenarios on the study area including no-build option.





Map 4.8 - SH 35 Scenario 1 Analysis





Map 4.9 - SH 35 Scenario 2 Analysis



CORRIDOR IMPROVEMENTS

The purpose of this study is to recommend a network of multimodal facilities to efficiently move residents and employees within the Study Area, as well as to and from employment centers and regional destinations. The roadway network is evaluated at a system level to understand congestion levels, crash rates and level of service. Multimodal elements including pedestrian, transit, and bicycle facilities are evaluated at a more detailed level to determine the needs and priorities along each corridor. The corridor improvements are summarized in the following tables.

Each of the major thoroughfares and major collectors identified in the Major Thoroughfare and Freeway Plan are evaluated individually and are listed in alphabetical order in the individual corridors section. Roadway elements include existing right-of-way, traffic counts, current modal uses as well as projected volumes and anticipated development. Public comment was also considered during the recommendation process.

Corridor sheets are organized with the following information for each corridor:

- Multimodal Elements
- Existing Conditions
- Improvement Needs
- Future Condition



Expand Capacity



Dedicated In Street ROW



New Road



Shared On Street



Access Management



Off-Street



Road Diet



Active Sidewalk Improvement



Roadway Rehab



Transit Rail



Class Change/ Addition



Transit Bus



MAJOR CORRIDORS TABLE

			MASON CONTIDONS TABLE								
STREET NAME	FROM	то	FUNCTIONAL CLASS	MEDIAN/CTL/ UNDIVIDED	LANES	PEDESTRIAN	TRANSIT	EXISTING VOLUME RANGE	2040 VOLUME RANGE	PROPOSED MULTIMODAL STREET CLASSIFICATION	IMPROVEMENT TYPE
Airport Blvd	SH-288	Scott St.	P-6-100	Median	4	Yes	Local - 87	6,900 - 9,900	21,400 - 36,200	Commercial/Mixed Use Boulevard	
Airport Blvd	Scott St.	Cullen Blvd.	P-6-110	Median	4	Yes	Local - 54	3,500 - 6,600	14,500 - 18,400	Commercial/Mixed Use Boulevard	
Airport Blvd	Cullen Blvd.	Martin Luther King Blvd.	P-6-100	Median	4	Yes		8,100 - 9,200	18,700	Commercial/Mixed Use Boulevard	
Airport Blvd	Martin Luther King Blvd.	Mykawa Rd.	P-6-100	Median	4	Yes		11,500 - 16,400	21,500 - 33,300	Commercial/Mixed Use Boulevard	
Airport Blvd	Mykawa Rd.	Telephone Rd.	P-6-100	Median	4	Yes		10,900 - 16,400	18,600 - 28,400	Commercial/Mixed Use Boulevard	•
Airport Blvd	Telephone Rd.	Broadway St.	P-6-100	Median	6	Yes	Local - 40	16,300 - 21,200	26,500 - 31,700	Commercial/Mixed Use Boulevard	
Airport Blvd	Broadway St.	Monroe Blvd.	P-6-100	Median	6	Yes	Local - 88	17,200 - 18,700	26,900 - 28,600	Commercial/Mixed Use Boulevard	
Airport Blvd	Monroe Blvd.	IH-45	P-6-100	Median	6	Yes	Local - 88	22,800 - 28,200	31,300 - 37,300	Commercial/Mixed Use Boulevard	
Almeda Genoa Rd	SH-288	Furman Rd.	MJ-4-70	Undivided	2	No	Local - 54	14,300 - 16,300	24,500 - 29,500	Commercial/Mixed Use Avenue	
Almeda Genoa Rd	Furman Rd.	Scott St.	MJ-4-70	Undivided	2	No	Local - 54	8,200 - 10,700	14,200 - 17,800	Commercial/Mixed Use Avenue	
Almeda Genoa Rd	Scott St.	Cullen Blvd.	MJ-4-70	Undivided	2	No		4,700 - 6,000	7,700 - 13,000	Commercial/Mixed Use Avenue	
Almeda Genoa Rd	Cullen Blvd.	Cottingham St.	MJ-4-70	Undivided	2	No		6,400 - 7,200	10,900 - 12,700	Commercial/Mixed Use Avenue	
Almeda Genoa Rd	Cottingham St.	S Wayside Dr.	MJ-4-70	Undivided	2	No		1,500 - 2,200	2,400 - 5,200	Commercial/Mixed Use Avenue	₹
Almeda Genoa Rd	S Wayside Dr.	Mykawa Rd.	MJ-4-70	Undivided	2	No		3,500 - 3,700	9,600 - 10,300	Commercial/Mixed Use Avenue	***
Almeda Genoa Rd	Mykawa Rd.	Telephone Rd.	MJ-4-70	Undivided	2	No		3,500 - 3,900	8,500	Commercial/Mixed Use Avenue	
Almeda Genoa Rd	Telephone Rd.	Monroe Blvd.	T-4-100	Median	4	Yes		14,600	25,400 - 27,900	Commercial/Mixed Use Boulevard	
Almeda Genoa Rd	Monroe Blvd.	Blackhawk Blvd.	T-4-100	Median	4	Yes		13,400 - 22,600	21,200 - 35,300	Commercial/Mixed Use Boulevard	
Almeda Genoa Rd	Blackhawk Blvd.	IH-45	P-6-120	Median	4	Yes	Local - 88	12,500 - 46,700	23,600 - 60,900	Commercial/Mixed Use Boulevard	
Beamer Rd	Fuqua St.	Beltway 8	T-4-100	Median	4	Yes	Local - 88	3,400 - 20,400	5,600 - 24,400	Residential Boulevard	₫
Bellfort St	SH-288	Scott St.	T-4-100	Median	4	Yes	Local - 73	12,300 - 14,900	22,100 - 30,300	Transit Boulevard	(A) 🚱 (A)
Bellfort St	Scott St.	Cullen Blvd.	T-4-100	Median	4	Yes	Local - 73	7,700 - 8,500	16,500 - 16,900	Transit Boulevard	(A) 🚱 (A)
Bellfort St	Cullen Blvd.	Jutland Rd.	T-4-100	Median	4	Yes	Local -73 Shuttle - 360	21,800 - 23,700	26,700 - 30,000	Transit Boulevard	
Bellfort St	Jutland Rd.	Martin Luther King Blvd.	T-4-120	Median	4	Yes	Local - 73	17,900 - 19,100	23,500 - 24,900	Transit Boulevard	(A) 🚱
Bellfort St	Martin Luther King Blvd.	Crestmont St.	T-4-130	Median	4	Yes	Local - 73	18,900 - 20,300	24,300 - 24,700	Transit Boulevard	(A) (A)
Bellfort St	Crestmont St.	Mykawa Rd.	T-4-130	Median	4	Yes	Local - 73	19,100 - 20,900	22,900 - 24,400	Transit Boulevard	(A) 🚱
Bellfort St	Mykawa Rd.	Telephone Rd.	T-4-100	Median	4	Yes	Local -73	10,400 - 14,000	13,000 - 17,900	Transit Boulevard	(A) 🚱
Bellfort St	Telephone Rd.	Broadway St.	T-4-100	Median	4	Yes	Local - 73, 76	16,000 - 23,400	19,000 - 25,100	Transit Boulevard	(A) 🚱
Bellfort St	Broadway St.	IH-45	T-4-80	Median	4	Yes	Local - 76	15,700 - 26,300	17680 - 27,100	Transit Boulevard	
Blackhawk Blvd	Almeda Genoa Rd.	Fuqua St.	T-4-100	Median	4	Yes		13,000 - 18,900	17,600 - 23,800	Commercial/Mixed Use Boulevard	(476)
Blackhawk Blvd	Fuqua St.	Kingspoint Rd.	T-4-100	Median	4	Yes		10,800 - 12,400	14,100 - 17,300	Residential Boulevard	\$
Broadway St	IH-610	Park Place Blvd.	P-6-120	Median	4	Yes	Local - 50	16,900 - 21,800	22,200 - 29,900	Transit Boulevard	(A) 🚱 (A)
Broadway St	Park Place Blvd.	Bellfort St.	P-6-120	Median	4	Yes	Local - 50	23,500 - 30,300	24,200 - 29,700	Transit Boulevard	
Broadway St	Bellfort St.	Airport Blvd.	P-6-120	Median	4	Yes	Local - 50, 73	18,900 - 26,000	23,600 - 28,700	Transit Boulevard	(A)
Clearwood St	IH-45	Almeda Genoa Rd.	T-4-100	Median	4	Yes	Local - 88	24,600 - 42,700	28,500 - 48,700	Commercial/Mixed Use Boulevard	(74) (3%) (5%)





































MAJOR CORRIDORS TABLE

STREET NAME	FROM	то	FUNCTIONAL CLASS	MEDIAN/CTL/ UNDIVIDED	LANES	PEDESTRIAN	TRANSIT	EXISTING VOLUME RANGE	2040 VOLUME RANGE	PROPOSED MULTIMODAL STREET CLASSIFICATION	IMPROVEMENT TYPE
Cityscape Ave	E Orem Dr.	Almeda Genoa Rd.	MN-2-60	Undivided	2			RANGE	RANGE	Mixed Use Avenue	<u>(\$)</u>
Cottingham Rd	Almeda Genoa Rd.	Schurmier Rd.	P-6-100	Undivided	2	No		200 - 400	600 - 900	Commercial/Mixed Use Avenue	
Cottingham Rd	Schurmier Rd.	Beltway 8	P-6-100	Undivided	2					Commercial/Mixed Use Avenue	
Crestmont St	IH-610	Bellfort St.	MJ-2-60	Undivided	2	Yes	Local - 87	2,000 - 4,400	3,300 - 8,400	Residential Avenue	(77) (87) (8)
Crestmont St	Bellfort St.	Reed Rd.	MJ-2-60	Undivided	2	Yes	Local - 87			Residential Avenue	Ø₹ (★
Cullen Blvd	IH-610	Bellfort St.	T-4-80	Median	4	Yes	Local - 29	27,000 - 38,300	34,400 - 46,900	Commercial/Mixed Use Boulevard	<i>₫</i> ъ <u>⟨</u> ˆˆ
Cullen Blvd	Bellfort St.	Reed Rd.	T-4-80	Median	4	Yes	Local - 29	19,500 - 25,000	30,400 - 35,600	Commercial/Mixed Use Boulevard	<i>₹</i>
Cullen Blvd	Reed Rd.	Airport Blvd.	T-4-80	Median	4	Yes	Local - 29	21,600 - 25,400	29,700 - 38,400	Commercial/Mixed Use Boulevard	<i>₫</i> ₹
Cullen Blvd	Airport Blvd.	E Orem Dr.	T-4-80	Median	4	Yes	Local - 29	14,300 - 15,600	23,600 - 25,700	Commercial/Mixed Use Boulevard	Ø ☆
Cullen Blvd	E Orem Dr.	Almeda Genoa Rd.	T-4-140	Median	4	Yes		11,000 - 12,300	14,600 - 18,700	Commercial/Mixed Use Boulevard	
Cullen Blvd	Almeda Genoa Rd.	Fuqua St.	T-4-100	Median	4	Yes		13,900	25,700	Commercial/Mixed Use Boulevard	
Cullen Blvd	Fuqua St.	Beltway 8	T-4-100	Median	4	Yes		14,800 - 20,900	26,100 - 30,800	Commercial/Mixed Use Boulevard	
Dixie Dr	Mykawa Rd.	Telephone Rd.	MJ-4-70	Undivided	4	Yes		2,900 - 8,900	2,700 - 9,600	Commercial/Mixed Use Avenue	<i>₫</i>
E Orem Dr	SH 288	Cullen Blvd.	T-4-100	Median	4	Yes		-	-	Residential Boulevard	<u>(A)</u> (B) (B)
E Orem Dr	Cullen Blvd.	Martin Luther King Blvd.	T-4-100	Median	4	Yes	Local - 29	2,700 - 2,900	14,600 - 14,700	Residential Boulevard	
E Orem Dr	Martin Luther King Blvd.	Martindale Rd.	T-4-100	Median	4	Yes		2,400 - 4,600	10,400 - 13,700	Commercial/Mixed Use Boulevard	
E Orem Dr	Martindale Rd.	Mykawa Rd.	T-4-100	Median	4	Yes		2,800 - 4,600	11,900 - 13,700	Commercial/Mixed Use Boulevard	
E Orem Dr	Mykawa Rd.	Telephone Rd.	T-4-100	Median	4	Yes		3,500 - 3,900	10,900 - 12,800	Commercial/Mixed Use Boulevard	
Fuqua St	Furman Rd.	Scott St.	T-4-100	Undivided	2	No		2,900 - 5,600	5,500 - 9,700	Residential Avenue	₹
Fuqua St	Scott St.	Cullen Blvd.	T-4-100	Undivided	2	No		2,500 - 5,100	5,100 - 10,000	Residential Avenue	(7)
Fuqua St	Cullen Blvd.	Martin Luther King Blvd.	MJ-4-70	Undivided	2	No		1,500 - 1,600	3,200 - 3,300	Residential Avenue	(77)
Fuqua St.	Martin Luther King Blvd.	S Wayside Dr.	MJ-4-70	Undivided	2	No		-	-	Residential Avenue	?
Fuqua St	S Wayside Dr.	Mykawa Rd.	T-4-100	Undivided	2	No		1,400 - 1,600	1,700 - 2,500	Residential Avenue	
Fuqua St	Mykawa Rd.	Telephone Rd.	T-4-100	Undivided	2	Yes		-	-	Residential Avenue	
Fuqua St	Telephone Rd.	Monroe Blvd.	T-4-100	Median	4	Yes		1,700 - 1,900	2,700 - 4,600	Commercial/Mixed Use Boulevard	
Fuqua St	Monroe Blvd.	Blackhawk Blvd.	T-4-100	Median	4	Yes		1,900 - 11,700	3,500 - 15,500	Commercial/Mixed Use Boulevard	
Fuqua St	Blackhawk Blvd.	Kingspoint Rd.	T-4-100	Median	4	Yes		6,800 - 6,900	10,200 - 12,000	Commercial/Mixed Use Boulevard	
Fuqua St	Kingspoint Rd.	Beamer Rd.	T-4-100	Median	4	Yes		8,100 - 10,000	11,100 - 12,100	Commercial/Mixed Use Boulevard	
Fuqua St	Beamer Rd.	IH-45	T-4-100	Median	4	Yes	Local - 88	17,600 - 26,300	15,000 - 37,400	Commercial/Mixed Use Boulevard	<i>₫</i>
Furman Rd	Beltway 8	Almeda Genoa Rd.	MJ-4-70	Undivided	2	No		5,500	9,800	Commercial/Mixed Use Avenue	<i>₫</i> ₀ <u>⟨</u> ѕ̂⟩
Furman Rd	Almeda Genoa Rd.	E Orem Dr.	MJ-4-70	Undivided	2	No		<u> </u>	-	Residential Avenue	MTFP &
Galveston Rd	IH-610	Park Place Blvd.	P-6-100	Undivided	4	Yes		11,000 - 13,900	11,000 - 12,800	Commercial/Mixed Use Boulevard	<i>₫</i> ₽0 <u>⟨</u> ♠
Galveston Rd	Park Place Blvd.	Howard Dr.	P-6-100	Undivided	4	Yes	Local - 5	9,400 - 10,500	12,200 - 13,300	Commercial/Mixed Use Boulevard	<i>₹</i>
Holmes Rd	SH-288	Scott St.	T-4-100	Median	4	Yes		4,600 - 7,800	22,600 - 25,700	Commercial/Mixed Use Boulevard	<i>₫</i> % <u>(∱</u>





































MAJOR CORRIDORS TABLE

STREET NAME	FROM	то	FUNCTIONAL CLASS	MEDIAN/CTL/ UNDIVIDED	LANES	PEDESTRIAN	TRANSIT	EXISTING VOLUME RANGE	2040 VOLUME RANGE	PROPOSED MULTIMODAL STREET CLASSIFICATION	IMPROVEMENT TYPE
Holmes Rd	Scott St.	IH-610	T-4-100	Median	4	Yes		1,100 - 2,200	5,300 - 5,400	Commercial/Mixed Use Boulevard	****
Howard Dr	IH-45	Galveston Rd.	T-4-75	Median	4	Yes		20,300 - 23,000	20,400 - 22,800	Commercial/Mixed Use Boulevard	***
Jutland Rd	IH-610	Pershing St.	MJ-2-60	Undivided	2	Yes		2,100 -3,600	2,700 - 3,800	Residential Avenue	(4)
Jutland Rd	Pershing St.	Bellfort St.	MJ-2-70	Undivided	2	Yes	Shuttle - 360	1,600 - 5,400	2,400 - 6,300	Residential Avenue	
Jutland Rd	Bellfort St.	Reed Rd.	MJ-2-60	Undivided	2	Yes		7,900 - 8,300	9,900 - 10,000	Residential Avenue	(77)
Jutland Rd	Reed Rd.	Sunbeam St.	MJ-2-60	Undivided	2	Yes		-	-	Residential Avenue	MTFP &
Kingspoint	IH-45	Fuqua St.	MJ-4-60	Undivided	2	Yes		12,200 - 30,500	14,300 - 36,700	Commercial/Mixed Use Avenue	₹
Kingspoint	Fuqua St.	Beltway 8	MJ-4-100	Undivided	2	Yes		8,100 - 11,900	12,800 - 15,800	Residential Avenue	***
Long Dr	IH-610	Telephone Rd.	T-4-80	Median	4	Yes	Local - 5	12,200 - 19,900	14,400 - 23,900	Transit Boulevard	(A) (B)
Martin Luther King Blvd	IH-610	Bellfort St.	P-6-120	Median	6	Yes	Local - 80	13,900 - 23,500	21,100 - 32,400	Residential Boulevard	♣
Martin Luther King Blvd	Bellfort St.	Reed Rd.	P-6-120	Median	4	Yes	Local - 80	11,700 - 13,300	26,900 - 27,000	Residential Boulevard	
Martin Luther King Blvd	Reed Rd.	Airport Blvd.	P-6-110	Median	4	Yes	Local - 80	9,500 - 11,700	16,600 - 18,900	Residential Boulevard	(77) (19) (19) (19) (19) (19) (19) (19) (19)
Martin Luther King Blvd	Airport Blvd.	E Orem Dr.	P-6-150	Median	4	Yes	Local - 29, 80	6,700 - 7,700	13,300 - 14,000	Commercial/Mixed Use Boulevard	😩 🚱 🎊
Martin Luther King Blvd	E Orem Dr.	Almeda Genoa Rd.	P-6-100	Median	4	Yes		5,900	10,600 - 10,800	Commercial/Mixed Use Boulevard	(3)
Martindale Rd	S Acres Dr.	Madden Ln.	T-4-100	Undivided	2	Yes				Residential Avenue	(77) (37)
Monroe Rd	IH-45	Airport Blvd.	T-4-130	Median	4	Yes		20,200 - 37,200	27,100 - 39,000	Commercial/Mixed Use Boulevard	<i>₫</i> ⁄⁄> (∱)
Monroe Rd	Airport Blvd.	Almeda Genoa Rd.	T-4-100	Median	4	Yes		15,600 - 21,000	21,200 - 27,900	Industrial Boulevard	<i>₹</i>
Monroe Rd	Almeda Genoa Rd.	Fuqua St.	T-4-100	Median	4	Yes		14,800 - 16,400	22,200 - 23,300	Commercial/Mixed Use Boulevard	<i>₫</i> ₽0 🥳
Monroe Rd	Fuqua St.	Beltway 8	T-4-100	Median	4	Yes		10,700 - 17,600	17,600 - 28,500	Commercial/Mixed Use Boulevard	<i>₹</i>
Mykawa Rd	IH-610	Dixie Dr.	T-4-80	Median	4	Yes		11,300 - 14,200	12,100 - 13,900	Industrial Boulevard	<i>ĕ</i> >> <u>⟨</u> ˆ∕¸⟩
Mykawa Rd	Dixie Dr.	S Wayside Dr.	T-4-80	Median	4	Yes		10,800	16,200 - 17,300	Industrial Boulevard	ℰ ୭ 🔥
Mykawa Rd	S Wayside Dr.	Bellfort St.	T-4-100	Median	4	Yes		10,400 - 10,800	16,300	Industrial Boulevard	<u>څ</u> 🖒
Mykawa Rd	Bellfort St.	Airport Blvd.	T-4-100	Median	4	Yes		16,000 - 17,100	22,100 - 23,100	Industrial Boulevard	₹
Mykawa Rd	Airport Blvd.	Almeda Genoa Rd.	T-4-100	Undivided	2	No		10,400 - 12,700	16,700 - 19,000	Industrial Boulevard	
Mykawa Rd	Almeda Genoa Rd.	Beltway 8	T-4-100	Undivided	2	No		10,500 - 16,400	15,100 - 26,800	Industrial Boulevard	
Park Place Blvd	Telephone Rd.	Reveille St.	T-4-80	Undivided	4	Yes	Local - 5	3,400	5,000	Commercial/Mixed Use Avenue	(77) (47) (5)
Park Place Blvd	Reveille St.	IH-45	T-4-80	Undivided	4	Yes	Local - 5	8,500 - 12,700	11,300 - 14,900	Commercial/Mixed Use Avenue	₹
Park Place Blvd	IH-45	Galveston Rd.	MJ-4-70	Undivided	4	Yes	Local - 5	5,200 - 6,700	5,200 - 6,800	Residential Avenue	(77)
Reed Rd	SH-288	Scott St.	T-4-100	Median	4	Yes	Local - 87	4,100 - 7,600	8,100 - 13,900	Commercial/Mixed Use Boulevard	<i>₫</i> °0 / ∱
Reed Rd	Scott St.	Cullen Blvd.	T-4-80	Median	4	Yes	Local - 87	6,100 - 8,700	10,600 - 14,200	Commercial/Mixed Use Boulevard	<i>₹</i>
Reed Rd	Cullen Blvd.	Martin Luther King Blvd.	T-4-80	Median	4	Yes	Local - 87	5,000 - 5,500	5,800 - 13,600	Commercial/Mixed Use Boulevard	₽
Reed Rd	Martin Luther King Blvd.	Crestmont St.	T-4-100	Undivided	4	Yes	Local - 87			Residential Avenue	
Reed Rd	Crestmont St.	Mykawa Rd.	T-4-100	Undivided	2	Yes			-	Residential Avenue	<u>♠</u>
Reveille St	IH-45	Park Place Blvd.	P-6-100	Median	6	Yes	Local -76	34,600 - 35,200	39,400 - 40,000	Commercial/Mixed Use Boulevard	Ŕ





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MAJOR CORRIDORS TABLE

STREET NAME	FROM	то	FUNCTIONAL CLASS	MEDIAN/CTL/ UNDIVIDED	LANES	PEDESTRIAN	TRANSIT	EXISTING VOLUME RANGE	2040 VOLUME RANGE	PROPOSED MULTIMODAL STREET CLASSIFICATION	IMPRO*	VEMENT TYPE
Reveille St	Park Place Blvd.	Telephone Rd.	P-6-100	Median	6	Yes	Local -76	28,300 - 33,000	33,400 - 38,000	Commercial/Mixed Use Boulevard	777	(
S Wayside Dr	IH-610	Long Dr.	T-4-100	Median	4	Yes		10,300 - 13,200	14,400 -17,400	Commercial/Mixed Use Boulevard		<i>₫</i>
S Wayside Dr	Long Dr.	Dixie Dr.	T-4-100	Median	4	Yes		7,700 - 12,200	11,500 - 23,500	Commercial/Mixed Use Boulevard		Ø₹ (§
S Wayside Dr	Mykawa Rd.	Vasser Rd.	T-4-250	Median	4	Yes				Residential Boulevard		Ø₹ (§*)
S Wayside Dr	Vasser Rd.	S Acres Dr.	T-4-100	Undivided	2	-	-	-	-	Residential Avenue	A	₫
S Wayside Dr	Madden Ln.	E Orem Dr.	T-4-100	Undivided	2	-	-	-	-	Residential Avenue	A	Ø (♠
S Wayside Dr	E Orem Dr.	Almeda Genoa Rd.	T-4-100	Undivided	2					Residential Avenue	A	Ø₹) (₹)
S Wayside Dr	Fuqua St.	Beltway 8	T-4-100	Undivided	2	No		1,000 - 1,700	6,100 - 10,100	Residential Avenue	777	Ø₹ (∱)
S Wayside Dr	Almeda Genoa Rd.	Fuqua St.	T-4-100	Undivided	2	No		1,200 - 1,500	8,400 - 9,000	Residential Avenue	777	Ø₹ (**)
Sabo Rd	Kingspoint Rd.	Fuqua St.	MJ-4-80	Undivided	4	Yes	Local - 88	9,200 - 15,400	10,300 - 21,900	Residential Boulevard		<i>₫</i>
Sabo Rd	Fuqua St.	Beltway 8	T-4-100	Median	4	Yes		9,200 - 24,600	10,300 - 28,000	Residential Avenue	7777	Ø∂ (∱)
Schurmier Rd	Scott St.	Cullen Blvd.	MJ-2-60	Undivided	2	Yes	-	-	-	Residential Avenue	MTFP	
Schurmier Rd	Cullen Blvd.	S Wayside Dr.	T-4-100	Undivided	2	No				Residential Avenue	777	
Schurmier Rd	S Wayside Dr.	Mykawa Rd.	MJ-4-70	Undivided	2	No				Residential Avenue	777	(
Scott St	IH-610	Bellfort St.	T-4-120	Median	4	Yes	Local - 54	17,900 - 25,100	22,300 - 41,000	Residential Boulevard		
Scott St	Bellfort St.	Reed Rd.	T-4-100	Median	4	Yes	Local - 54	13,900 - 20,400	19,400 -25,000	Residential Boulevard		
Scott St	Reed Rd.	Airport Blvd.	T-4-100	Median	4	Yes	Local - 54	7,800 - 11,400	13,200 - 18,400	Residential Boulevard		
Scott St	Airport Blvd.	Almeda Genoa Rd.	T-4-100	Median	4	Yes	Local - 54	5,900 - 10,300	8,500 - 21,400	Residential Boulevard		
Scott St	Almeda Genoa Rd.	Fuqua St.	T-4-100	Median	2	Yes	Local - 54	2,800	8,500 - 8,700	Residential Boulevard		
Scott St	Fuqua St.	Beltway 8	T-4-100	Median	4	No		1,300 - 2,500	6,500 - 13,200	Residential Boulevard	Œ	
Telephone Rd	IH-610	Park Place Blvd.	T-4-100	CTL	4	Yes	Local - 40	3,570 - 11,460	6,700 - 15,500	Commercial/Mixed Use Boulevard		ℰ
Telephone Rd	Park Place Blvd.	Reveille St.	P-6-120	Median	6	Yes	Local - 40	14,290 - 21,090	17,200 - 22,800	Commercial/Mixed Use Boulevard) 🚳 <u>(</u>
Telephone Rd	Reveille St.	Bellfort St.	P-6-120	Undivided	6	Yes	Local - 40	42,600	51,200	Commercial/Mixed Use Boulevard		
Telephone Rd	Bellfort St.	Airport Blvd.	P-6-120	Undivided	6	Yes	Local - 40	33,700 - 41,800	44,200 - 49,200	Commercial/Mixed Use Boulevard		₫
Telephone Rd	Airport Blvd.	E Orem Dr.	P-6-120	Undivided	6	Yes		31,700 - 40,400	43,200 - 53,100	Industrial Boulevard		Ø₹ (Å
Telephone Rd	E Orem Dr.	Fuqua St.	P-6-120	Undivided	6	Yes		36,600 - 37,000	48,400 - 51,700	Commercial/Mixed Use Boulevard		Ø∂ (Å)
Telephone Rd	Fuqua St.	Beltway 8	P-6-120	Undivided	6	Yes		35,100 - 39,900	47,900 - 58,000	Commercial/Mixed Use Boulevard		Ø₹0 (K)





Expand New Road New Road Road New Road Road New Road New Road Road New Road Road New Road New Road New Road Road New Road



63

LOCAL CORRIDOR TABLE

STREET NAME	FROM	то	FUNCTIONAL CLASS	MEDIAN/CTL/ UNDIVIDED	MTFP ROW	LANES	PROPOSED MULTIMODAL STREET CLASSIFICATION	IMPROVEMENT TYPE
Allison Rd	Almeda Genoa Rd.	Mykawa Rd.	Minor Collector	Undivided	60'	2	Residential Avenue	MTFP 🖒
Blackhawk Ridge Ln	Monroe Blvd.	Fuqua St.	Minor Collector	Undivided	65'	2	Residential Avenue	MTFP &
Calhoun Rd	IH 610	Cullen Blvd.	Minor Collector	Undivided	70' - 80'	2	Residential Avenue	MTFP 🚱
Dover St	Rockhill St.	Airport Blvd.	Minor Collector	Undivided	65'	2	Residential Avenue	МТБР
Dover St	Bellfort Ave.	IH 45	Minor Collector	Undivided	65'	2	Residential Avenue	MTFP
Glen Hollow	Selinsky Rd.	South Acres Dr.	Minor Collector	Undivided	65'	2	Residential Avenue	MTFP
Glen Valley Dr	Santa Elena St.	Bellfort Ave.	Minor Collector	Undivided	65'	2	Residential Avenue	МТБР
Glen Valley Dr	Bellfort Ave.	Morley St.	Minor Collector	Undivided	65'	2	Residential Avenue	МТБР
Glencrest St	Morley St.	Airport Blvd.	Minor Collector	Undivided	65'	2	Residential Avenue	МТБР
Hansen Rd	Cannif St.	Scranton Ave.	Minor Collector	Undivided	50' - 60'	2	Commercial/Mixed Use Avenue	MTFP &
Hycohen Rd	Almeda Genoa Rd.	Fellows Rd.	Minor Collector	Undivided	60'	2	Commercial/Mixed Use Avenue	A A
Kopman Dr	Santa Fe Dr.	Airport Blvd.	Minor Collector	Undivided	80'	2	Residential Avenue	MTFP &
Land Rd	Almeda Genoa Rd.	Fuqua St.	Minor Collector	Undivided	50'	2	Residential Avenue	A
Mary Kay Ln	Schurmier Rd.	Beltway 8	Minor Collector	Undivided	60'	2	Residential Avenue	MTFP 🖒
Mary Kay Ln	Allison Rd.	Schurmier Rd.	Minor Collector	Undivided	60'	2	Residential Avenue	MTFP (S)
Meldrum Ln	End of Roadway	Dexter Rd.	Minor Collector	Undivided	60' - 80'	2	Residential Avenue	MTFP &
Meldrum Ln	Dexter Rd.	Clearwood St.	Minor Collector	Undivided	60' - 80'	2	Residential Avenue	<u>A</u>
Meldrum Ln	Monroe Rd.	End of Roadway	Minor Collector	Undivided	60' - 80'	2	Residential Avenue	MTFP &
Morley St	Broadway St.	Glencrest St.	Minor Collector	Undivided	60'	2	Residential Avenue	MTFP
Morley St	Telephone Rd.	Broadway St.	Minor Collector	Undivided	60'	2	Residential Avenue	МТБР
Mosley Rd	IH 45	Scranton Ave.	Minor Collector	Undivided	55'	2	Commercial/Mixed Use Avenue	МТБР
Northdale St	Dixie Dr.	Bellfort Ave.	Minor Collector	Undivided	80'	2	Residential Avenue	MTFP 🚱 🏠
Nunn St	Dixie Dr.	Bellfort Ave.	Minor Collector	Undivided	70'	2	Residential Avenue	MTFP 🚱 🏠
Old Chocolate Bayou Rd	Allison Rd.	Schurmier Rd.	Minor Collector	Undivided	80'	2	Residential Avenue	MTFP
Old Chocolate Bayou Rd	Schurmier Rd.	Beltway 8	Minor Collector	Undivided	80'	2	Residential Avenue	MTFP



Expand







Class Change-Addition



Bikeway-Dedicated In Street ROW



Bikeway-Off Street



Bikeway-Shared











LOCAL CORRIDOR TABLE

STREET NAME	FROM	то	FUNCTIONAL CLASS	MEDIAN/CTL/ UNDIVIDED	MTFP ROW	LANES	PROPOSED MULTIMODAL STREET CLASSIFICATION	IMPROVEMENT TY	PE
Panair St	W Monroe Rd.	Airport Blvd.	Minor Collector	Undivided	80'	2	Commercial/Mixed Use Avenue	МТБР	
Pershing St	Calhoun Rd.	Crestmont St.	Minor Collector	Undivided	60'	2	Residential Avenue	МТЕР	Ŕ
Radio Rd	Meldrum Ln.	Wayfarer Ln.	Minor Collector	Undivided	60'	2	Residential Avenue	A	
Rockhill St	Broadway St.	Monroe Rd.	Minor Collector	Undivided	60' - 70'	2	Residential Avenue	MTFP (A)	
Rockhill St	Tiperary Ln.	Broadway St.	Minor Collector	Undivided	60'	2	Residential Avenue	MTFP (47)	
Rosehaven Dr	Reed Rd.	Airport Blvd.	Minor Collector	Undivided	60'	2	Residential Avenue	MTFP (57)	R
S Acres Dr	Cullen Blvd.	Mykawa Rd.	Major Collector	Undivided	60'	2	Commercial/Mixed Use Avenue	МТЕР	(2)
Scranton Ave	W Monroe Rd.	IH 45	Minor Collector	Undivided	60'	2	Commercial/Mixed Use Avenue	MTFP &	
Seaford Dr	Kingspoint Rd.	Fuqua St.	Major Collector	Undivided	60' - 70'	2	Residential Avenue	MTFP &	(1)
Selinsky Rd	Jutland Rd.	Martindale Rd.	Minor Collector	Undivided-Median	70' - 140'	2	Residential Avenue	MTFP &	
Stone St	Bellfort Ave.	Geln Vista St.	Minor Collector	Undivided	80'	2	Residential Avenue	MTFP	
Sunbeam St	Cullen Blvd.	Martin Luther King Blvd.	Minor Collector	Undivided	60'	2	Residential Avenue	MTFP	(A)
Swallow St	Bellfort Ave.	Santa Fe Dr.	Minor Collector	Undivided	70'	2	Residential Avenue	MTFP &	()
Swingle Rd	Furman Rd.	Almeda Genoa Rd.	Minor Collector	Undivided	60'	2	Residential Avenue	МТЕР	(A)
Tavenor Ln	Monroe Rd.	Minnesota St.	Minor Collector	Undivided	50' - 60'	2	Residential Avenue	MTFP	
Vasser Rd	Crestmont St.	Mykawa Rd.	Minor Collector	Undivided	70'	2	Residential Avenue	MTFP	
W Monroe Rd	Panair St.	Monroe Rd.	Minor Collector	Undivided	80' - 90'	2	Commercial/Mixed Use Avenue	МТБР	
Waltrip St	Dixie Dr.	Bellfort Ave.	Minor Collector	Undivided	70'	2	Residential Avenue	MTFP	(A)
Webercrest Rd	Selinsky Rd.	Almeda Genoa Rd.	Minor Collector	Undivided	65'	2	Residential Avenue	MTFP	
Winkler Dr	IH 45	Monroe Rd.	Major Collector	Undivided	100'	2	Commercial/Mixed Used Avenue	MTFP &	R









Roadway Road Diet



Class Change-Addition













Sidewalk Improvement









AIRPORT BOULEVARD







Existing Conditions		Future Conditions		
Lanes	4 - 6	MTFP Designation	P-6-100/110	
Existing Counts Range	10,200 - 35,500	Future Volume Range	14,400 - 37,300	
Right-of-Way	100' - 110'	Multimodal Class	Commercial Mixed-Use Blvd	
Median/CTL/Undivided	Median	Median/CTL/Undivided	Median	

Existing Conditions

Airport Blvd. is a 4-6 lane median divided Principal Thoroughfare with 100'-110' rightof-way that provides continuous east-west movement from SH-288 to IH-45 across the study area. Commercial, industrial, transportation and utility uses are the most prominent land uses along the corridor. Single family residential land use is primarily located west of Mykawa Rd. Although there is no existing bicycle facility along the corridor, Airport Blvd. runs adjacent to the shared off-street trail system along Sims Bayou. According to the Houston Bike Plan, long term off-street bicycle facilities are proposed for segments along the corridor. There are several local METRO bus routes that operate on portions of Airport Blvd., primarily providing access to the Hobby Airport.

Improvement Needs

Through our analysis, the following intersections represented high crash locations: Scott St., Cullen Blvd., Telephone Rd., and Monroe Rd. The intersections at Mykawa Rd., Telephone Rd., Broadway St., Monroe Rd. and IH-45 Frontage road also represent high stress locations for pedestrian crossings. Although there are sidewalks located along the corridor, enhancements to the pedestrian facilities are important to increase walkability and accessibility.

Recommendations

While there is a future demand for increased capacity along the corridor, the study recommends Airport Blvd. to remain a 4-lane Principal Thoroughfare from Scott St. to Telephone Rd. To accommodate projected traffic volumes and increased access to major highways, 6 lanes are recommended from SH 288 to Scott St. and Telephone Rd. to Monroe.

The proposed multi-modal street classification for Airport Blvd. is a Commercial/Mixed-Use Boulevard. Due to the airport and proximity to neighborhoods, local transit should be prioritized along this corridor. Attention should be focused to enhancing the pedestrian realm and provide access to the off-street shared-use path along Sims Bayou. Connection opportunities should be located at Martin Luther King Blvd, Cullen Blvd. and Scott St.

COST: \$4.3M planning level cost estimate

SH 288

scott St

Cullen Blvd

Martin Luther King Blvd

Mykawa Rd

Telephone Rd

Broadway St

Monroe Rd

IH AF

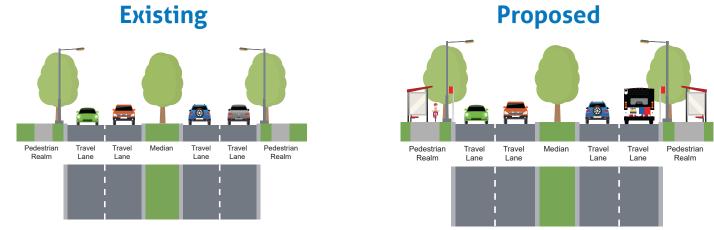


AIRPORT BOULEVARD

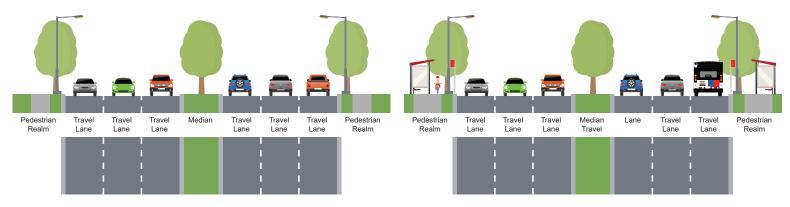








Scott St. to Telephone Rd.



SH 288 to Scott St./Telephone Rd. to I-45



AIRPORT BOULEVARD







These exhibits illustrate a before and after of the proposed recommendations for Airport Blvd. at Cullen St. The visual rendering for Airport Blvd. includes 12' ft. shared-use paths, trailhead activation, low-impact development on the median, and a shareduse path bridge on Cullen St. over Sims Bayou.

Existing Image Credit: Asakura Robinson







ALMEDA-GENOA ROAD











Existing Conditions		Future Conditions		
Lanes	4	MTFP Designation	T-4-100	
Existing Counts Range	11,400	Future Volume Range	5,500 - 24,300	
Right-of-Way	100'	Multimodal Class	Commercial Mixed-Use Ave/Blvd	
Median/CTL/Undivided	Median	Median/CTL	Median	

Existing Conditions

Almeda Genoa Rd. provides east-west connectivity from SH-288 to IH 45. Variations in the existing cross section include:

- SH 288 to Telephone Rd.: 2 lane undivided Major Collector with 70' right-of-way and open ditch along each side of the roadway. Residential and developable land is prominent along this segment.
- Telephone Rd. to Monroe Blvd.: 4 lane median divided Thoroughfare with 100' right-of-way and wide pedestrian realm. Commercial and residential land uses are prominent along this segment.
- Monroe Blvd. to IH-45: 4 lane median divided Principal Thoroughfare with 120' right-of-way and buffered pedestrian realm. Commercial land use is prevalent along this segment. METRO operates the Local 88 along this segment proving access to San Jacinto College.

Improvement Needs

The intersections at Mykawa Rd. and Kleckley Dr. were identified as high stress intersections for pedestrians. The intersections at Furman Rd., Kleckley Dr., and IH 45 represented high crash locations along the corridor. As the area west of Telephone Rd. is developed, pedestrian enhancements as well as roadway improvements are desired. There are two elementary schools that abut the corridor. Improved crosswalks, reduced speeds, sidewalks and enhanced signalization for pedestrians are important at these locations.

Recommendations

Due to projected traffic volumes and east-west connectivity along the corridor, the following recommendations should be considered:

- SH 288 to Scott St.: increase capacity to 4 lane Major Collector with a subclassification of Commercial/Mixed-Use Ave.
- Scott St. to Telephone Rd.: remain a 2-lane Major Collector with a sub-classification of Commercial/Mixed-Use Ave.
- Telephone Rd. to IH-45: remain a 4-lane Thoroughfare with a sub-classification of Commercial/Mixed-Use Blvd.

At minimum, 5' sidewalks should be built along both sides for the length of corridor to increase accessibility. Where right-of-way is available, sidewalks should be increased to provide opportunity for off-street bicycle facility.

> **COST: \$10.2 M** planning level cost estimate

SH 288 Furman Rd

Cullen Blvd

Martin Luther King Blvd

s Wayside Dr Mykawa Rd

Telephone Rd

Monroe Rd

Blackhawk Blvd





ALMEDA-GENOA ROAD



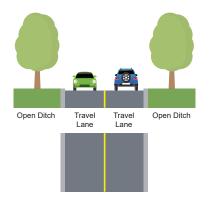


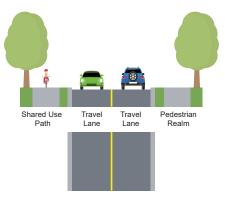




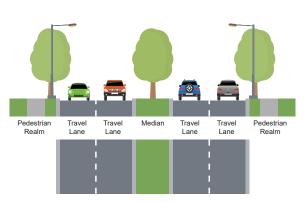


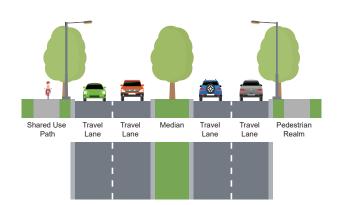
Existing





SH 288 to Telephone Rd.





Telephone Rd. to IH 45



BEAMER ROAD





Existing Condition	ons	Future Conditions		
Lanes	4	MTFP Designation	T-4-100	
Existing Counts Range	11,400	Future Volume Range	5,500 - 24,300	
Right-of-Way	100'	Multimodal Class	Residential Blvd	
Median/CTL/Undivided	Median	Median/CTL	Median	

Existing Conditions

Beamer Rd. is a 4-lane median divided Thoroughfare with 100' right-of-way and buffered pedestrian realm on both sides of the roadway. Single family and multi-family residential is the primary land use along the corridor. Beverly Hills Intermediate School is located along the corridor. According to the Houston Bike Plan, a long-term dedicated on-street facility is proposed for this corridor. METRO also operates the Local 88 Route along this corridor.

Improvement Needs

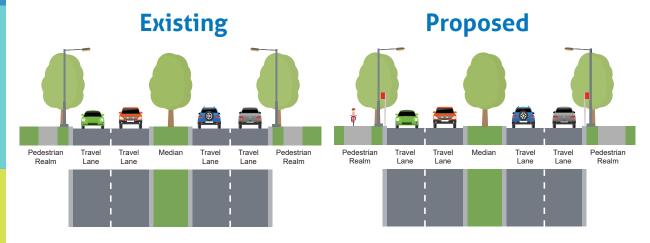
Based on the population density adjacent to this corridor as well as the location of an intermediate school, improved pedestrian amenities including high-visibility crosswalks and median refuges should be considered. The continuation of Beamer Rd., known as Seaford Dr. north of Fuqua St., provides access to two other elementary schools. Continuation of pedestrian improvements north of Fuqua St. to these schools and the residential area would also help improve access and mobility.

Recommendations

Based on projected traffic volumes, it is recommended that Beamer Rd. remain classified as a 4-lane Major Thoroughfare with 100' right-of-way. For continued access management and preservation of the median, the corridor is further recommended as a Residential Blvd.

It is further recommended that Seaford Dr., the continuation of Beamer Rd. north of Fuqua St., be classified as a 2-lane Major Collector with 60'-70' right-of-way.

Special attention should be given to the pedestrian realm along the corridor to help improve walkability and provide mobility options along the local transportation network. A 10' shared-use path is recommended to be designed along one side of the corridor, working in conjunction with METRO to provide viable local bus facility options. High visibility crosswalks and enhanced signage should be implemented near schools.



COST: \$160K planning level cost estimate



BLACKHAWK BOULEVARD - CLEARWOOD STREET







Existing Conditions

Blackhawk Blvd., from Almeda Genoa Rd. to Beltway 8, and Clearwood St., from IH-45 to Almeda Genoa Rd., is a 4-lane median divided Thoroughfare with 100' right-of-way and buffered pedestrian realm. Single family residential use is prominent along the corridor with more commercial use located adjacent to IH-45 and Beltway 8. METRO operates the Local 88 along the Clearwood St. segment before turning east along Almeda Genoa Rd. A long-term dedicated on-street bicycle facility is proposed along this corridor.

Improvement Needs

Due to increased vehicle activity and commercial businesses, a high crash location was identified between Edgebrook St. and Ledge St. along Clearwood St. The intersection at IH-45 was indicated as a high stress location for pedestrians. Blackhawk Park and Laura Bush Elementary are located near one another along this corridor. Improved pedestrian connections to these locations are important.

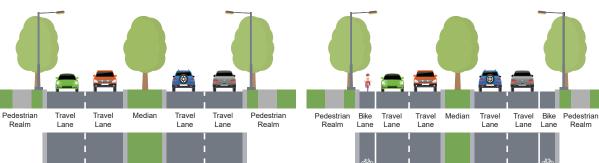
Existing Cond	litions	Future Conditions		
Lanes	4	MTFP Designation	T-4-100	
Existing Counts Range	14,200 - 21,500	Future Volume Range	14,100 - 48,600	
Right-of-Way	100'	Multimodal Class	Commercial Mixed-Use Blvd - Residential Blvd	
Median/CTL/Undivided	Median	Median/CTL	Median	



Recommendations

Based on future traffic volumes along this corridor, it is recommended to remain classified as a 4-lane Thoroughfare with an increase to 6 lanes as Clearwood St nears IH 45. In preservation of the median, it is recommended the corridor be designated as a Commercial/Mixed-Use Blvd and a Residential Blvd between Kingspoint Rd. to Fuqua St. An on-street bicycle facility is recommended for this corridor given the residential density and access to parks and schools.

COST: \$885K





BELLFORT STREET







Existing Condi	tions	Future Conditions		
Lanes	4	MTFP Designation	T-4-100	
Existing Counts Range	14,200 - 21,500	Future Volume Range	14,100 - 48,600	
Right-of-Way	100'	Multimodal Class	Transit Blvd	
Median/CTL/Undivided	Median	Median/CTL	Median	

Existing Conditions

Bellfort St. is a 4-lane median divided Thoroughfare with 80'-130' right-of-way that provides continuous east-west movement from SH-288 to IH-45 across the study area. Single family residential is the primary land use along the corridor with sporadic commercial uses located near major intersections. While sidewalks are located along the corridor, they are in poor condition. METRO operates two high-frequency local routes along this corridor. There are many neighborhood destinations located along this corridor including schools, parks, community centers, and library. A longterm dedicated on-street bicycle facility is proposed for this corridor with access to the planned Sims Bayou Greenway extension. This roadway, identified as Howard Dr., continues east across IH-45 to Galveston Rd.

Improvement Needs

There are several intersections along this corridor that represent high crash locations: Cullen Blvd., Martin Luther King Blvd., Telephone Rd. (highest) and Broadway St. This corridor has the top eight transit ridership locations throughout the study area. Pedestrian intersection stress levels were highest at Telephone Rd. and IH-45.

Public comment indicated that roadway improvements were necessary west of Cullen Blvd. along with safety enhancements along the wide medians from SH 288 to Mykawa Rd. Public comment also indicated improved signal timing east of Mykawa Rd. Pedestrian improvements along the corridor, specifically near Hartman Middle School and Stuart Park were also indicated as high concerns.

Recommendations

Given existing and future traffic volumes along the corridor, it is recommended that the corridor remain a 4-lane Thoroughfare. The corridor is recommended as a Transit Blvd. to preserve the median for access management and continued improvement of transit. Short term improvements include increased local bus frequencies with transit shelter improvements and a wider pedestrian realm. Long term improvements include the continuation of the Light Rail Red Line accessing Hobby Airport and Fannin South Transit Center. Further study is recommended for light rail transit feasibility along this corridor.

COST: \$4.5M

planning level cost estimate does not include light rail transit cost estimate







BELLFORT STREET



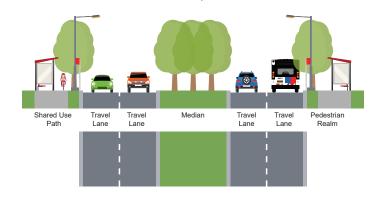




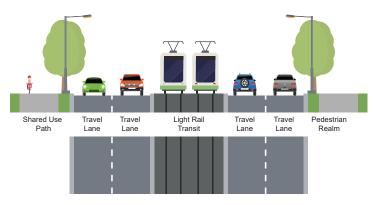
Pedestrian Realm Travel Lane Median Travel Lane Pedestrian Realm

Proposed

Short Term Improvements



Long Term Improvements



*Location of shared use path along north or south side of street will be determined in design and engineering phase.



BROADWAY STREET







Existing Cond	litions	Future Conditions		
Lanes	4	MTFP Designation	P-6-120	
Existing Counts Range	16,700 - 25,900	Future Volume Range	22,100 - 29,800	
Right-of-Way	120'	Multimodal Class	Transit Blvd	
Median/CTL/Undivided	Median	Median/CTL	Median	

Existing Conditions

Broadway St. is a 4-lane median divided Principal Thoroughfare with 120' right-ofway and buffered pedestrian realm. The Broadway St. corridor, from Airport Blvd. to IH-45, was recently completed in 2017 with enhancements including landscaped gateway, high visibility pedestrian crosswalks, and improved roadway conditions. North of IH-45, land use is primarily single family residential; south of IH-45, land use is primarily multifamily residential. METRO operates several bus routes along this corridor providing access to major destinations. Broadway St. is proposed to have a long-term off-street bicycle facility located from IH-45 to Airport. It also provides a connection to the Sims Bayou Greenway.

Improvement Needs

Broadway St., from IH-45 to Airport Blvd. has the highest population density in the study area. Although this segment of the corridor was recently improved, further enhancements should occur to transit amenities and sidewalk infrastructure. The intersections at IH-45, IH-610 and Airport Blvd. were high pedestrian stress level intersections due to crossing distance and vehicular volume.

Public comment indicated that the intersection of IH-45 and Broadway St. is a dangerous intersection for both vehicles and pedestrians. This intersection is being studied by TxDOT for improvements.



Recommendations

Based on projected traffic volumes, it is recommended Broadway St. remain classified as a 4-lane Principal Thoroughfare with a Transit Boulevard designation. Short term improvements include a 10' shared use path along one side of the corridor, between IH 45 and Airport Blvd. and 6' sidewalks along both sides of the corridor from IH 610 to IH 45. Long term improvements include the continuation of the Light Rail Green Line/Purple Line accessing Hobby Airport. Further study is recommended for light rail transit feasibility along this corridor. Off-street trail connections should be prioritized near Sims Bayou to increase mobility options.

COST: \$1.1M

planning level cost estimate does not include light rail transit cost estimate



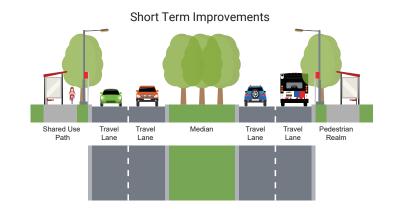
BROADWAY STREET







Pedestrian Realm Travel Lane Median Travel Lane Pedestrian Realm







CRESTMONT STREET







Existing Cond	litions	Future Conditions		
Lanes	2	MTFP Designation	MJ-2-60	
Existing Counts Range	2,900 - 5,400	Future Volume Range	3,300 - 8,400	
Right-of-Way	60'	Multimodal Class	Residential Ave	
Median/CTL/Undivided	Undivided	Median/CTL	Undivided	

Existing Conditions

Crestmont St. is a 2-lane undivided Major Collector with 60' right-of-way. There is sidewalk infrastructure located on both sides of the roadway, except along the eastern side between Southridge St. and Van Fleet St. Single family residential is the primary land use along the corridor. There is an existing high-comfort shared on-street bicycle facility along this corridor. METRO also operates a local bus route along this corridor.

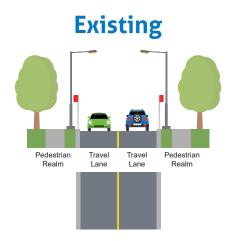
Improvement Needs

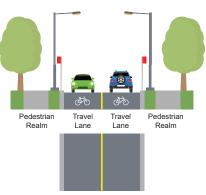
Based on the surrounding residential population and existing transit and bicycle facilities, improved sidewalk infrastructure is important along this corridor. This corridor has the potential to accommodate all modes of transportation given the wide vehicular lanes and pedestrian oriented neighborhood feel. The extension of the bicycle network south past Reed Rd. to Sims Bayou would provide enhanced connectivity to neighborhood amenities.

Recommendations

This corridor should remain classified as a 2-lane Major Collector with a Residential Avenue sub-classification. Providing a complete bicycle and pedestrian network along Crestmont St. should be prioritized along this corridor to provide an alternate route within the transportation network. Completing the sidewalk gaps in the network and extending the bicycle network to Sims Bayou are important mobility improvements along this corridor. High visibility crosswalks and enhanced signage should be implemented near schools.









DIXIE DRIVE





Existing Conditions		Future Conditions		
Lanes	4	MTFP Designation	MJ-4-70	
Existing Counts Range	5,900	Future Volume Range	2,700 - 9,600	
Right-of-Way	70'	Multimodal Class	Commercial Mixed-Use Ave	
Median/CTL/Undivided	Undivided	Median/CTL	Undivided	

Existing Conditions

Dixie Dr. is a 4-lane undivided Major Collector with 70' right-of-way and a pedestrian realm on both sides of the roadway. Commercial and industrial land uses are located west of Chaffin St. with more single family residential east of Chaffin St. Although there is a marked bicycle facility (sign post indicating Bike Route), this facility is in poor condition and is not high comfort. A short term dedicated on-street facility is proposed for this corridor. Transit does not exist along this corridor.

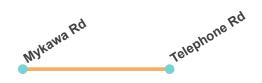
Improvement Needs

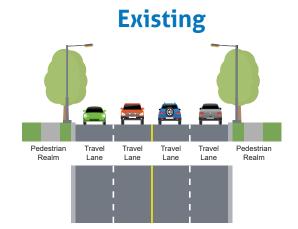
The intersection at Dixie Dr. and Telephone Rd. was one of the highest pedestrian stress intersections in the study area. Similar to other locations within the study area, sidewalks adjacent and leading up to the railroad crossings are either nonexistent or in need of major repair.

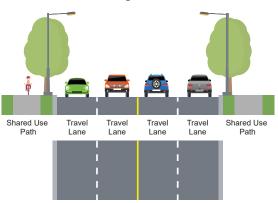
Recommendations

Given the existing industrial and residential use along the corridor and projected traffic volumes, it is recommended Dixie Dr. remain a 4-lane Major Collector with a sub-classification as a Commercial/Mixed-Use Avenue. Given the context of the roadway and anticipated SH 35 garnering additional traffic volume, an off-street bike path is recommended along the corridor as well as intersection improvements at Telephone Rd. to provide better connectivity to the residential neighborhood. Sidewalk and ADA compliant ramps should also be implemented along the corridor.











CULLEN BOULEVARD









Existing Conditions

Cullen Blvd. is a 4-lane median divided Thoroughfare with 80' – 140' right-of-way that provides continuous north-south movement from IH-610 to Beltway 8 through the study area. Single family residential is the primary land use along the corridor, especially in the north and south segments, with commercial use located near major intersections and undeveloped land south of E Orem Dr. METRO operates a local bus along Cullen Blvd. until E Orem Dr., providing access to the Southeast Transit Center. There is a proposed long term dedicated on street bicycle facility from IH-610 to E Orem Dr. Cullen Blvd. also provides access to the Sims Bayou Greenway network at Airport Blvd.

COST: \$4.9M planning level cost estimate

Existing Cond	litions	Future Conditions		
Lanes	4	MTFP Designation	T-4-80/100/140	
Existing Counts Range	14,000 - 25,300	Future Volume Range	14,500 - 46,800	
Right-of-Way	80' - 140'	Multimodal Class	Commercial Mixed-Use Blvd	
Median/CTL/Undivided	Median	Median/CTL	Median	



Improvement Needs

The intersections at Bellfort St. and Reed Rd. represented high crash locations along the corridor and Reed Rd. was designated as a stressful intersection for pedestrians. Although there is a continuous sidewalk along Cullen Blvd., maintenance is needed along segments to improve walkability to neighborhood destinations. South of Almeda Genoa Rd., Cullen Blvd. was recently widened to a fourlane section with a shared use path on the west side of the roadway and a sidewalk on the east.

Recommendations

While there is a future demand for increased capacity north of Airport Blvd, the study recommends Cullen Blvd. to remain classified as a 4-lane Thoroughfare. To accommodate future traffic volumes, longer left turn queue lanes and dedicated right turn lanes should be implemented at the IH 610 intersection. The continuation of the 10' shared use path along the west side of the roadway with a 5' sidewalk on the opposite should be prioritized to increase mobility and accessibility. Connection to the off-street trail network along Sims Bayou should be prioritized near Airport Blvd. The local bus route should be extended to Tom Bass Regional Park.



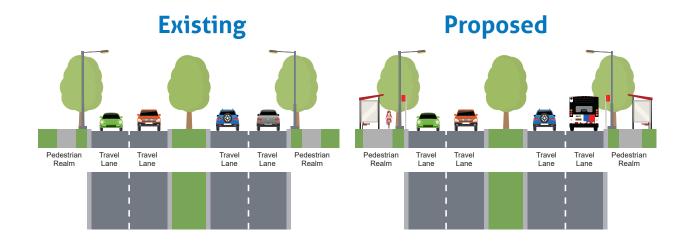
CULLEN BOULEVARD













EAST OREM DRIVE









Existing Conditions		Future Conditions	
Lanes 4		MTFP Designation	T-4-100
Existing Counts Range	7,300 - 14,400	Future Volume Range	10,400 - 14,600
Right-of-Way	100'	Multimodal Class	Commercial Mixed-Use Blvd - Residential Blvd
Median/CTL/Undivided	Median	Median/CTL	Median

Existing Conditions

East Orem Dr. is the continuation of Almeda Genoa Rd. west of Telephone Rd. East Orem Dr. is a 4-lane median divided roadway with 100' right-of-way. Variations in the roadway include:

- Inconsistent sidewalk network between Mykawa Rd. and Telephone Rd. with sidewalks located next to new development. Land use is primarily industrial.
- There are sidewalks located along the north side of the roadway from Martin Luther King Blvd. to Mykawa Rd.
- There are sidewalks located along both sides of the roadway between Cullen Blvd. and Martin Luther King Blvd.
- From Cullen Blvd. to Mykawa Rd., single family residential, developable and commercial land uses are present.

West of Cullen Blvd. the MTFP designation is proposed to be extended to SH 288. METRO operates between Cullen Blvd. and Martin Luther King Blvd.

Improvement Needs

East Orem Dr. is proposed to be built out west towards SH 288 and has the potential to be a significant east-west corridor within the study area. There is an overpass at Mykawa Rd., over the BNSF railroad facility that provides both vehicular and pedestrian mobility. The intersection of Telephone Rd. and Almeda Genoa Rd./East Orem Dr. was not only a high pedestrian stress intersection but also a high crash location along the corridor. As the area west of Mykawa Rd. is developed, improvements to sidewalk infrastructure and pedestrian crossings should be prioritized.

Recommendations

East Orem Dr. is recommended to remain a 4-lane Thoroughfare with 100' right-of-way. As the corridor develops west of Cullen Blvd, the median is recommended to remain. West of Martin Luther King, East Orem Dr. is recommended to be classified as a Residential Blvd; East of Martin Luther King, the corridor is recommended as a Commercial/Mixed Use Blvd. Sidewalks should be improved to 5' and built where necessary to complete gaps in the network and provide mobility options to transit. Local bus service is also recommended and should be incorporated for the length of the corridor.

COST: \$12.6M planning level cost estimate

SH 288

Cullen Blvd Martin Luther King Blvd

Martindale Rd Mykawa Rd

Telephone Rd



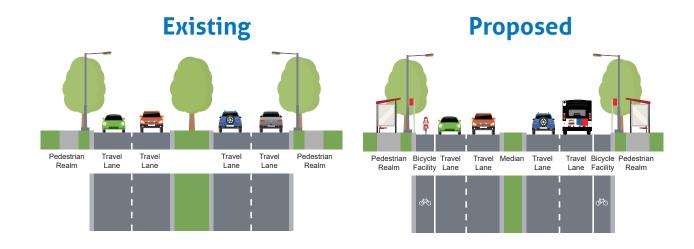
EAST OREM DRIVE













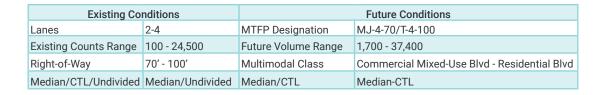
FUQUA STREET











Existing Conditions

Fuqua St. is an east-west corridor that is characterized as:

- 2-lane open ditch, undivided Thoroughfare with 100' right-of-way from Furman Rd. to Cullen Blvd. and S Wayside Dr. to Mykawa Rd.
- 2-lane open ditch undivided Major Collector with 70' right-of-way from Cullen Blvd. to Kier Rd.
- 4-lane median divided Thoroughfare with 100' right-of-way and sidewalks along both sides of the roadway from Telephone Rd. to IH-45.

Land use west of Mykawa Rd. is primarily developable land. East of Mykawa Rd., land use is a mix of single family residential commercial and public and institutional.

Improvement Needs

The intersection of Fuqua St. and Telephone Rd. represent a high pedestrian stress location. Fuqua St. is proposed to be widened and extended from Telephone Rd. to Mykawa Rd. as well as from S Wayside to Cottingham St. The extension of this roadway would provide an important east-west continuous corridor in the south part of the study area. When the roadway is built out, pedestrian amenities should be prioritized, especially near the two schools that abut Fugua St.

Recommendations

Based on projected traffic volumes, Fuqua St., west of Telephone Rd., is recommended to be classified as a 2-lane Major Collector with a center turn lane and a sub-classification of Residential Avenue. East of Telephone Rd., Fuqua St. should remain a 4-lane Thoroughfare with a sub-classification of Commercial/Mixed-Use Blvd.

Given the existing right-of-way, wide pedestrian realm should be implemented along the length of the corridor as well as local bus service and an off-street bicycle facility providing mobility options for all users. Intersection improvements including ADA ramps and high-visibility crosswalks should be implemented at Cullen Blvd., and Beamer Rd./Seaford Dr. to provide increased vehicular and pedestrian awareness adjacent to schools.

COST: \$13.8M planning level cost estimate

Furman Rd

Cullen Blvd

Cottingham 5t

c Wayside Dr

Mykawa Rd

Telephone Rd

Monroe Rd

Elackhawk Elvd Kingspoint Rd

1H 45



FUQUA STREET

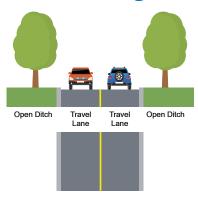


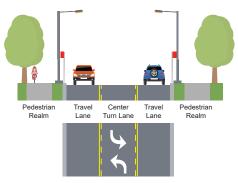




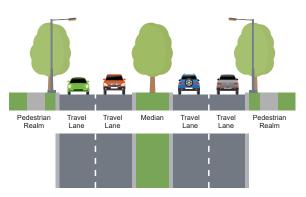


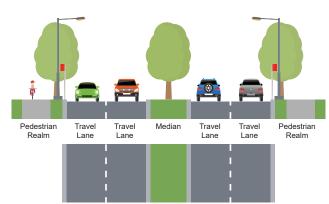
Existing





Furman Rd. to Mykawa Rd.





Telephone Rd. to IH 45



FURMAN ROAD





Existing Conditions		Future Conditions	
Lanes	2	MTFP Designation	MC-4-70
Existing Counts Range	2,500	Future Volume Range	9,800
Right-of-Way	70'	Multimodal Class	Commercial Mixed-Use Ave - Residential Ave
Median/CTL/Undivided	Undivided	Median/CTL	CTL

Existing Conditions

Furman Rd. is a 2-lane undivided Major Collector with 70' right-of-way and open ditches on either side of the roadway. North of Almeda Genoa Rd. is not designated on the MTFP. Land use along the corridor is primarily single family residential and developable land.

Improvement Needs

This corridor is proposed to be widened to accommodate future traffic and development in the area. As this roadway is built, pedestrian amenities should be prioritized as this roadway extends to the future Sims Bayou Greenway network. Providing connectivity to this neighborhood amenity is important.

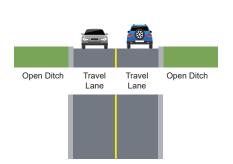
Recommendations

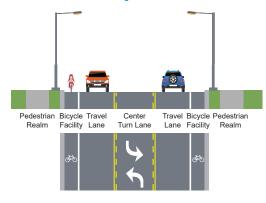
Based on projected traffic volumes and roadway extent, Furman Rd should be reclassified as a 2-lane Minor Collector with a center turn lane and 5' sidewalk on either side of the roadway. Based on surrounding land use, the corridor south of Almeda Genoa should be classified as a Commercial/Mixed-Use Avenue: north of Almeda Genoa Rd. should be classified as a Residential Avenue. An onstreet buffered bicycle facility should be built along roadway providing access to the Sims Bayou Greenway.

COST: S1.0M

planning level cost estimate

Existing









GALVESTON ROAD



Existing Conditions		Future Conditions	
Lanes 4		MTFP Designation	P-6-100
Existing Counts Range	13,900 - 16,500	Future Volume Range	11,000 - 13,200
Right-of-Way	100'	Multimodal Class	Commercial Mixed-Use Blvd
Median/CTL/Undivided	Undivided	Median/CTL	Undivided

Existing Conditions

Galveston Rd. is a 4-lane undivided Principal Thoroughfare with 100' right-of-way. The Union Pacific railroad runs parallel to Galveston Rd. along this segment, providing an open space along the western side of the roadway. Sidewalks are provided adjacent to Chavez High School but do not extend passed Sims Bayou. METRO operates a local bus route between Park Place Blvd. and Howard Dr. There is a proposed long-term dedicated on-street facility proposed for this corridor. This corridor provides connection to the Sims Bayou Greenway system.

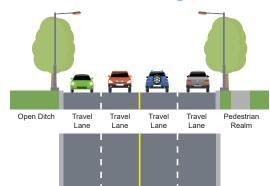
Improvement Needs

According to the MTFP, this roadway is proposed to be widened. Both intersections at Park Place Blvd, and Howard Dr. are identified as high stress locations for pedestrian crossings. Pedestrian improvements at these intersections, as well as along the corridor with widened sidewalks, ADA complaint ramps and bicycle facilities will help increase mobility and safety.

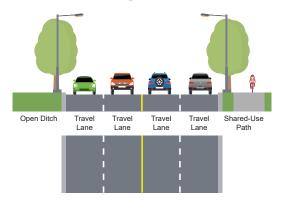
Public comment indicated that a hike/bike trail should be extended to Chavez High School as many students have a hard time walking Galveston Rd. and are often seen walking adjacent to the Union pacific Railroad.

Recommendations

Based on projected traffic volumes, Galveston Rd should remain a 4-lane Principal Thoroughfare. In conjunction with the ongoing SH 3 Access Management Study being conducted by TxDOT, an off-street shared use path should be provided for the extent of the corridor. A wide pedestrian realm should be constructed on the north side of the corridor. as right-of-way is limited adjacent to railroad facility. An off-street trail connection should be provided to Sims Bayou. Intersection improvements including ADA ramps and enhanced crosswalks and signage should be implemented at Park Place Blvd., Howard Dr., and Park Terrace.



Existing



Proposed



COST: \$1.0M planning level cost estimate



HOLMES ROAD







Existing Conditions		Future Conditions	
Lanes 4		MTFP Designation	T-4-100
Existing Counts Range 4,800 - 6,900		Future Volume Range 5,200 - 25,700	
Right-of-Way 100'		Multimodal Class	Commercial Mixed-Use Blvd
Median/CTL/Undivided	Median	Median/CTL	Median

Existing Conditions

Holmes Rd. is a 4-lane median divided Thoroughfare with 100' right-of-way. There is a sidewalk located along the southern portion of the roadway with open space located adjacent to the railroad to the north. Land use is primarily single family residential with a few commercial and industrial properties to the south and industrial land use to the north.

Improvement Needs

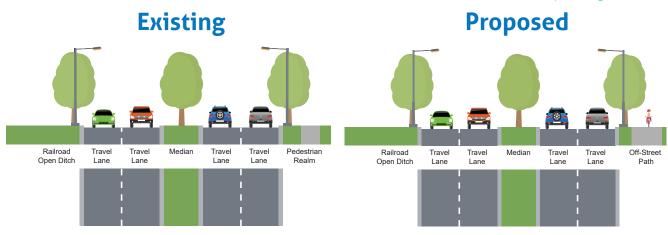
According to the traffic model, traffic volume along this corridor is expected to increase significantly. Pedestrian improvements at major intersections and along the corridor should be prioritized.

Recommendations

Based on projected traffic volumes, Holmes Rd. should remain classified as a 4-lane Thoroughfare. Given the existing and proposed surrounding land uses, the multi-modal classification suitable for this corridor is a Commercial/Mixed-Use Blvd. While there is an existing sidewalk along the south side of the corridor, a 10' off-street side path should be built to improve mobility options.



COST: \$860K planning level cost estimate





HOWARD DRIVE







Existing Conditions		Future Conditions	
Lanes	4	MTFP Designation	T-4-75
Existing Counts Range	16,900	Future Volume Range	20,300 - 22,700
Right-of-Way	75'	Multimodal Class	Commercial Mixed-Use Blvd
Median/CTL/Undivided	Median	Median/CTL	Median

Existing Conditions

Howard Dr. is the continuation of Bellfort St. east of IH-45. It is a 4-lane median divided Thoroughfare with 75' right-of-way and a sidewalk along both sides of the roadway. Single family residential is the predominant land use along the corridor with commercial use near IH-45.

Improvement Needs

Although there is a sidewalk located along both sides of the roadway, it is in bad condition and overgrown and should be maintained or rebuilt to accommodate the residents in the community. The intersection at Galveston Rd. was indicated as a high stress location for pedestrians. This intersection should be prioritized for improvement as it provides direct access to Chavez High School.

Recommendations

Howard Dr. is recommended to remain classified as a Thoroughfare with a subclassification as a Commercial/Mixed-Use Blvd. Improvements in the sidewalk network along both sides of the roadway are recommended to serve local transit access and mobility. One side of the roadway should be built as a shared-use path to accommodate both bicycles and pedestrians. Intersection improvements including ADA ramps and crosswalk enhancements should be implemented at Galveston Rd., Neal St., Arizona St., Bliss St. and Winkler Dr.





JUTLAND ROAD







Existing Condi	tions	Future Conditions		
Lanes	2	MTFP Designation	MJ-2-60/70	
Existing Counts Range	1,700 - 3,200	Future Volume Range	2,300 - 10,000	
Right-of-Way	60' - 70'	Multimodal Class	Residential Ave	
Median/CTL/Undivided	Undivided	Median/CTL	Undivided	

Existing Conditions

Jutland Rd. is a 2-lane undivided Major Collector with 60' – 70' right-of-way. Sidewalk infrastructure is provided throughout the corridor; however, gaps exist along portions of the roadway. There are several churches and schools that abut this corridor, with single family residential as the predominant land use. METRO operates the 360 Peerless Shuttle that provides access to the Southeast Transit Center and area schools. A proposed long-term dedicated on-street bicycle facility is proposed for this corridor.

Improvement Needs

Completing the sidewalk gaps is recommended to improve neighborhood connectivity and accessibility. The continuation of sidewalks as well as a bicycle facility would help provide access to the Sims Bayou Greenway to the south.

Public comment indicated that this roadway, from Bellfort St. to Reed Rd. is dangerous and needs improvement.

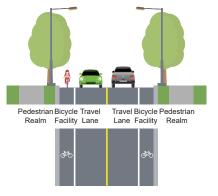
COST: \$1.5M planning level cost estimate

Recommendations

Based on projected traffic volumes, Jutland Rd. should remain classified as a 2-lane Major Collector. Although not classified on the MTFP, Jutland Rd., from Reed Rd. to Sunbeam, should be classified as a 2-lane Major Collector. The multi-modal classification suitable for Jutland Rd. is a Residential Avenue. Given the residential land use along the corridor, an enhanced pedestrian realm should be prioritized with an emphasis to complete gaps in the network. An on-street bicycle facility is recommended along the corridor with an offstreet shared use-path connection to the Sims Bayou Greenway.

H 610 Pershing St Belfort St Reed Rd Sunbeam St







MONROE BOULEVARD





Existing Conditions		Future Conditions	
Lanes 4		MTFP Designation	T-4-100/130
Existing Counts Range	7,700 - 26,300	Future Volume Range	17,600 - 42,700
Right-of-Way	100' - 130'	Multimodal Class	Commercial Mixed-Use Blvd - Industrial Blvd
Median/CTL/Undivided	Median	Median/CTL	Median

Existing Conditions

Winkler Dr IH 45 Airport Blvd

Monroe Blvd. is a 4-lane median divided Thoroughfare with 130' right-of-way between IH 45 and Airport Blvd. and 100' right-of-way between Airport Blvd. Beltway 8. There are sidewalks located along both sides of the corridor. Land use is predominantly industrial use, especially near the Hobby Airport area. Single family residential use is also located along the west side of the corridor. There is a proposed long term dedicated on-street bicycle facility for this corridor.

Improvement Needs

The intersection at Airport was identified as a high crash location and a high stress location for pedestrian crossings. Pedestrian improvements such as high visibility crosswalks and pedestrian signs should be prioritized adjacent to Dobie 9th Grade Campus (Fuqua St. Intersection). As a predominantly industrial corridor north of Almeda Genoa Rd., increased turning radii should be accommodated

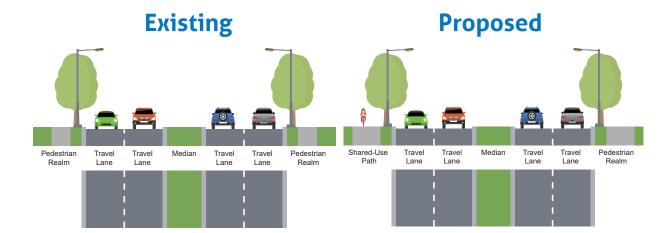
Recommendations

Based on projected traffic volumes, Monroe Rd. should remain a 4-lane Thoroughfare with a sub-classification as a Commercial/ Mixed-Use Blvd and an Industrial Blvd between Airport and Almeda Genoa. Given the right-of-way and projected traffic volumes, an off-street bicycle facility should be implemented along the corridor. Completing the sidewalk network should be prioritized to increase mobility.

COST: \$3.1M planning level cost estimate

Aimeda Genoa Rd

BW 8





KINGSPOINT ROAD - KLECKLEY DRIVE



Existing Condit	tions	Future Conditions		
Lanes 2-4		MTFP Designation	MJ-2-60/100	
Existing Counts Range	2,300 - 5,000	Future Volume Range	12,700 - 36,700	
Right-of-Way	60' - 100'	Multimodal Class	Residential Ave	
Median/CTL/Undivided	Undivided	Median/CTL	Undivided	

Existing Conditions

Kingspoint Rd. is characterized as the following:

- 2-lane undivided Major Collector with 60' 100' right-of-way from Beltway 8 to Sabo Rd. Land use is predominantly single family residential with a few commercial, public and institutional uses.
- After Sabo Rd., Kingspoint Rd. transitions to Kleckley Dr. as a 4-lane undivided Major Collector with 60' right-of-way. Land use is predominantly commercial as it abuts Almeda Mall.

Sidewalk infrastructure is provided throughout the corridor along both sides of the roadway except along the north side of Kingspoint Rd. between Buena Park Dr. and Fuqua St. METRO operates a local bus route along Kleckley Dr. A proposed short-term shared on-street bicycle facility is proposed for the segment between Sabo Rd. and Fuqua St.

Improvement Needs

Pedestrian improvements including completing the sidewalk gaps and intersection improvements at the following intersections should be prioritized: Kingspoint Rd., Sabo Rd., Fuqua St. and Buena Park Dr. Pedestrian crossings should be enhanced adjacent to Atkinson Elementary School and Beverly Hills Park.

COST: \$1.5M planning level cost estimate



Recommendations

Based on projected traffic volumes and adjacent land use, the following classification is recommended for Kingspoint Rd.:

- Kingspoint Rd. from Beltway 8 to Sabo Rd.: remain a 2-lane Major Collector with a sub-classification as a Residential Avenue.
- Kleckley Dr. from Sabo Rd. to Fuqua St: remain 4-lane Major Collector with a sub classification as a Commercial/Mixed-Use Avenue.

Improved pedestrian realm should be implemented along both sides of corridor with an off-street shared used path along the north side of the corridor between Buena Park and Fuqua St. Access management techniques including driveway consolidation should occur along the corridor near Almeda Mall. Enhanced crosswalk marking and signage should be implemented near Atkinson Elementary School to increase safety and awareness of vehicles and pedestrians.

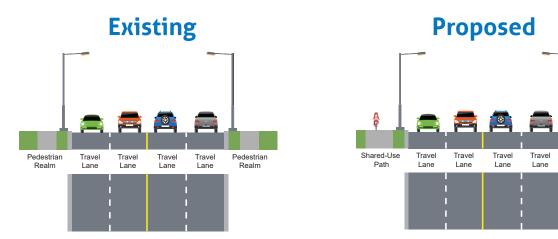


KINGSPOINT ROAD - KLECKLEY DRIVE

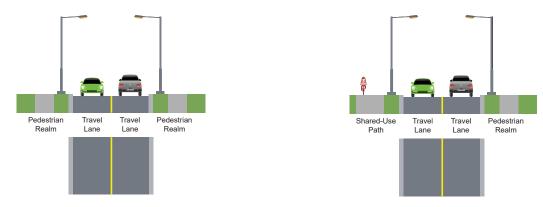








Almeda Genoa Rd. to Sabo Rd.



Sabo Rd. to Beltway 8



Pedestrian

Realm

LONG DRIVE - PARK PLACE BOULEVARD









Existing Conditions		Future Conditions	
Lanes	4	MTFP Designation	T-4-80/MJ-4-70
Existing Counts Range	9,600 - 22,100	Future Volume Range	5,000 - 23,900
Right-of-Way	70' - 80'	Multimodal Class	Industrial Ave - Commercial Mixed-Use Ave - Residential Ave
Median/CTL/Undivided	Median/Undivided	Median/CTL	Median/Undivided

Existing Conditions

Long Dr., from IH-610 to Telephone Rd., is a 4-lane median divided Thoroughfare with 80' right-of-way. Land use is predominantly industrial with commercial properties located near Telephone Rd.

East of Telephone Rd., Long Dr. transitions to Park Place Blvd. Park Place Blvd., from Telephone Rd. to IH-45, is a 4-lane undivided Thoroughfare with 80' right-of-way. From IH-45 to Galveston Rd., Park Place is a 4-lane undivided Major Collector with 70' right-of-way. Land use is a mix of commercial, single family and multi-family residential, and public and institutional uses.

Sidewalk infrastructure is provided along the entire length of both Long Dr. and Park Place Blvd. METRO operates a local bus route along this corridor.

Improvement Needs

Improving pedestrian connectivity to Cullinan Park, Charlton Park and Park Place Elementary should be prioritized with high visibility crosswalks and pedestrian signage. Although there are sidewalks along both sides of the corridor, some areas need improvements or to be rebuilt to current standards. ADA compliant ramps and high-visibility crosswalks should be provided at the intersections of S Wayside Dr., Telephone Rd., Reveille St., and Galveston Rd.

Public comment indicated that the Park Place Blvd./Broadway St. at IH-45 intersection was a dangerous intersection. This intersection is being studied by TxDOT for improvements.

Based on projected traffic volumes and surrounding land use, Long Dr. should remain a 4-lane Thoroughfare with a sub-classification as a Transit Blvd.

Recommendations

As Long Dr. transitions to Park Place Blvd., the corridor should remain a 4-lane Thoroughfare with a sub-classification as a Commercial/ Mixed-Use Avenue.

Park Place Blvd., east of IH 45 should remain a 4-lane Major Collector with a sub-classification as Residential Avenue.

Sidewalk improvements should be made along the corridor to provide access to METRO bus stops and improve mobility. An off-street bicycle facility should be implemented to increase mobility options along the corridor. Long Term improvements include the continuation of the Light Rail Purple Line accessing Hobby Airport and Palm Center. Further study is recommended for light rail transit feasibility along this corridor.

COST: \$1.8M

planning level cost estimate does not include light rail transit cost estimate

IH 610 Telephone Rd Reveille St H 45 Galveston Ro



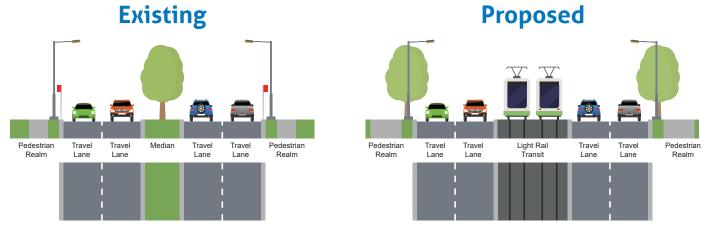
LONG DRIVE - PARK PLACE BOULEVARD



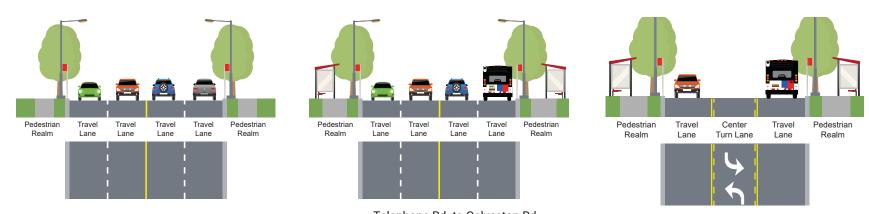








IH 610 to Telephone Rd.



Telephone Rd. to Galveston Rd.



LONG DRIVE - PARK PLACE BOULEVARD







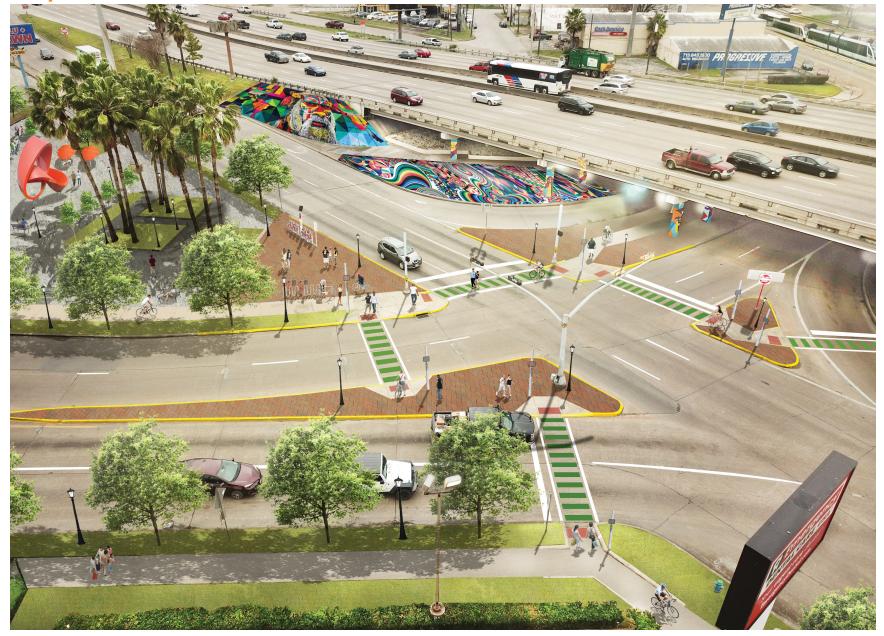


These exhibits illustrate the existing condition and proposed improvement for Park Place Blvd. facing northbound at Broadway and the Gulf Freeway. The visual rendering includes a 12' ft. shared-use path on the north side, a 4-lane thoroughfare, enhanced crosswalks, lighting, landscaping, and demarcated refuge islands, public art, bikeshare, bike parking, in addition to the Green Light Rail Line extension on Broadway.

ExistingImage Credit: Asakura Robinson









MLK BOULEVARD -COTTINGHAM ROAD













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Lanes	2-6	MTFP Designation	P-4-100/120/150
Existing Counts Range	800 - 20,500	Future Volume Range	900 - 32,400
Right-of-Way	100' - 150'	Multimodal Class	Commercial Mixed-Use Blvd - Residential Blvd
Median/CTL/Undivided	Median/Undivided	Median/CTL	Median/Undivided

Future Conditions

Existing Conditions

Martin Luther King Blvd. is a Principal Thoroughfare with variations in the existing cross section:

- IH 610 to Bellfort St.: 6-lane median divided roadway with 120' right-of-way and sidewalks along both sides. This segment was recently reconstructed with improved pavement and sidewalk infrastructure
- Bellfort St. to Almeda Genoa Rd.: 4-lane median divided roadway with 110' - 150' right-of-way and sidewalks along both sides. This segment is currently in the design phase.

Martin Luther King Blvd. transitions to Cottingham south of Almeda Genoa Rd. with the following cross section:

- · Almeda Genoa Rd. to Schurmier Rd.: 2-lane undivided, open ditch roadway with 100' right-of-way.
- Schurmier Rd. to Beltway 8: 2-lane undivided roadway with a sidewalk along the east side.

Land use is primarily single family residential with a mix of developable and industrial land south of Almeda Genoa Rd. and commercial uses adjacent to major intersections.

Improvement Needs

Existing Conditions

Two local bus routes serve this corridor with a top ridership bus stop at Bellfort St. The intersection at Bellfort St. is identified as a high crash location. Therefore, pedestrian improvements and driveway consolidation would help improve safety at this intersection. As Cottingham Rd. is built out, pedestrian improvements should be prioritized. This street would provide a continuous northsouth corridor through the study area. Public comment supported better sidewalks along the corridor.

Recommendations

Based on projected traffic volumes, MLK Blvd. should remain a 4-lane Principal Thoroughfare with a reduction from 6 to 4 travel lanes. between IH 610 and Bellfort. In order to preserve the median for access management, the corridor is recommended to be classified as a Residential Blvd. and Commercial/Mixed-Use Blvd, dependent on adjacent land use context. Sidewalk improvements as well as an offstreet bicycle facility should be implemented along the corridor. Local bus service should be extended to the new VA Center under construction along Cottingham Rd. Future build out of Cottingham Rd as a 4-lane Principal Thoroughfare is important to north-south connectivity and provides alternative route options.







Schrumier Rd

COST: \$7.2M planning level cost estimate



MLK BOULEVARD -COTTINGHAM ROAD





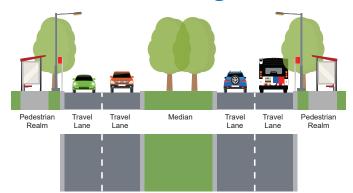




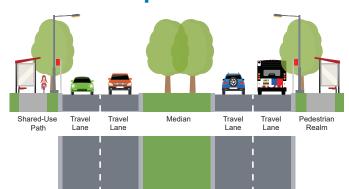




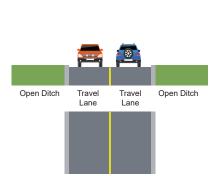
Existing

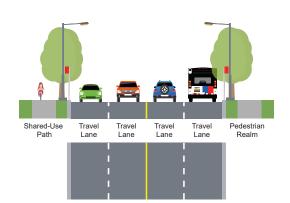


Proposed



IH 610 to Almeda Genoa Rd.





Almeda Genoa Rd. to Schurmier Rd.



MYKAWA ROAD









Existing Cor	nditions	Future Conditions					
Lanes	2-4	MTFP Designation	T-4-80/100				
Existing Counts Range	9,000 - 18,800	Future Volume Range	12,100 - 26,800				
Right-of-Way	80' - 100'	Multimodal Class	Industrial Blvd				
Median/CTL/Undivided	Median/ Undivided	Median/CTL	Median/Undivided				

Existing Conditions

Mykawa Rd. is a north-south corridor that provides continuous movement from IH-610 to Beltway 8 in the study area. Variations in the cross section include:

- IH 610 to Airport Blvd.: 4-lane median divided Thoroughfare with 80' – 100' right-of-way. Sidewalk infrastructure along this segment is located on the western side of the roadway.
- Land use is predominantly industrial until S Wayside Dr. and then primarily single family residential.
- Airport Blvd. to Beltway 8: 2-lane undivided, open ditch Thoroughfare with 100' right-of-way with no sidewalks. Land use along this segment is predominately industrial and developable land.

The BNSF Railroad runs parallel the length of the corridor. A long term off-street path is proposed for this corridor. Mykawa Rd. also provides access to Law Park, the largest in the study area.

Improvement Needs

South of Airport Blvd., Mykawa Rd. is classified as a 4-lane thoroughfare. As this roadway is built out, improved sidewalk facilities and intersection crossings should be prioritized. The intersections of Airport Blvd. and IH-610 frontage road were both high stress pedestrian crossing locations. Sidewalks adjacent to the railroad facility are either nonexistent or in need of serious repair. This presents a significant barrier to connectivity and mobility between communities along the railroad tracks.

Recommendations

Based on projected traffic volumes and surrounding land use, Mykawa Rd should remain classified as a 4-lane Thoroughfare with a sub-classification as an Industrial Blvd. The corridor should be built out to 4 lanes south of Airport Blvd. Coordination should occur with the alignment of SH 35 adjacent to the corridor.

IH 610

Dixie Dr Wayside Dr Belifort St

Airport Blvd

Almeda Genoa Rd

COST: \$8.7M planning level cost estimate

8 W8



MYKAWA ROAD

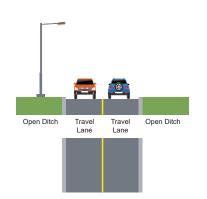


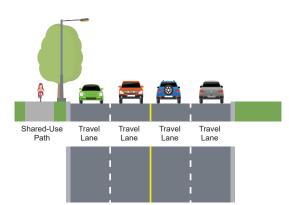












Airport Blvd. to Beltway 8



MYKAWA ROAD









These exhibits illustrate the existing conditions and recommendations for Mykawa Rd. looking southbound at East Orem. The visual rendering includes a 12' ft. shared-use path on the west side, a 4-lane thoroughfare to serve adjacent industrial and commercial land uses, and low-impact development on the east side of the street as a natural buffer to the railroad tracks.







Proposed





REED ROAD



Existing Cor	nditions	Future Conditions					
Lanes	4	MTFP Designation	T-4-80/100				
Existing Counts Range	8,400 - 15,000	Future Volume Range	5,800 - 14,100				
Right-of-Way	80' - 100'	Multimodal Class	Commercial Mixed-Use Ave - Residential Ave				
Median/CTL/Undivided	Median/Undivided	Median/CTL	Median/Undivided				

Existing Conditions

Reed Rd. is a 4-lane median divided Thoroughfare with 80' – 100' right-of-way between SH 288 and Martin Luther King Blvd. It continues as a 4-lane undivided roadway with 100' right-of-way from Martin Luther King Blvd. to Crestmont St. Land use is predominantly single family residential with commercial use adjacent to SH 288 and major intersections. Reed Rd. provides access to several schools and parks that abut the roadway. METRO operates a local bus route along this corridor. A short-term dedicated on-street bicycle facility is proposed between Sunnyside Park and Crestmont St.

Reed Road, between Stewart Park (Mt. Caramel Street) and Stuart Park (Hemingway Drive) will receive a "new ride facility" (dedicated lane closest to the bayou for bicycles) with improvements to the intersection at Swallow Street. In addition, an off-street trail will be built along the top bank of Sims Bayou for walkers/runners to parallel this section of Reed Road as part of the Sims Bayou Greenway project.

Improvement Needs

Reed Rd. is proposed to be built out as a Thoroughfare from Crestmont St. to Mykawa Rd. Pedestrian and bicycle facilities should be prioritized along this roadway as it provides connections to several schools and parks. A new intersection should be constructed at Mykawa Rd. across the BNSF railroad facility to provide access to the neighborhood to the east. The intersection at Cullen Blvd. was identified as a high stress location for pedestrian crossings. Although there are sidewalks along both sides for the length of the corridor, many need repair or maintenance.

Recommendations

Reed Rd, is recommended to remain a 4-lane Thoroughfare from SH-288 to Martin Luther King with a sub-classification as a Commercial/Mixed-Use Blvd to maintain median and access management. Improved pedestrian realm and an on-street bike facility is recommended along this section of the corridor. As land use context changes east of Martin Luther King to more residential, Reed Rd should be reclassified as a 2-lane Thoroughfare with on-street parking and onstreet bicycle facility. Reed Rd. should continue with this same cross section to Mykawa Rd. providing east/west connection and access to the park. This section should be classified as a Residential Avenue.

COST: \$5.1M planning level cost estimate

SH 288

Scott S

Cullen Blvd

MIK BWd Crestmont St Mykawa Rd



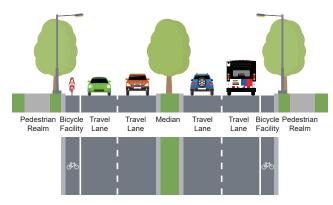
REED ROAD



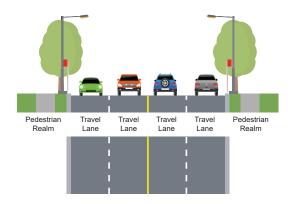
Existing

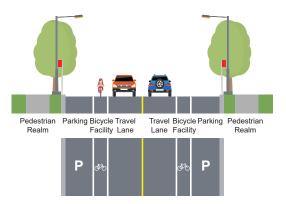


Proposed



SH 288 to Martin Luther King Blvd.





Martin Luther King Blvd. to Mykawa Rd.



REVEILLE STREET





Existing Cond	litions	Future Conditions				
Lanes	6	MTFP Designation	P-6-100			
Existing Counts Range	27,100 - 33,800	Future Volume Range	33,300 - 40,000			
Right-of-Way	100'	Multimodal Class	Commercial Mixed-Use Blvd			
Median/CTL/Undivided	Median	Median/CTL	Median			

Existing Conditions

Reveille St. is a 6-lane median divided Principal Thoroughfare with 100' right-of-way and sidewalks along both sides of the roadway. There are sidewalk gaps along the western side of the roadway north of Armin St. and between Dixie Dr. and Westover St. METRO operates a local bus route along this corridor. Land use is predominantly single family residential with commercial use near IH 610, Park Place Blvd. and Telephone Rd./Bellfort St.

Reveille St. is also classified as State Highway 35 and provides a direct connector ramp to and from IH 45. Reveille St. transitions into Telephone Rd. at the Bellfort St. intersection.

Improvement Needs

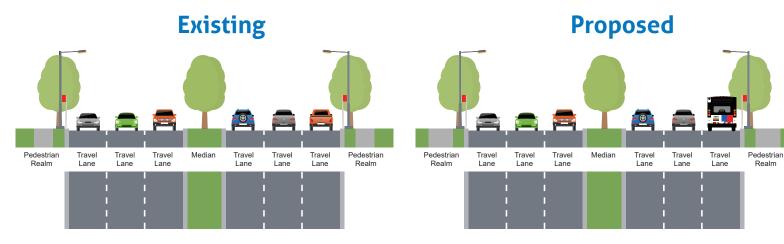
The intersections at Park Place Blvd. and Telephone Rd./Bellfort St. were identified as high stress pedestrian crossing locations as well as high crash locations. Based on modeling results, this corridor will experience increased traffic volume into 2040. High visibility pedestrian crossings and improved pedestrian realms will increase safety of all users along the roadway. Connection to the off-street trail network along Sims Bayou Greenway should be prioritized.

A Special Area Study is currently underway by the Hobby Area Management District in part to reconfigure the Reveille St./Telephone Rd. intersection.

Recommendations

Based on projected traffic volumes and direct connector ramps to IH-45, Reveille St. should remain a 6-lane Principal Thoroughfare. Designating Reveille St. as a Commercial/ Mixed-Use Blvd is appropriate given the land use context and travel patterns. Sidewalk infrastructure should be improved along corridor to enhance accessibility to local bus service. Intersection improvements at Telephone Rd., Bellfort St., and Park Place Blvd. should include access management, ADA ramps and enhanced crosswalk markings.

COST: \$470K planning level cost estimate





SCHURMIER ROAD









Cullen Blvc



Mykawa Rd

Existing Condit	ions	Future Conditions				
Lanes	2	MTFP Designation	MJ-4-100			
Existing Counts Range	700 - 1,100	Future Volume Range	10,200 - 28,000			
Right-of-Way	70' - 100'	Multimodal Class	Residential Ave			
Median/CTL/Undivided	Undivided	Median/CTL	Undivided			

Existing Conditions

Schurmier Rd. is a 2-lane undivided, open ditch roadway with the following cross section variations:

- Cullen to Mary Kay Lane: Major Collector with 70' right-of-way.
- Mary Kay Lane to 1,500' east of Journey Rd.: Thoroughfare with 100' right-of-way.
- 1,500' east of Journey Rd. to Mykawa Rd.: Major Collector with 70' right-of-way.

There is no pedestrian facility located along this corridor. Land use is a mix of industrial, developable and single family residential uses.

Improvement Needs

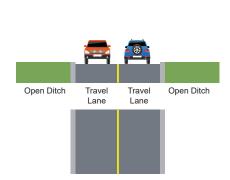
Although the corridor from Scott St. to Cullen Blvd. is currently not identified on the MTFP, it should be extended as a Major Collector with a pedestrian realm.

COST: \$2.4M planning level cost estimate

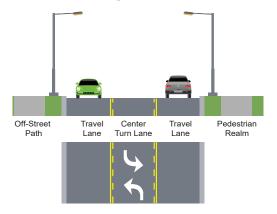
Recommendations

Schurmier Rd. should be developed as a 2-lane Major Collector with a Residential Avenue multi-modal classification. As the corridor develops, right-of-way should be acquired to provide an enhanced pedestrian realm. Once built, Schurmier may function as an alternative to vehicular traffic along Fuqua St. Intersection improvements at Scott St., Cullen Blvd., S Wayside Dr. and Telephone Rd. should be prioritized to provide safe mobility options for all users.

Existing



Proposed





SOUTH WAYSIDE DRIVE



Existing Cor	nditions	Future Conditions				
Lanes	2-4	MTFP Designation	T-4-100/250			
Existing Counts Range	2,200 - 10,200	Future Volume Range	6,100 - 23,500			
Right-of-Way	100' - 250'	Multimodal Class	Commercial Mixed-Use Blvd - Residential Ave/Blvd			
Median/CTL/Undivided	Median/Undivided	Median/CTL	Median/Undivided			

Existing Conditions

S Wayside is classified as a Thoroughfare with the following cross section variations:

- IH 610 to Dixie Dr.: 4-lane median divided roadway with 100' right-of-way and sidewalks along both sides.
- Mykawa Rd. to Vasser Rd.: 4-lane median divided roadway with 250' right-of-way and sidewalks along both sides.
- Almeda Genoa Rd. to Beltway 8: 2-lane open ditch, undivided roadway with no sidewalks.

Land use is predominantly single family and industrial use with more developable parcels south of Almeda Genoa Rd. There is an existing on-street bike route north of Dixie Dr. This facility is identified as low comfort and should be reconstructed to provide increased safety and comfort for all users. A long term dedicated on-street facility is proposed for the length of the corridor.

Improvement Needs

As identified on the MTFP, S Wayside is proposed to be constructed between Dixie Dr. and Mykawa Rd., and Vasser Rd. and Almeda Genoa Rd., utilizing a portion of Martindale Rd. This connection would provide another

continuous north-south corridor through the study area. Pedestrian amenities and bicycle facilities should be prioritized with a wider pedestrian realm and ADA compliant ramps at all intersections.

Recommendations

Based on projected traffic volumes, S Wayside Dr. should remain as the following designations:

- IH 610 to Dixie Dr.: a 4-lane Thoroughfare with a sub-classification as a Commercial/Mixed-Use Blvd.
- Mykawa Rd. to Vasser: 4-lane
 Thoroughfare with a sub-classification as
 Residential Boulevard
- Vasser Rd. to Beltway 8: utilizing
 Martindale Rd, S Wayside should be built
 as a 2-lane Thoroughfare with a sub classification as Residential Ave. This
 alignment is represented on the MTFP
 map and utilizes a portion of Martindale
 Rd

When S Wayside is developed, based on available right-of-way, enhanced sidewalks as well as an on-street bicycle facility should be provided the length of the corridor. Connections to Sims Bayou Greenway as well as Law Park should be prioritized.







COST: \$8.2M planning level cost estimate



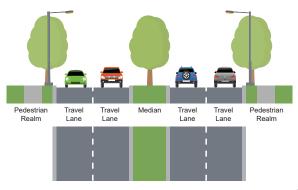
SOUTH WAYSIDE DRIVE



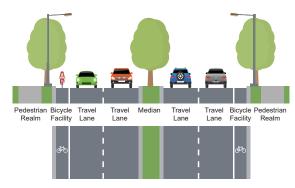




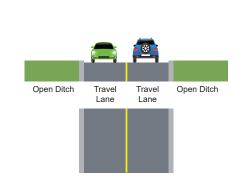
Existing

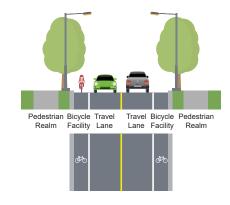


Proposed



IH 610 to Vasser Rd.





Vasser Rd. to Beltway 8



SABO ROAD



Existing Cor	ditions	Future Conditions					
Lanes	4	MTFP Designation	MJ-4-80/T-4-100				
Existing Counts Range	12,600	Future Volume Range	10,200 - 28,000				
Right-of-Way	80' - 100'	Multimodal Class	Residential Ave/Blvd				
Median/CTL/Undivided	Median/ Undivided	Median/CTL	Median/Undivided				

Existing Conditions

Sabo Rd. is a north-south 4-lane roadway identified with the following cross section variations:

- Kingspoint Rd. to Fuqua St.: undivided Major Collector with 80' right-of-way and sidewalks along both sides.
- Fuqua St. to Beltway 8: median divided Thoroughfare with 100' right-of-way and sidewalks along both sides.

METRO operates both a local bus route as well as a park and ride bus route along this corridor. There is a proposed long-term dedicated onstreet bicycle facility along this corridor. Land use is primarily single-family use west of the roadway and commercial and multifamily residential uses along the east side and near the intersections.

Improvement Needs

High visibility crosswalks and pedestrian crossing signs should be implemented near Meador Elementary and nearby neighborhoods to increase walkability and accessibility. Based on modelling results, this corridor will experience increased traffic volumes into 2040.

Recommendations

It is recommended Sabo Rd. maintain its 4-lane Major Collector designation between Kingspoint and Fuqua and its 4-lane Thoroughfare designation between Fuqua and Beltway 8. In preservation of the median south of Fuqua St., it is recommended to be classified as a Residential Blvd. For consistency in relation to land use, north of Fuqua is recommended as a Residential Avenue. An on-street bicycle facility is recommended along the corridor given the adjacent residential uses. Intersection and crosswalk improvements should be prioritized near Meador Elementary School.

Kingspoint Rd

COST: \$207K planning level cost estimate



SABO ROAD

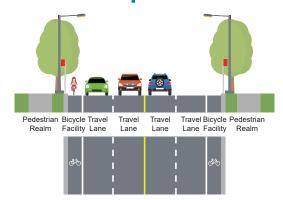




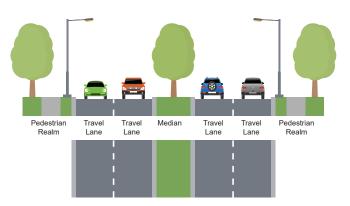


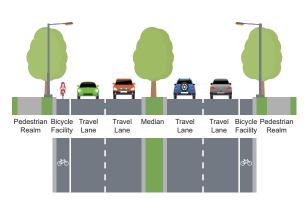
Pedestrian Realm Travel Lane Travel Lane Pedestrian Realm

Proposed



Kingspoint Rd. to Fuqua St.





Fuqua St. to Beltway 8



SCOTT STREET





Existing Conditions

Scott St. is a 4-lane median divided Thoroughfare with 100′ – 120′ right-ofway that provides continuous north-south movement from IH 610 to Beltway 8 through the study area. There are continuous sidewalks along both sides of the roadway, except between Fugua St. and Beltway 8. Land use along the corridor is predominantly single family residential with sporadic commercial and developable land. While there is no existing or planned bike route along Scott St., this corridor does provide access to the off-street trail network along Sims Bayou and to many other on-street or shared on-street bicycle facilities. METRO operates a local bus route along this corridor.

Improvement Needs

The following intersections along Scott St. were identified as high crash locations: Holmes Rd., Bellfort St., Reed Rd., and Airport Blvd. Based on the surrounding land use, pedestrian improvements at intersections and crosswalks should be prioritized. Modeling results indicate traffic along Scott St. will continue to be significant into 2040. Public comment indicated that there is an increased amount of traffic along Scott St. from the SH 288 expansion.

Existing Cond	litions	Future Conditions					
Lanes	2-4	MTFP Designation	T-4-100/120				
Existing Counts Range	1,300 - 16,300	Future Volume Range	6,400 - 41,000				
Right-of-Way	100' - 120'	Multimodal Class	Residential Blvd				
Median/CTL/Undivided	Median	Median/CTL	Median				

Recommendations

Based on projected traffic volumes, Scott St. should remain a 4-lane Thoroughfare with a Residential Blvd multi-modal classification to preserve the median. The local bus route along this corridor should be extended south towards Tom Bass Regional Park. A wide pedestrian realm should be provided along both sides of the roadway to ensure safe movement along this busy roadway and provide access to local bus facility. Connection opportunities should be provided at Sims Bayou Greenway.



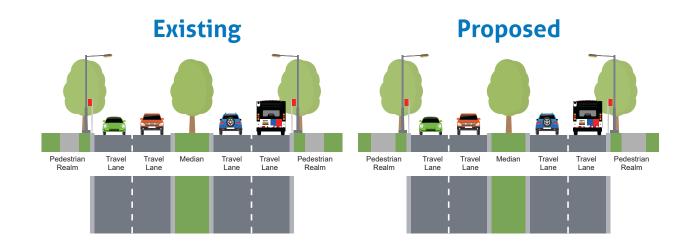
COST: \$735K planning level cost estimate



SCOTT STREET









TELEPHONE ROAD









Existing Conditions

Telephone Rd. provides north-south connectivity from IH-45 to Beltway 8. Variations in the existing cross section include:

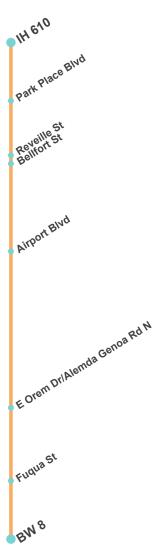
- IH 610 to Park Place Blvd.: 4-lane Thoroughfare with 100' right-of-way and center turn lane.
- Park Place Blvd. to F Orem Dr.: 6-lane. median divided Principal Thoroughfare with 120' right-of-way.
- E Orem Dr. to Beltway 8: 6-lane Principal Thoroughfare with 120' right-of-way and center turn lane.

Sidewalks are either nonexistent or in need of repair north of Park Place Blvd. METRO operates a local bus route along the corridor until Airport Blvd., accessing Hobby Airport Transit Center. There is an on-street bikeway proposed for this corridor. Land use is a mix of commercial, industrial, and public and institutional uses abutting the corridor.

Improvement Needs

The intersection of Telephone Rd./Reveille St. at Bellfort St. was identified as the highest crash location throughout the study area. Based on modeling, traffic volume along this corridor is expected to be significant into 2040. Improving pedestrian amenities with wide sidewalks, ADA compliant ramps, and bicycle infrastructure will enhance pedestrian connectivity and safety.

Existing Cond	ditions		Future Conditions
Lanes	4-6	MTFP Designation	T-4-100/P-6-120
Existing Counts Range	25,000 - 39,900	Future Volume Range	6,600 - 58,000
Right-of-Way	100' - 120'	Multimodal Class	Commercial Mixed-Use Blvd - Industrial Blvd
Median/CTL/Undivided	Median/CTL	Median/CTL	Median/CTL



Completing the sidewalk gaps between Airport Blvd. and Almeda Genoa Rd. would enhance pedestrian connectivity in this area. Improved sidewalk infrastructure is also needed north of Park Place Blvd.

Public comment indicated pavement failure due to truck traffic near the intersection of Telephone Rd./Reveille St. at Bellfort St. Other comments indicated safety concerns due to congestion around Ortiz Middle School.

Recommendations

Based on projected traffic volumes, Telephone Rd. should remain a 4-lane Thoroughfare from IH 610 to Park Place Blvd., and a 6-lane Principal Thoroughfare from Park Place Blvd. to Beltway 8. A median with left turn bays is recommended north of Park Place Blvd. and south of Braniff St. to improve access management. A shared-use path should be provided along the west side with a 5' sidewalk along the east side for the length of the corridor. Connection to Sims Bayou Greenway should be prioritized. Long Term improvements include the continuation of the Light Rail Purple Line accessing Hobby Airport from Long Dr. to Bellfort St. Further study is recommended for light rail transit feasibility along this corridor.

> **COST: \$3.0M** planning level cost estimate



TELEPHONE ROAD



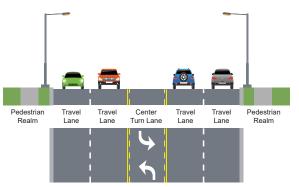


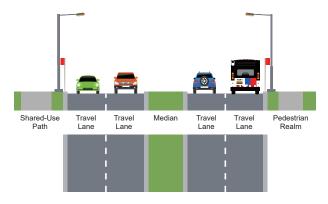




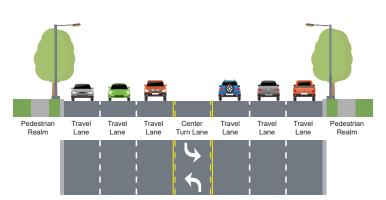


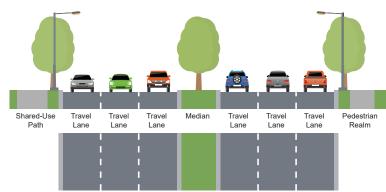






IH 610 to Park Place Blvd





Park Place Blvd to Beltway 8







POLICY UPDATE

Neighborhood Street Connection

During the planning process, discussions with the public and stakeholders identified neighborhood connections and walkability as one of the top priorities.

As seen in the Pedestrian Connectivity Map, potential pedestrian improvement areas were identified as areas that would benefit from increased local street neighborhood connections. Local streets in neighborhoods are often underutilized and exhibit low volumes of traffic. These streets should also be welcoming places for leisure and spaces for play. Design elements that could encourage walkability along local streets includes stormwater management features, curb extensions, vertical speed control elements, and bicycle facilities.

A Neighborhood Local Street Policy should be implemented by the City of Houston to allow neighborhood districts and residents along a continuous local street to apply for traffic calming and pedestrian enhancements. This would require an update to the City Neighborhood Traffic Management Program (Article XV of Chapter 45 Code of Ordinances).



Source: NACTO Urban Street Design Guide



Source: NACTO Urban Street Design Guide

MTFP Update

The Major Thoroughfare and Freeway Plan (MTFP) is another document that is updated regularly and used by many City of Houston departments to align transportation recommendations and development recommendations.

Streets that are designated on the MTFP allow the City to secure Right-of-Way, coordinate projects with other entities, and provide connections to neighborhood destinations.

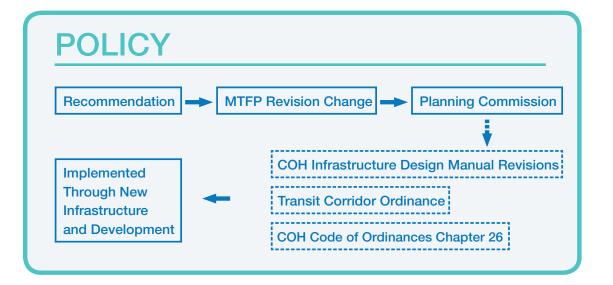
It is recommended that the roadways identified through this plan be added to the MTFP through the Amendment Process. The identification of roadways using the multimodal sub-classification system should also be utilized to prioritize roadways and adjacent land use.

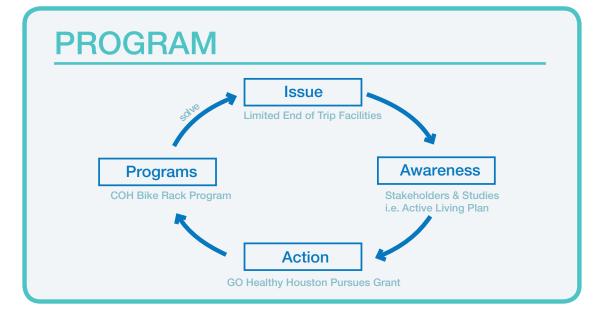


Bicycle Facility

Throughout the analysis of existing and proposed bicycle facilities designated through the Houston Bike Plan process, it became apparent that the Side Path designation needed further clarification. As identified in the Houston Bike Plan, the Side Path designation could either be classified as an Off-Street facility or Dedicated in Street Right-of-Way facility.

While ultimate design of this type of facility is dependent upon further engineering and analysis, it is recommended that the Side Path be designated as an Off-Street facility. This type of policy update would only be pertinent to how it is represented. The Side Path should still have the same design elements referenced in the City of Houston Bike Plan.







PHASING/IMPLEMENTATION

The City of Houston initiated this planning study to determine improvement needs and help guide the City's short, mid, and long-term planning efforts that could be implemented to help improve mobility and accessibility throughout the Southeast Houston study area.

Through a coordinated effort between stakeholder committees, public, and various organizations, this study sets a vision for future multimodal transportation facilities that have local and regional impacts.

This study identified several projects that can be implemented through various organizations, including:

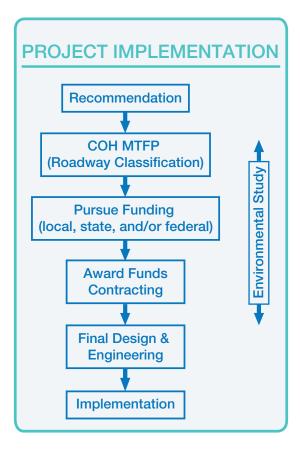
- Planning and Development Department
- Houston Public Works
- METRO Houston
- Houston Parks Board
- Harris County
- Texas Department of Transportation

Through coordinated efforts between various agencies, many of these improvements can be implemented together, such as sidewalk and roadway improvements; crosswalks and intersection improvements; and METRO bus stop enhancements.

The recommendations from this study are not intended to be static. These recommendations are intended to be built upon to meet the community and stakeholder needs.

Although short, mid and long-term projects are identified in this plan, processes exist for implementation. The following graphics provide an overview of how they work related to Project, Policy, and Program Guidance.

A project will go through the following steps indicated in the graphic before implementation depending on project complexity, identified funds and scheduling.





COST ESTIMATES

Based on goals established by the committee members and public involvement, short, mid, and long term projects have been identified throughout the study area. Each project was provided a planning level cost estimate.

Although these cost estimates are represented as independent of one another, many of the improvements can be accomplished together. (i.e. If roadway is being redeveloped, improved pedestrian and bicycle facilities as well as intersections would also be enhanced).

SHORT-TERM IMPROVEMENTS

The short-term projects identified below contain improvements that can be implemented without the need for property acquisition and can generally be completed within a five-year timeframe. While the City of Houston has the responsibility of leading this planning effort, H-GAC, METRO, Gulfgate TIRZ, Sunnyside TIRZ, Houston Parks Board, TxDOT, HCID#9 &10, and Harris County all play a vital role in implementation.

MEDIUM-TERM IMPROVEMENTS

The medium-term projects identified below contain improvements that can be implemented within a ten-year timeframe. While the City of Houston has the responsibility of leading this planning effort, H-GAC, METRO, Gulfgate TIRZ, Sunnyside TIRZ, Houston Parks Board, TxDOT, HCID#9 &10, and Harris County all play a vital role in implementation. Several projects indicated below will require additional detail to estimate costs.

\$72 M **ROADWAY IMPROVEMENTS**

\$18 M **PEDESTRIAN IMPROVEMENTS**

LONG-TERM IMPROVEMENTS

The long-term projects below represent the entire corridors within the study area. Refer to the corridor sheets contained in the document for additional guidance for each corridor. In effort to create complete corridors most of the corridor recommendations involve travel lane, Intersection, bicycle, pedestrian and transit improvements. As funding is allocated, each improvement can advanced individually or as a complete corridor.

\$20 M INTERSECTION **IMPROVEMENTS**

\$37 M **BICYCLE IMPROVEMENTS**



SHORT-TERM IMPROVEMENTS

Project	Limits	Description	Quantity	Unit	Unit Cost	TOTAL COST	City of Houston	METRO	Gulfgate TIRZ	Sunnyside TIRZ	Houston Park Board	TXDOT	HCID #9	HCID #10	HCID #16	Harris County
					TRANS	SIT IMPROVEMENTS	Ŝ									
Bus Stop Enhancements	IRoute 87	Shelter imporvements with benches, trash bin and signage.	6	Each	\$6,000	\$36,000		\$36,000								
SUBTOTAL COST						\$36,000	\$0	\$36,000	\$0	\$0	\$0					\$0
					BICYC	LE IMPROVEMENTS	3									
Trailhead Connections	MLK, Mykawa, Telephone, Belfort, Broadway	Opportunity for eleven (11) trailhead connections including wayfinding, bike racks, and monuments	11	Each	\$19,000	\$209,000	\$209,000									
Sims Bayou Off-Street Trail	SH288 to Scott, MLK to Law Park, Law Park to Telephone	Buildout of 7 miles of off-street trail along Sims Bayou	7	Mile	\$725,000	\$5,075,000					\$5,075,000					<u> </u>
MLK Bikeway Improvements	IH 610 to Sims Bayou	In coordination with Harris County Precinct One, off-street bike facility along MLK	2.97	Mile	\$370,000	\$1,098,900										\$1,098,900
Broadway Off-Street Path	IH 610 to IH 45	Programmed CIP Project along Broadway	1.15	Mlle	\$370,000	\$425,500	\$425,500									1
Jutland Road		Dedciated in Street Bicycle Facility for length of corridor, provide connection to Sims Bayou	2.19	Mile	\$48,000	\$105,120	\$105,120									
SUBTOTAL COST						\$6,913,520	\$739,620				\$5,075,000					\$1,098,900
					INTERSE	CTION IMPROVEME	NTS									
Fuqua St at Telephone Rd	Fuqua St at Telephone Rd	Span Wire to Mast Arm, ADA ramps, and enhanced crosswalk	1	LS	\$250,000	\$250,000	\$250,000									1
Dixie Dr at Telephone Rd	Dixie Dr at Telephone Rd	ADA ramps and enhanced crosswalk	1	LS	\$9,560	\$9,560	\$9,560									
Woodridge at Telephone Rd	Woodridge at Telephone Rd	ADA ramps and enhanced crosswalk	1	LS	\$9,560	\$9,560	\$9,560									I
Galveston Rd at Park Place Blvd	Galveston Rd at Park Place Blvd	Span Wire to Mast Arm, ADA ramps, and enhanced crosswalk	1	LS	\$250,000	\$250,000	\$250,000									<u> </u>
Galveston Rd at Howard Dr	Galveston Rd at Howard Dr	ADA ramps and enhanced crosswalk	1	LS	\$9,560	\$9,560	\$9,560									<u> </u>
Airport Blvd at Monroe Rd	Airport Blvd at Monroe Rd	ADA ramps and enhanced crosswalk	1	LS	\$9,560	\$9,560	\$9,560									<u> </u>
Airport Blvd at MLK	Airport Blvd at MLK	Enhanced crosswalk, gateway improvements, and landscaping	1	LS	\$999,486	\$999,486	\$999,486									<u> </u>
SUBTOTAL COST						\$1,537,726	\$1,537,726									
					PEDEST	RIAN IMPROVEMEN	TS									
Telephone Rd, Airport Blvd, and Long Dr	Refer to maps	Sidewalk Gaps	22300	LF	\$32	\$713,600	\$713,600	х								<u> </u>
Bellfort Road	SH288 to IH45	Rebuild sidewalks 6' on both sides of roadway with ADA compliant ramps and crosswalk enhancements	38,130	LF	\$32	\$5,200,000	\$5,200,000	х	х	х						
Jutland Road	IH 610 to Sunbeam	Rebuild sidewalks to 5' on both sides of roadway with ADA compliant ramps	11,570	LF	\$32	\$740,480	\$740,480									
Crestmont Street	IH 160 to Reed Rd	Rebuild sidewalks to 5' on both sides of roadway with ADA compliant ramps	11,280	LF	\$32	\$721,920	\$721,920		Х							<u> </u>
Reed Road	SH288 to Mykawa	Rebuild sidewalks to 5' on both sides of roadway with ADA compliant ramps	18,750	LF	\$32	\$1,200,000	\$1,200,000		Х	Х						<u> </u>
SUBTOTAL COST						\$8,576,000	\$8,576,000									-
	TOTAL SHORT-TERM	COST				\$17,063,246	\$10,853,346	\$36,000	\$ -	\$ -	\$5,075,000	\$ -				\$1,098,900



MEDIUM-TERM IMPROVEMENTS

Project	Limits	Description	Quantity	Unit	Unit Cost	TOTAL COST	City of Houston	METRO	Gulfgate TIRZ	Sunnyside TIRZ	Houston Park Board	TXDOT	HCID #9	HCID #10	HCID #16	Harris County
					TRAN	SIT IMPROVEMENT	S									
Community Connector	Telephone to Kingspoint, Orem to Beltway 8.	Community Connector route in the southeast portion of the study area providing residents access to multiple destinations	1	Each	\$500,000	\$500,000	\$500,000	х								
New Local Bus Service	E Orem/Almeda Genoa Rd, Airport Blvd, Monroe Blvd, and Fugua St	New local bus routes				\$\$	х	х								
Existing Bus Service Enhancements	Continuation of #29, #54, and # 80 local bus routes	Existing Bus Service Enhancements				\$\$	х	х								
SUBTOTAL COST						\$500,000	\$500,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
					BICYC	LE IMPROVEMENTS										
Off-Street Trail Connections	Connection opportunity	Connections to Sims Bayou trail network through utility corridors and ditch connections				\$\$\$	х		Х		х					
Stuart Park Gateway	between Hartman Middle School, Stuart Park and Sims Bayou	Connection opportunity between Hartman Middle School, Stuart Park and Sims Bayou				\$\$\$	Х	Х	х		х					
SUBTOTAL COST						\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
					INTERSE	CTION IMPROVEME	NTS									
Botanic Garden Intersection		New intersection at Botanic Garden and park place Elementary School	1	LS	\$250,000	\$250,000	\$250,000									
SUBTOTAL COST						\$250,000	\$250,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
					N	ATFP CHANGES										
Blackhawk Ridge Ln	Monroe Blvd to Fuqua St	Upgrade Design Standard				\$700,000	\$700,000									
Calhoun Rd	IH 610 to Cullen Blvd	Upgrade Design Standard				\$840,000	\$840,000							Х		
Dover St	Bellfort Ave to IH 45	Upgrade Design Standard				\$800,000	\$800,000						X			
Dover St	Rockhill St to Airport Blvd	Upgrade Design Standard				\$500,000	\$500,000						Х			
Furman Rd	Beltway 8 to Almeda Genoa	Maintain 2 lanes				\$1,100,000	\$1,100,000			X						
Furman Rd	Almeda Genoa to Proposed E Orem	Maintain 2 lanes				\$930,000	\$930,000			Х						
Glen Valley Dr	Bellfort Ave to Morley St	Upgrade Design Standard				\$300,000	\$300,000						X			
Glen Valley Dr	Santa Elena St to Bellfort Ave	Upgrade Design Standard				\$300,000	\$300,000						X			
Glencrest St	Morley St to Airport Blvd	Upgrade Design Standard				\$300,000	\$300,000						X			
Kopman Dr	Santa Fe Dr to Airport Dr	Upgrade Design Standard				\$300,000	\$300,000						Х			
Morley St	Telephone to Broadway St	Upgrade Design Standard				\$300,000	\$300,000						X			
Morley St Northdale St	Broadway St to Glencrest St	Upgrade Design Standard				\$300,000 \$500.000	\$300,000 \$500.000						X			
	Dixie Dr to Bellfort Ave	Upgrade Design Standard		-		,	\$500,000						X			
Nunn St Pershing St	Dixie Dr to Bellfort Ave Calhoun Rd to Crestmont St	Upgrade Design Standard Upgrade Design Standard				\$500,000 \$360,000	\$360,000						Α	Х		
Rockhill St	Tiperary Ln to Broadway St	Upgrade Design Standard		+		\$400,000	\$400,000						Х	_^		
Rockhill St	Broadway to Monroe	Upgrade Design Standard		+		\$400,000	\$400,000						X	1		
Seaford Dr	Kingspoint Rd to Fugua St	Remain 2 lanes		1		\$300,000	\$300,000						^		X	
Stone St	Bellfort Ave to Glenvista St	Upgrade Design Standard		1		\$300,000	\$300,000						Х	1		
Swallow St	Bellfort Ave to Santa Fe Dr	Remain 2 lanes		1		\$300,000	\$300,000						X			
Vasser Rd	Crestmont St to Mykawa Rd	Remain 2 lanes				\$300,000	\$300,000		Х							
Waltrip St	Dixie Dr to Bellfort Ave	Remain 2 lanes		1		\$300,000	\$300,000						Х			
SUBTOTAL COST				1		\$10,330,000	\$10,330,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	TOTAL SHORT-TERM					\$11,080,000	\$11,080,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	ŝo



LONG-TERM IMPROVEMENTS

Corridor	Bicycle	Pedestrian	Roadway	Total Cost	
Airport Blvd	\$1,913,000		\$2,401,000	\$4,314,000	
Allison Rd		\$1,014,000	\$1,373,000	\$2,387,000	
Almeda Genoa Rd	\$2,475,000	\$3,266,000	\$4,469,000	\$10,210,000	
Beamer Rd	\$35,000	\$248,000	\$0	\$283,000	
Bellfort St	\$2,674,000	\$2,440,000	\$640,000	\$5,754,000	
Blackhawk Blvd	\$91,000	\$0	\$105,000	\$196,000	
Blackhawk Ridge Ln	\$259,000	\$0	\$0	\$259,000	
Broadway St	\$424,000	\$1,020,000	\$143,000	\$1,587,000	
Calhoun Rd	\$40,000	\$284,000	\$0	\$324,000	
Clearwood St	\$388,000	\$354,000	\$124,000	\$866,000	
Cottingham Rd	\$5,000	\$486,000	\$4,000,000	\$4,491,000	
Crestmont St	\$7,000	\$722,000	\$363,000	\$1,092,000	
Cullen Blvd	\$2,084,000	\$1,902,000	\$1,840,000	\$5,826,000	
Dixie Dr	\$630,000	\$576,000	\$306,000	\$1,512,000	
E Orem Dr	\$301,000	\$2,116,000	\$11,211,000	\$13,628,000	
Fuqua St	\$3,702,000	\$3,382,000	\$8,444,000	\$15,528,000	
Furman Rd	\$750,000	\$684,000	\$0	\$1,434,000	
Galveston Rd	\$668,000	\$610,000	\$76,000	\$1,354,000	
Glen Hollow		\$0	\$137,000	\$137,000	
Hansen Rd	\$14,000	\$0	\$137,000	\$151,000	
Holmes Rd	\$452,000	\$428,000	\$191,000	\$1,071,000	
Howard Dr	\$361,000	\$330,000	\$76,000	\$767,000	
Hycohen Rd		\$0	\$2,000,000	\$2,000,000	
Jutland Rd	\$105,000	\$740,000	\$1,002,000	\$1,847,000	
Kingspoint	\$852,000	\$778,000	\$219,000	\$1,849,000	
Kopman Dr		\$102,000	\$0	\$102,000	
Land Rd		\$102,000	\$2,000,000	\$2,102,000	
Long Dr	\$83,000	\$586,000	\$124,000	\$793,000	
Martin Luther King Blvd	\$1,700,000	\$1,552,000	\$476,000	\$3,728,000	
Martindale Rd	\$17,000	\$118,000	\$38,000	\$173,000	
Mary Kay Ln		\$236,000	\$2,159,000	\$2,395,000	
Meldrum Ln	\$3,000	\$156,000	\$2,318,000	\$2,477,000	

Corridor	Bicycle	Pedestrian	Roadway	Total Cost		
Monroe Rd	\$1,828,000	\$1,670,000	\$439,000	\$3,937,000		
Mosley Rd	\$1,020,000	\$1,070,000	\$137,000	\$137,000		
Mykawa Rd	\$2,408,000	\$2,200,000	\$5,181,000	\$9,789,000		
Northdale St	\$24,000	\$168,000	\$0,181,000	\$192,000		
Nunn St	\$24,000	\$168,000	\$0	\$192,000		
Old Chocolate Bayou Rd	\$24,000	\$336,000	\$3,229,000	\$3,565,000		
Panair St		\$168,000	\$229,000	\$3,303,000		
Park Place Blvd	\$787,000	\$720,000	\$181,000	\$1,688,000		
Radio Rd	\$1.000	\$720,000	\$164,000	\$1,686,000		
Reed Rd	\$1,000	\$1,360,000	\$164,000	\$165,000		
Reveille St	\$1,181,000					
	40.000	\$554,000	\$191,000	\$745,000		
Rockhill St	\$2,000	\$0	\$0	\$2,000		
Rosehaven Dr	\$1,000	\$136,000	\$183,000	\$320,000		
S Acres Dr		\$136,000	\$183,000	\$319,000		
S Wayside Dr	\$215,000	\$1,528,000	\$7,168,000	\$8,911,000		
Sabo Rd	\$73,000	\$0	\$134,000	\$207,000		
Schurmier Rd		\$1,322,000	\$1,789,000	\$3,111,000		
Scott St		\$322,000	\$573,000	\$895,000		
Scranton Ave	\$1,000	\$322,000	\$139,000	\$462,000		
Seaford Dr	\$1,000	\$102,000	\$0	\$103,000		
Selinsky Rd	\$15,000	\$102,000	\$38,000	\$155,000		
Stone St	\$15,000	\$0	\$0	\$15,000		
Sunbeam St		\$102,000	\$139,000	\$241,000		
Swallow St	\$1,000	\$102,000	\$0	\$103,000		
Swingle Rd		\$102,000	\$139,000	\$241,000		
Tavenor Ln	\$1,000	\$0	\$139,000	\$140,000		
Telephone Rd	\$327,000	\$990,000	\$2,155,000	\$3,472,000		
Vasser Rd		\$102,000	\$0	\$102,000		
W Monroe Rd		\$102,000	\$137,000	\$239,000		
Waltrip St		\$102,000	\$0	\$102,000		
Webercrest Rd		\$102,000	\$137,000	\$239,000		
Winkler Dr	\$111,000	\$102,000	\$137,000	\$350,000		

Improvement	Total Cost
Bicycle	\$27,049,000
Pedestrian	\$37,352,000
Roadway	\$72,535,000
Total Cost	\$136,936,000



FUNDING OPPORTUNITIES

Community Development Block Grants

(CDBG) are administered by the U. S. Department of Housing and Urban Development (HUD), and are used for various projects that "benefit low- and moderate-income persons." While the program is primarily aimed at affordable housing, it is possible to use funding for infrastructure projects in low- and moderate-income neighborhoods, "slums," or "blighted areas."

For example, the City of Arlington has used CDBG funding to improve sidewalks connecting low-income neighborhoods to nearby commercial areas. Annual CDBG appropriations are made based on formulas which assess community need, including "extent of poverty, population, housing overcrowding, age of housing, and population growth lag." In 2018, the City of Houston received approximately \$24,000,000 in CDBG funding. (All guotes refer to HUD descriptions.)

The **Surface Transportation Program (STP)**

provides flexible funding that may be used by States and localities for bicycle and pedestrian projects. Bicycle and pedestrian improvements may be incorporated into the design of any federal-aid highway, including those on the National Highway System (NHS), bridge projects on any public road, transit capital projects, and intra-city and inter-city bus terminals and facilities. STP funds may be used for carpool projects, fringe and corridor parking facilities and programs, bicycle transportation and pedestrian walkways, and

the modification of public sidewalks to comply with ADA.

A state agency or local government typically must contribute 20% of the capital cost for highway and transit projects. Generally, STP funds may not be used for roads functionally classified as local or rural minor collectors, but there is an exception for bicycle transportation and pedestrian walkways. The project sponsor must demonstrate the transportation benefits associated with proposed bicycle and pedestrian improvements to be considered for federal funding.

The Highway Safety Improvement Program (HSIP) is a core federal program to achieve significant reduction in traffic fatalities and serious injuries on all public roads through the implementation of infrastructure related highway safety improvements. Funds may be used for projects on any public road or publicly owned bicycle and pedestrian pathway or trail.

Congestion Mitigation and Air Quality

(CMAQ) funds are sub-allocated to air quality nonattainment and maintenance areas within a state. Since 1991, bicycle and pedestrian activities have been eligible for CMAQ funding consideration. Specifically, eligible activities include constructing bicycle and pedestrian facilities (paths, bike racks, support facilities, etc.) that are not exclusively recreational and that reduce vehicle trips; non-construction outreach related to bicycle safety; and

establishing and funding state bicycle/ pedestrian coordinator positions for promoting and facilitating non-motorized transportation modes through public education, safety programs, etc.

The State and Community Highway Safety Grant Program, commonly referred to as Section 402, provides grants to assist states and communities in the development and implementation of highway safety programs designed to reduce traffic crashes, deaths, injuries and property damage. Funds are distributed to all states according to a formula, based 75 percent on road miles and 25 percent on population. A minimum of 40 percent of a state's 402 funds must be expended by local governments or be used for the benefit of local governments. For fiscal years 2006 through 2011, Texas received authorization of \$15 to \$17 million annually for the Section 402 program.

H-GAC RTP/TIP: In order to program Federal transportation funding for a project, it generally must be included on the Regional Transportation Plan (RTP) for the local Metropolitan Planning Organization, in this case the Houston-Galveston Area Council.

The Transportation Improvement Plan (TIP) is a fiscally-constrained plan of projects approved for Federal funding and expected to be completed in the next four years. As of early 2019, H-GAC has recently completed a



Call for Projects to be included in the TIP and is in the process of soliciting public comments and selecting projects for funding. The Call for Projects takes place approximately every three years.

Harris County Bond Referendum: Although the City has moved to an alternative mode of street-work funding (see "Rebuild Houston" below), Harris County continues to use the most common method of funding projects, bond referenda where projects are funded by borrowing against future tax revenues. The County, particularly Precinct 1, which covers the study area and has extensive overlap with City of Houston jurisdiction, has been recently prioritizing bicycle infrastructure projects, and should be considered a likely source of funding these projects in the near future. County representatives have participated in this planning study.

The Recreational Trails Program (RTP)

provides funds to states to develop and maintain recreational trails and trail-related facilities for both non- motorized and motorized recreational trail uses. Projects funded by the RTP are not necessarily ineligible for other federal-aid highway funds (for example for a second or subsequent phase of a project) and other federal-aid highway funds may be used to make up the matching fund requirements for RTP projects. States may make grants to private organizations or to any government entity.

The Texas Parks and Wildlife (TPWD) administers the National Recreational Trails Fund in Texas under the approval of the Federal Highway Administration (FHWA). The grants can be up to 80% of project cost with a maximum of \$200,000 for non-motorized trail grants and currently there is not a maximum amount for motorized trail grants. Funds can be spent on both motorized and non-motorized recreational trail projects such as the construction of new recreational trails, to improve existing trails, to develop trailheads or trailside facilities, and to acquire trail corridors.

The City's Sidewalk Major Thoroughfare **Program** provides up to four blocks of new sidewalks along major thoroughfares for access to transit and commercial areas. The School Sidewalk Program constructs up to four blocks leading to a school (not along its perimeter). For both of these programs, right-of-way must already exist and an application request must be made to the Public Works department and approved by Planning Commission. The related Pedestrian Accessibility Review is conducted by the Mayor's Office for People with Disabilities (MOPD) and identifies the highest-priority projects of up to 1,500 feet each, of sidewalks per project. Funding is dependent on availability within the budget of the Department of Public Works (\$1.8 billion in 2018, for all

activities). The MOPD estimates project review and completion to take between 6 and 24 months for Accessibility Review projects. No time estimate is given for the other two programs.

The **Safe Routes to School (SRTS)** program is funded with Federal money from nationwide transportation authorizations (most recently SAFETEA-LU). In this region, it is administered by TxDOT, and is restricted to "political subdivisions of the state," meaning cities, counties, and school districts. Management Districts, TIRZs, and similar entities are not eligible. The program was established to enable and encourage primary and middle school children to walk or bicycle to school.

The objective is to improve the quality of children's lives and support national health objectives by reducing traffic, fuel consumption and air pollution in the vicinity of schools. SRTS projects must be part of a continuous route and be within 2 miles of a K-8 school (not a high school), and eligible project types include bicycle infrastructure, shareduse paths, sidewalks, and projects to improve safety for non-motorized transportation. Projects previously submitted to an MPO Call for Projects (also Federal funding) are not eligible, per TxDOT.



At the time of this writing, TxDOT is conducting a call for SRTS applications, but with only limited funding available (\$8,700,000 statewide). Pre-applications are due April 12, 2019, and final applications due August 15, 2019.

Build Houston Forward is the City's initiative to repair and reconstruct street and drainage infrastructure. It was approved by the voters in November 2010 and created a dedicated payas-you-go fund, rather than continuing to fund these projects with debt instruments such as bonds, as well as laying out a process for retiring existing infrastructure debt. Projects are prioritized for funding on the basis of need, with a goal of reducing street flooding and improving mobility.

Projects come from the City's Capital Improvement Plan (CIP), a five-year plan updated annually. Public meetings on the CIP update are typically scheduled for February and March of each year; these took place in the study area on Thursday, February 28, 2019 (District D) and Wednesday, March 6, 2019 (District I). Build Houston Forward projects are to comply with former Mayor Annise Parker's 2013 Executive Order on Complete Streets, where context-sensitive designs of street projects are to ensure transportation improvements serve "motorists, public transit riders, pedestrians, people of all abilities and bicyclists."

Tax Increment Reinvestment Zones (TIRZs)

are formed by the City or County with State approval, and dedicate property tax revenues over some defined base amount (the increment) to infrastructure projects specifically within the defined zone. Currently, two TIRZs operate in the study area, Gulfgate (City of Houston TIRZ #8, established 1997, enlarged 1999 and 2014), and Sunnyside (City of Houston TIRZ #26, established 2015); in both cases, the TIRZ is defined by ordinance to exist for 30 years.

Like the City, the TIRZs have a Capital Improvement Plan (CIP) of infrastructure projects funded by their tax revenues; for example, the Gulfgate TIRZ's 2018 budget listed approximately \$93,000,000 for capital projects. The TIRZs, should their boards choose, may fund sidewalk, roadway, trail, and other projects identified in this plan. Expected funding availability for the TIRZs for 2019 is \$10,000,000 for Gulfgate and \$100,000 for Sunnyside.

Similar to TIRZs, Management Districts are formed by the City or County and fund improvements within a specific area. The difference is that Management Districts typically are funded through an additional tax levy or membership fees. They also have a Capital Improvement Plan and may choose to fund sidewalk, roadway, trail, and other projects identified in this plan. Currently, three Management Districts operate in the study area, Harris County Improvement Districts

#9 (Hobby Area District), #10A (5 Corners District), and #16 (portions of the Almeda Mall property).

The **Houston Parks Board's Bayou Greenways** 2020 (BG2020) project is a public-private partnership between non-profit Houston Parks Board, City of Houston and Houston Parks and Recreation Department in coordination with the Harris County Flood Control District, which manages the bayous. BG2020 includes completing a 150-mile network of connected parks and trails and 3,000 acres of greenspace access. Houston Parks Board is committed to \$120,000,000 in fundraising for the project, over \$110.500.000 of which has been raised. and the City has approved \$100,000,000 in public funding. Sims Bayou in the study area has existing trails roughly between Scott St. and MLK Blvd., from Reveille Park to I-45, and from east of I-45 to Milby Park. As of January 2019, a trail along Sims Bayou from Stuart Park to Reveille Street is under construction. The seament from Reveille Street to Reveille Park is under design, as is the segment from MLK Blvd. to Stuart Park. The segment from Scott St. to Buffalo Speedway is in final permitting. These projects, when construction in finished (estimated 2020) will result in a continuous off-street trail throughout the study area and as far west as Hillcroft Avenue.



Finally, several private foundations provide funding to support the planning and construction of pedestrian and bicycle facilities:

The American Hiking Society: National Trails Fund offers grants (\$500 to \$5,000) to member organizations for projects that improve hiking trails.

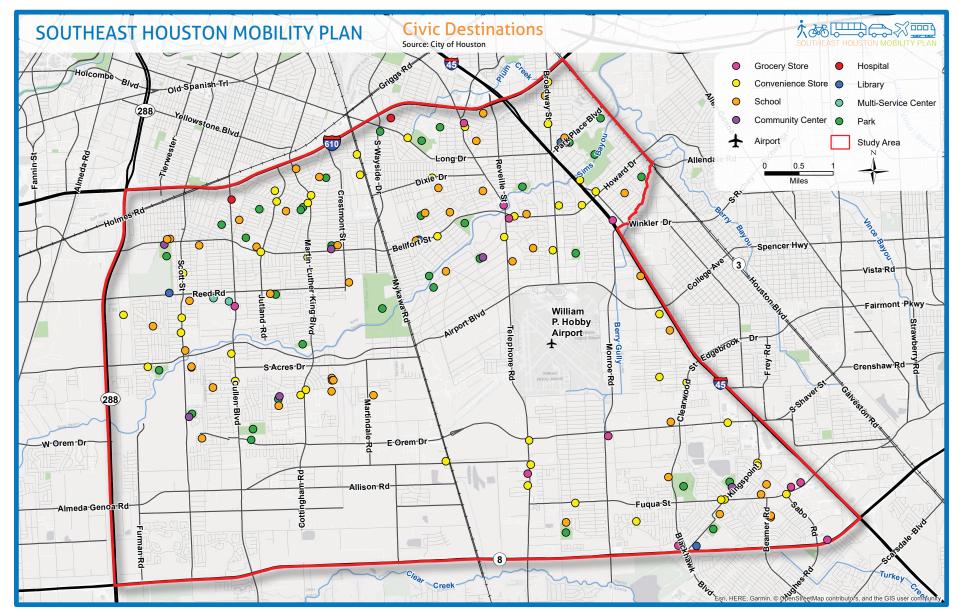
The **PeopleForBikes:** Community Grant Program provides grants to help construct bicycle infrastructure and support large-scale bicycle advocacy initiatives.

Advocacy Advance: Rapid Response Grants provide funding to organizations that are part of the League of American Bicyclists and the Alliance for Biking & Walking to support campaigns aimed at increasing or preserving funding for active transportation infrastructure.

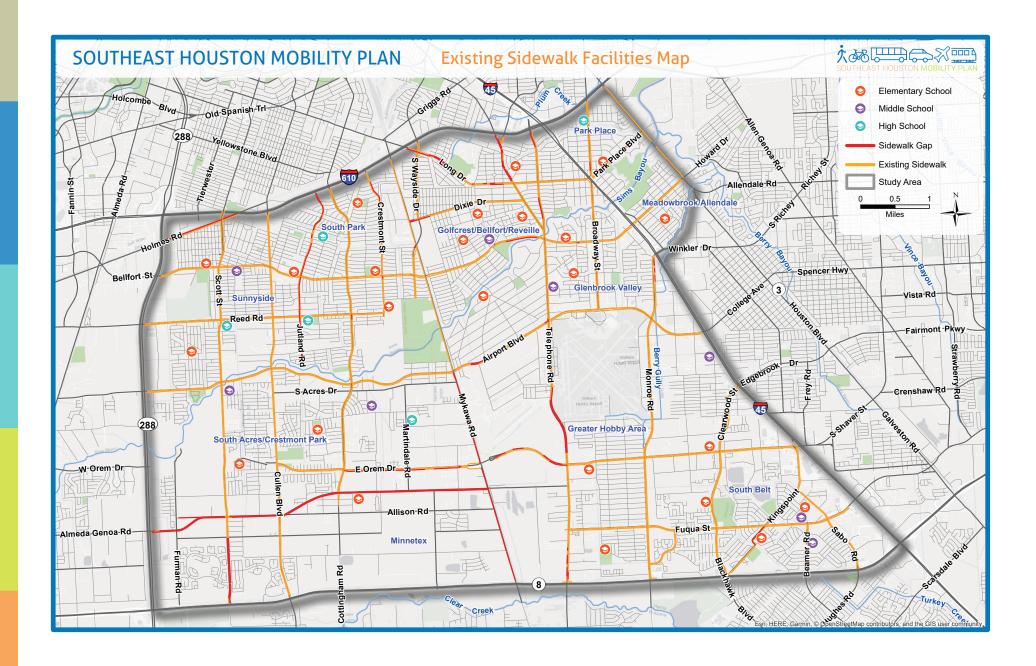
The Houston Endowment and the Kinder Foundation have provided funding to support land acquisition and trail development in our region including projects that support the Bayou Greenways Initiative.



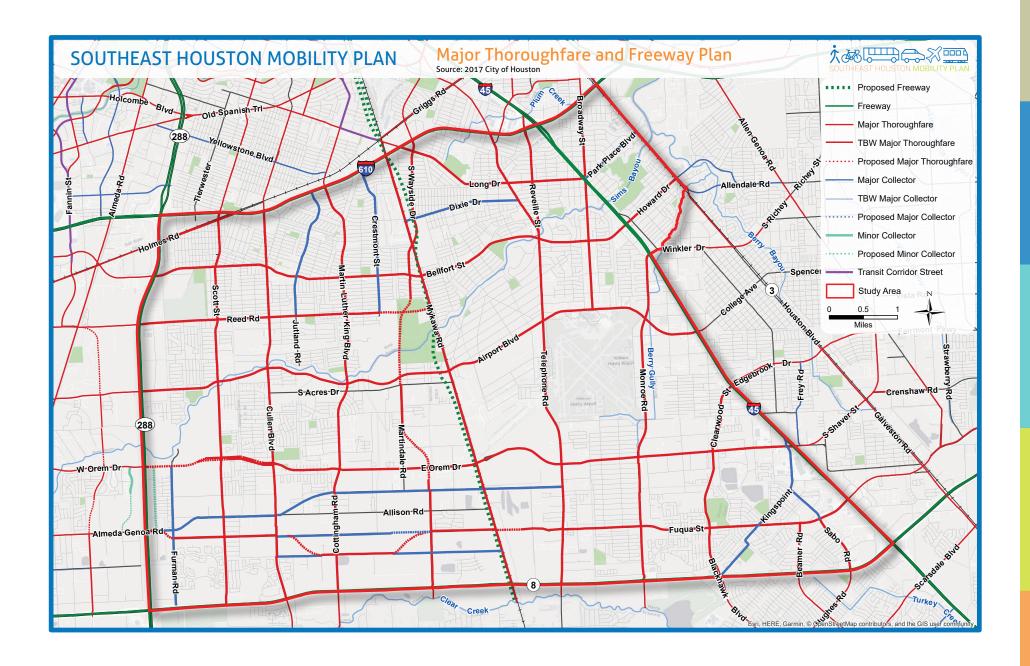
APPENDIX A: EXISTING CONDITIONS SUMMARY



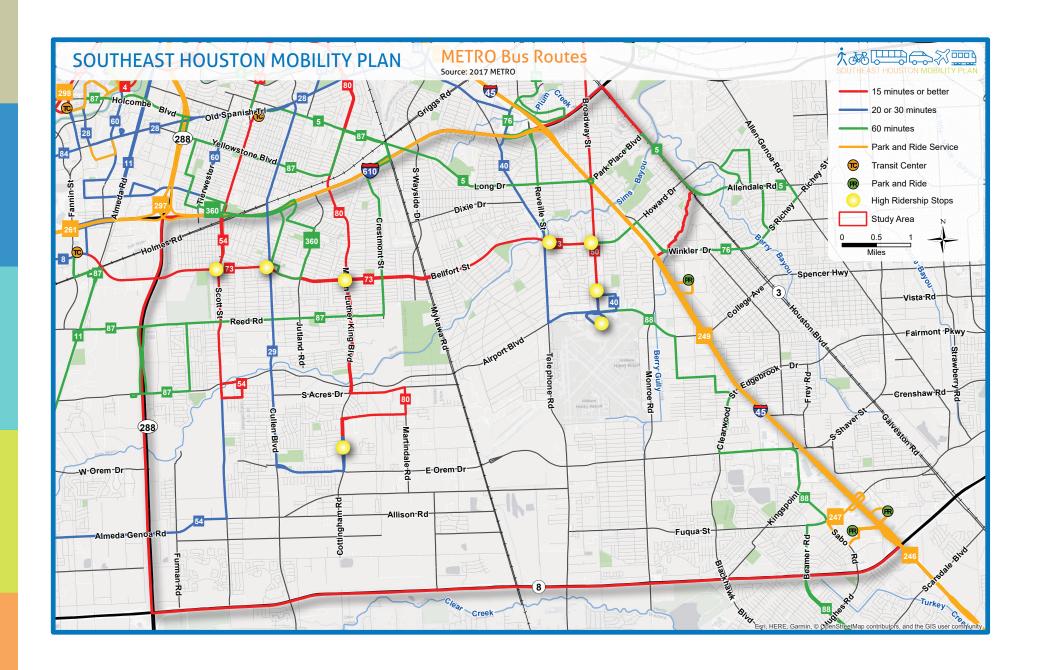




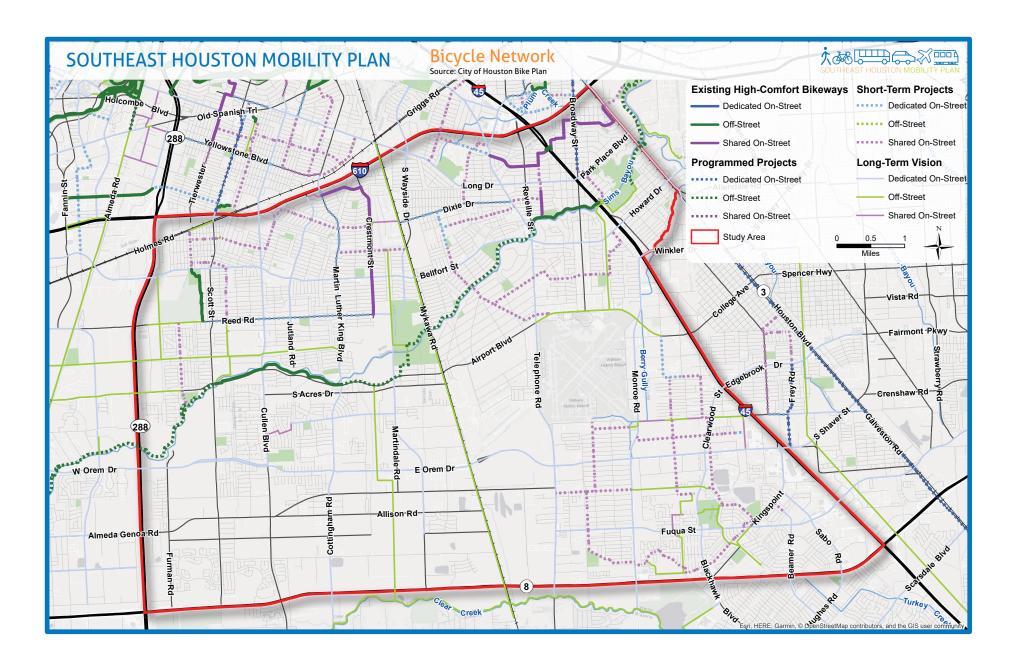




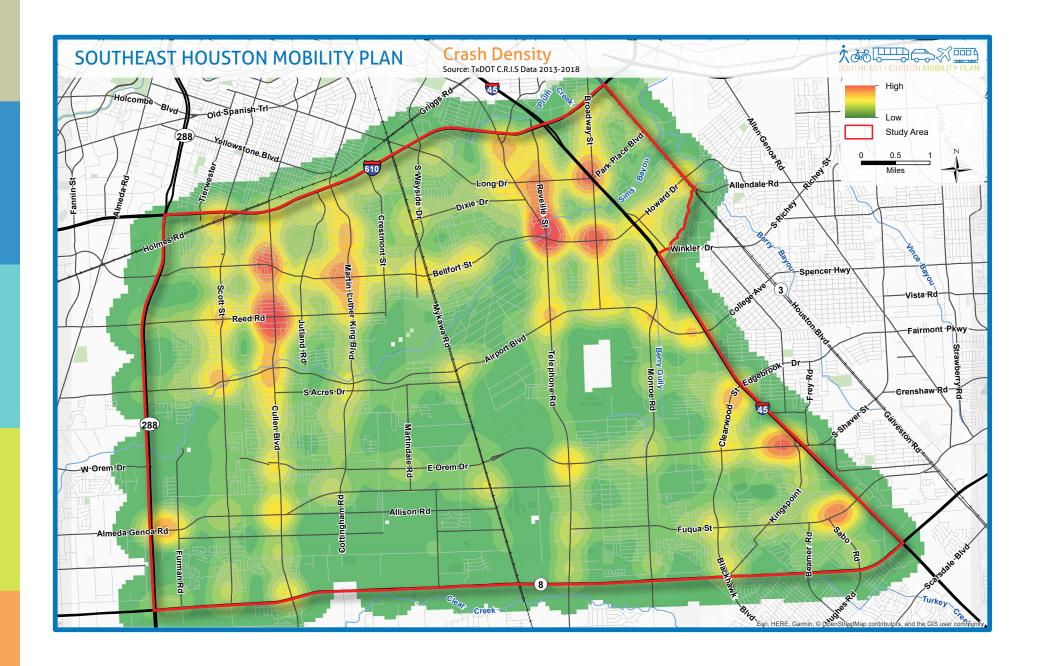




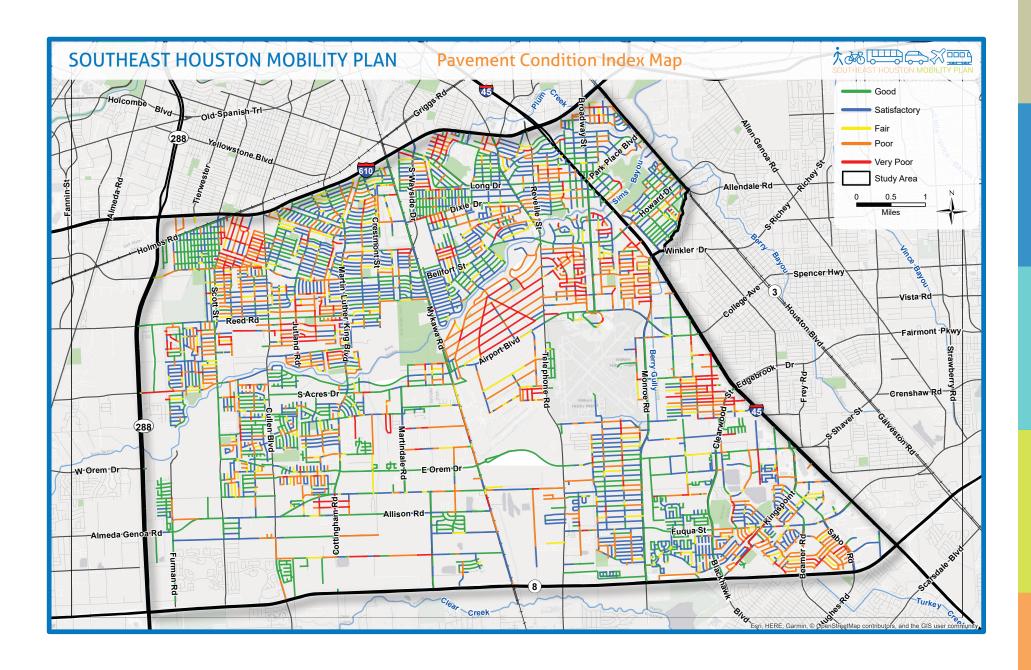




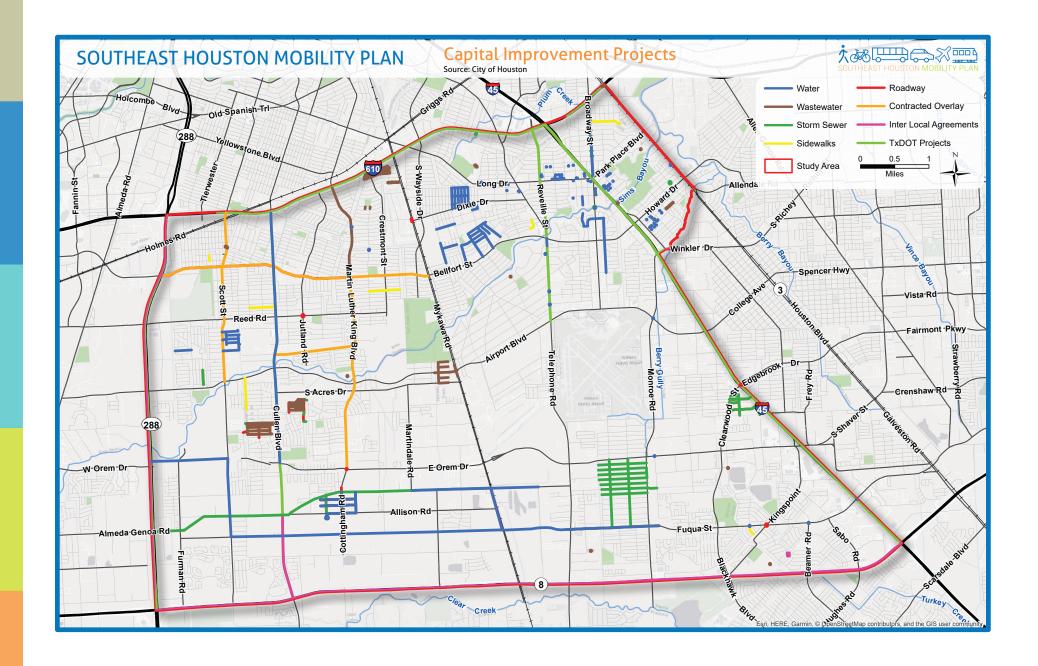




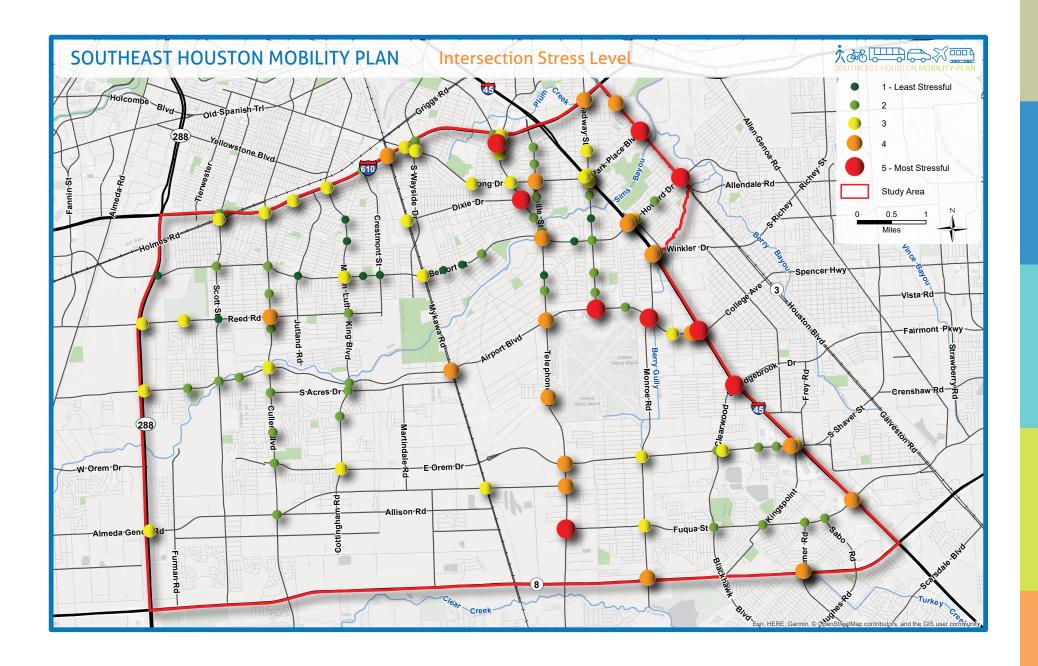




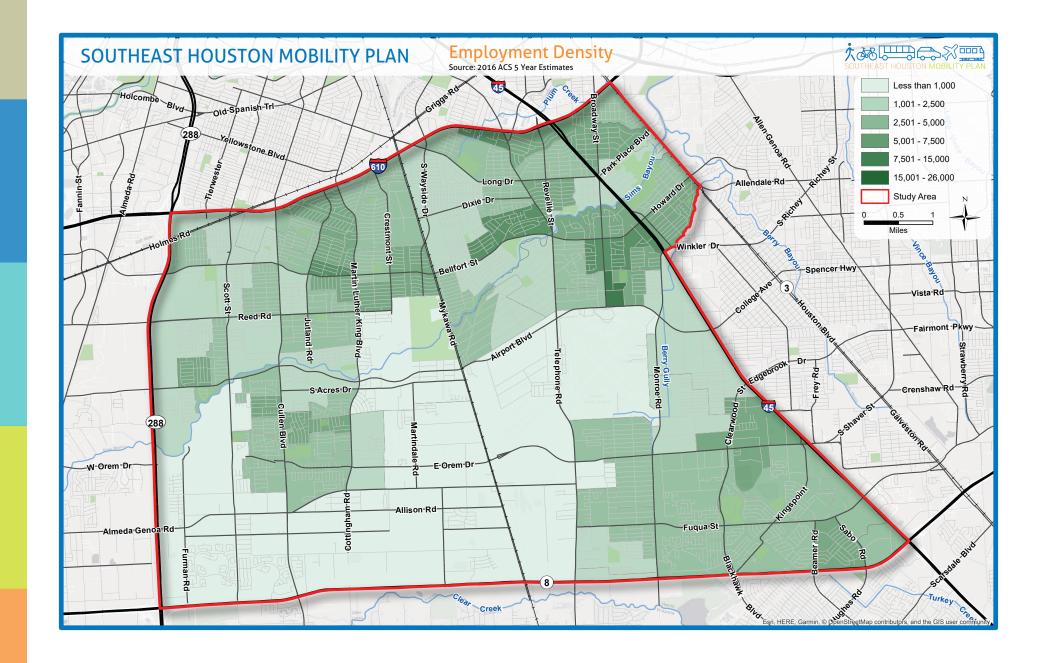




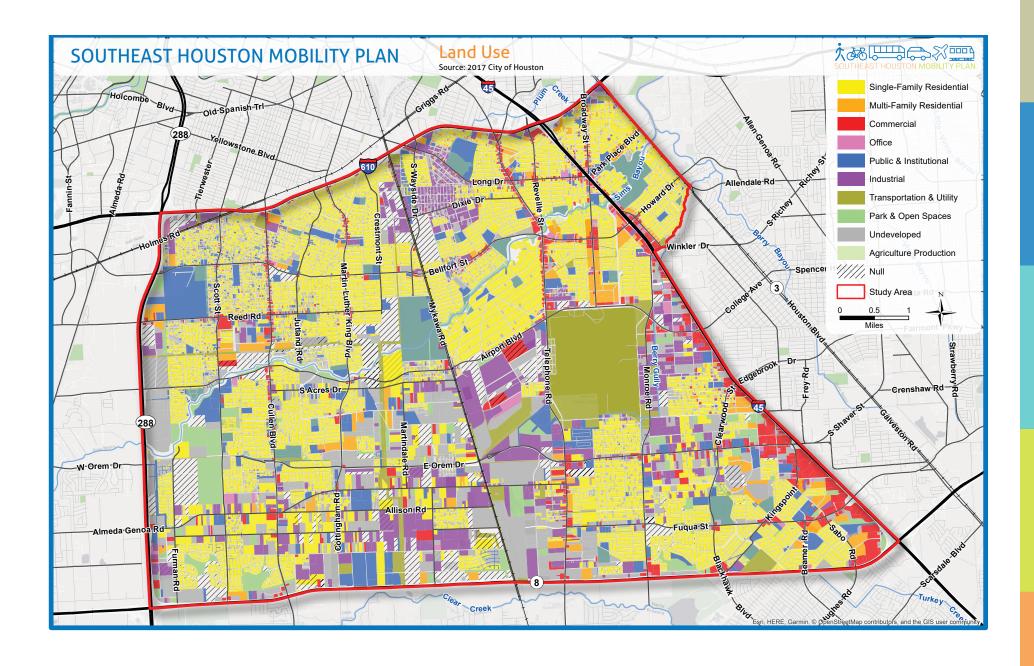




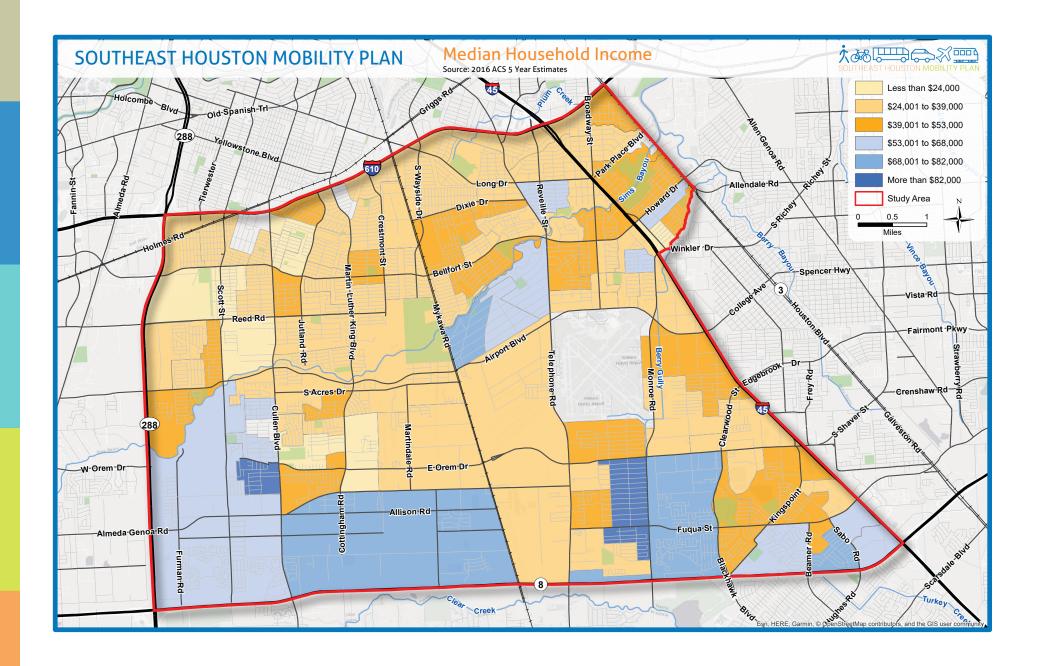




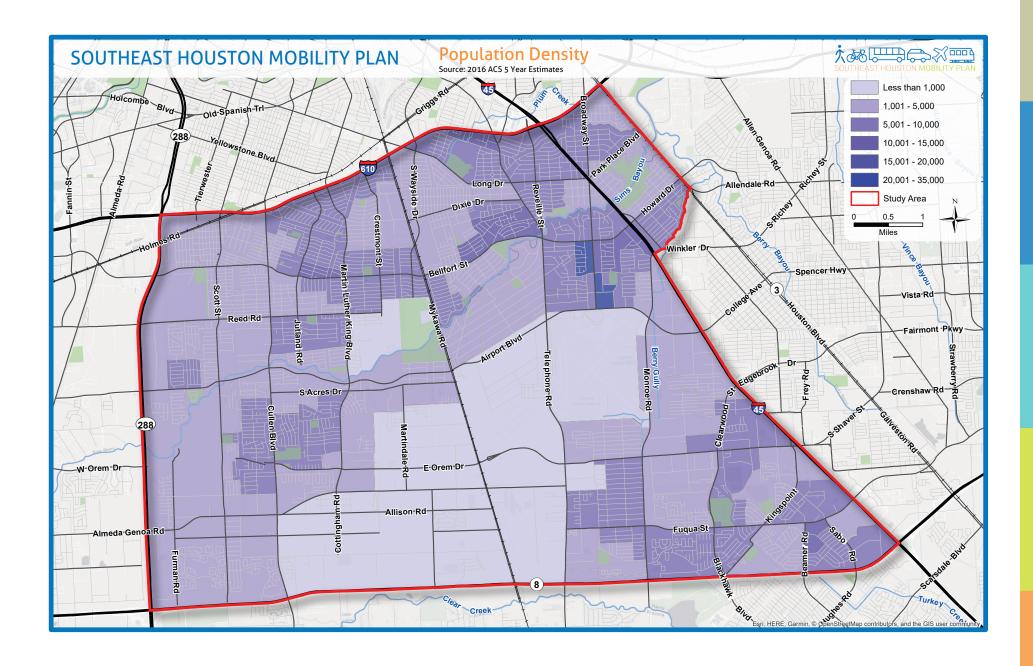




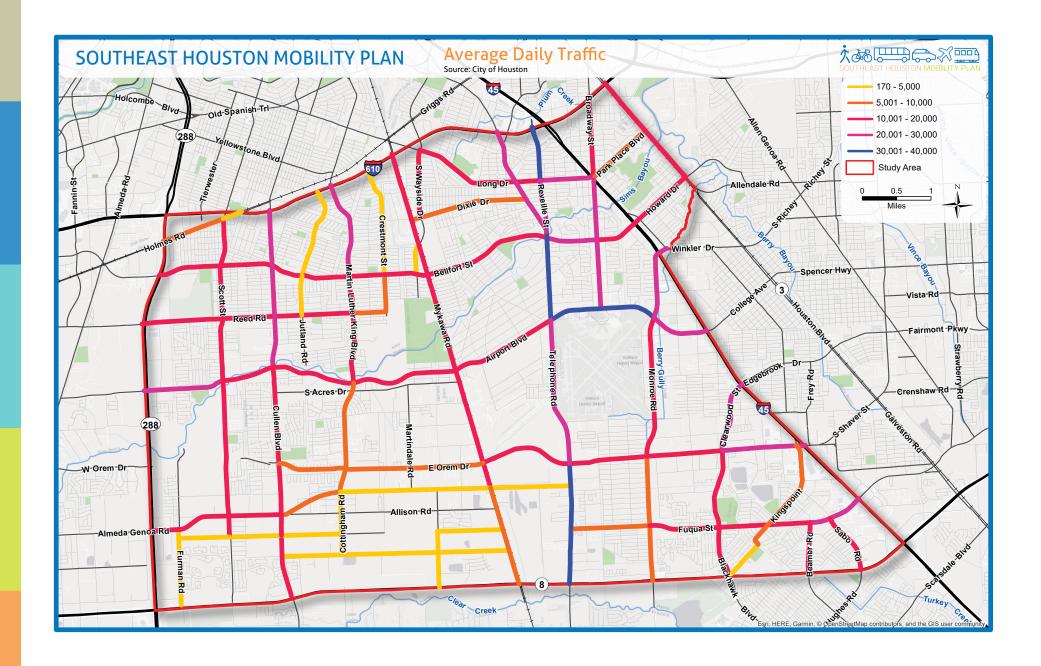




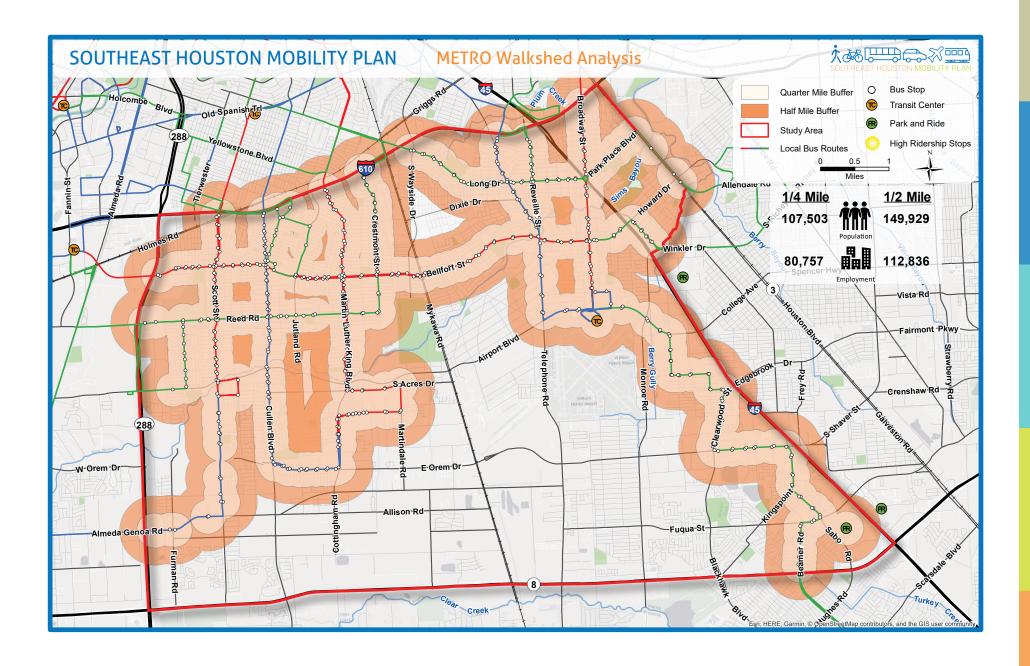




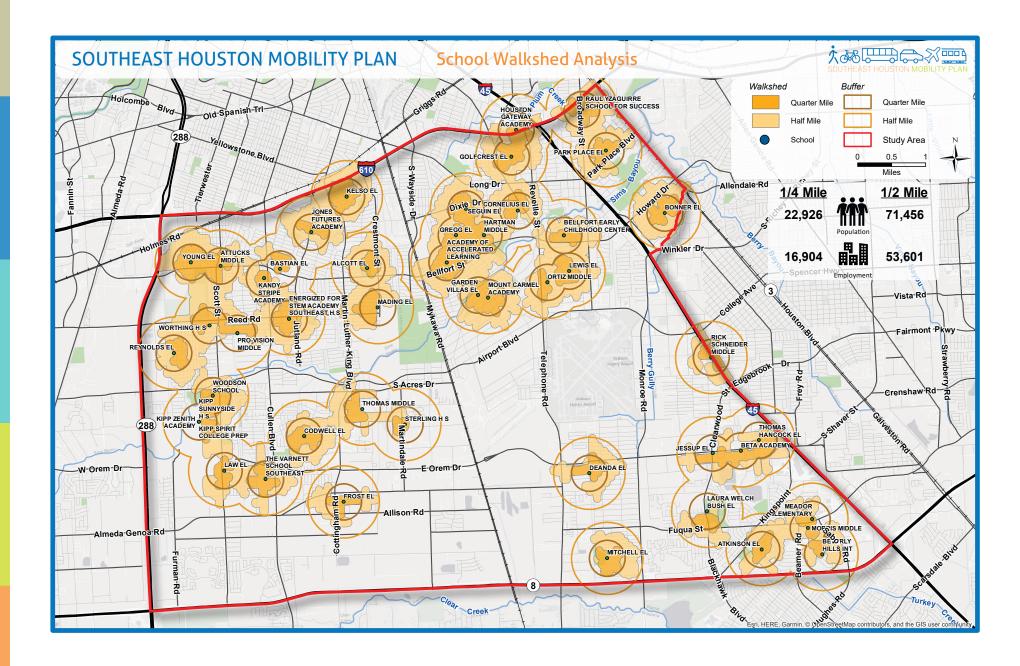




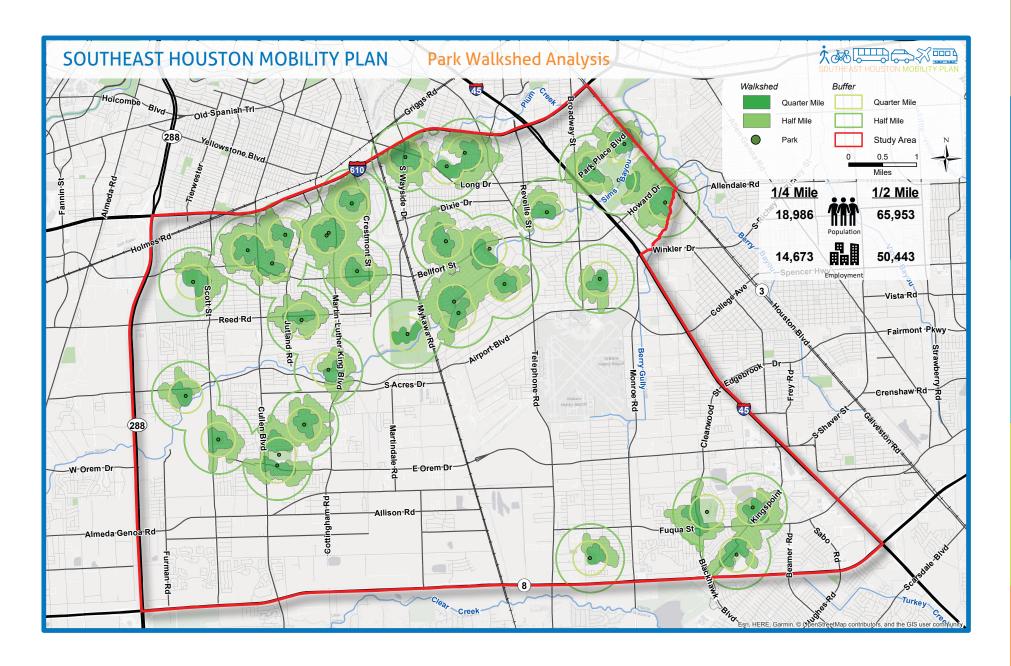




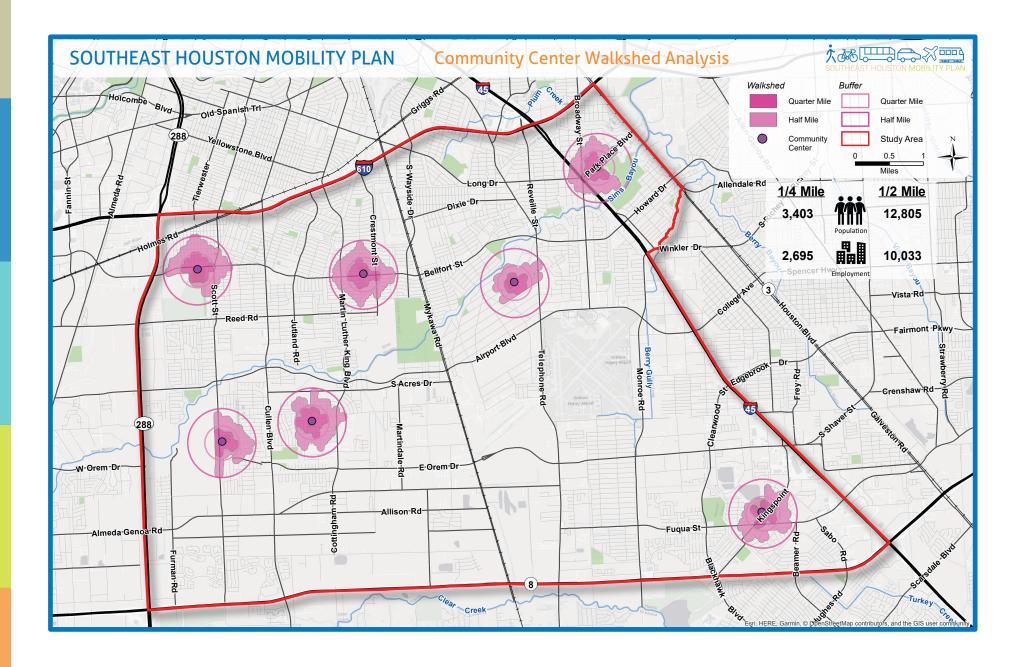




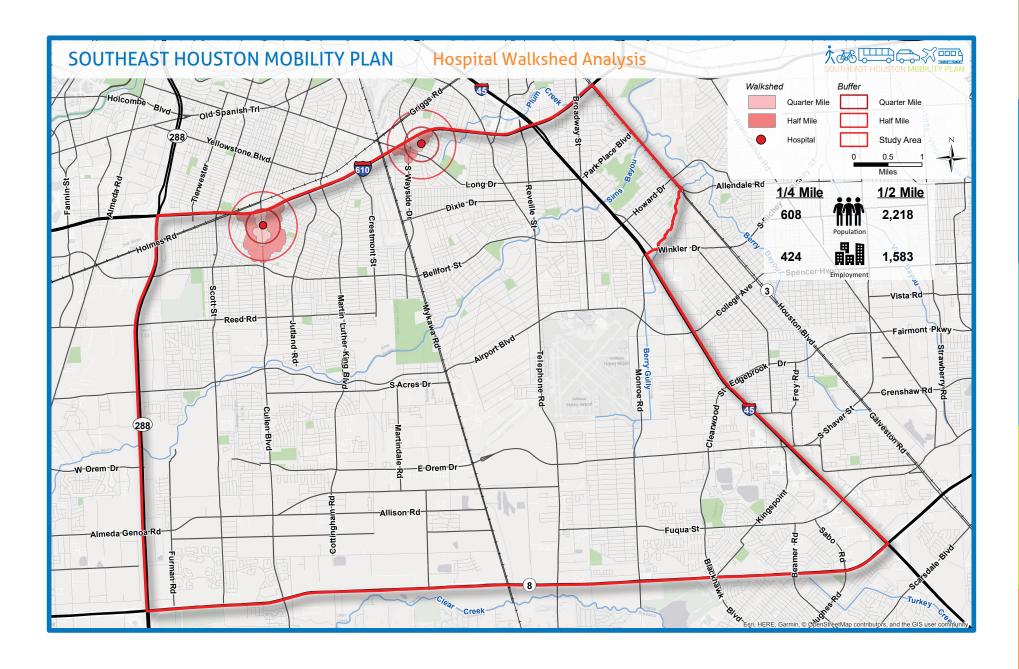




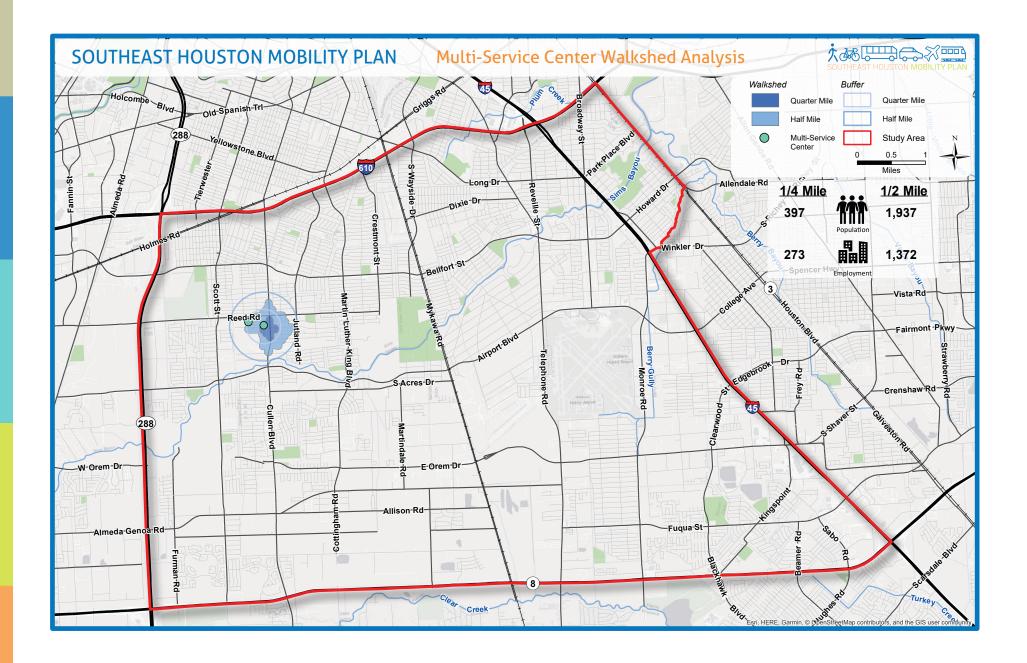




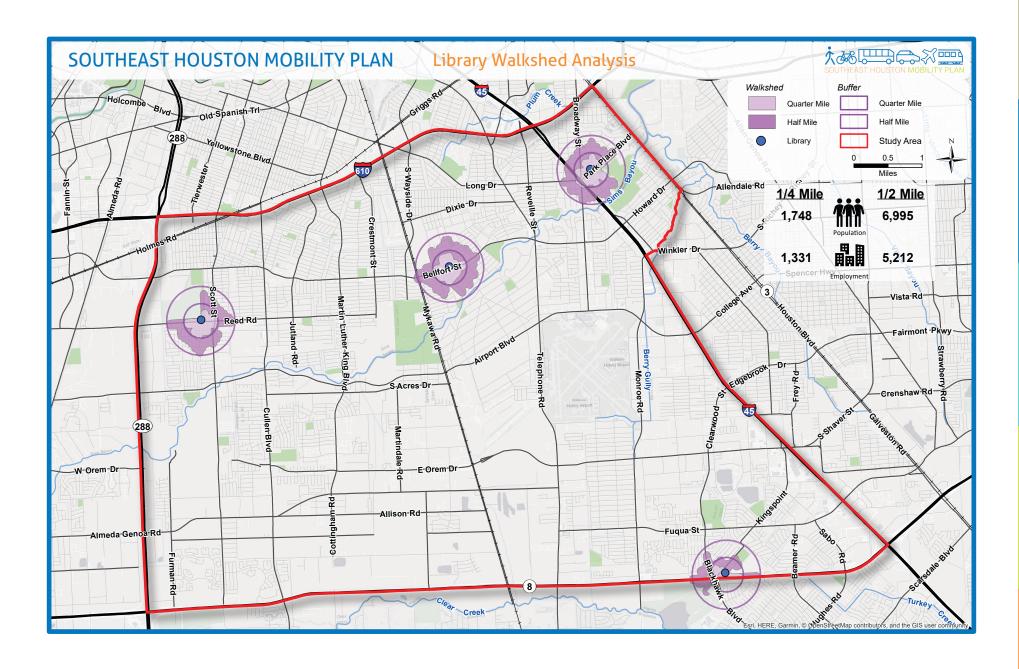














APPENDIX B: PUBLIC INVOLVEMENT SUMMARY

COMMITTEE MEETING #1 - MAY 24, 2018



KICKOFF STEERING AND TECHNICAL COMMITTEE MEETING

Southeast Houston Mobility Plan Date: Thursday, May 24, 2018 Time: 5:30pm-7:00pm Meeting Location: Harbach-Ripley Neighborhood Center

ATTENDEES

Melissa Beeler, City of Houston
Paresh Lad, City of Houston
Wu Ying, City of Houston/PDD
Khang Nguyen, City of Houston/HPW/TDO
Sharon Moses-Burnside, City of Houston
Cheryl Mergo, H-GAC
Gusta Booker, District D, TIRZ 8
Anita Hollamn, COH/TDO
Charles U. Airiohuodion, TXDOT
Jonathan Brooks, Link Houston
Rodney Jones, TIRZ 26
Roxis McKinney, District D
Raul Diaz, Rev. Park Place CC

Tom Brents, Hobby Airport District
Don Huml, TIRZ 08
Mary Roberts, District D
Jennifer Ostlind, City of Houston
Amar Mohite, Harris County Precinct One
Chelbi Mims, One World Strategy Group
Priya Zachariah, METRO
Beth White, Houston Parks Board
Tracy Stephens, Gulfgate TIRZ, Sunnyside
Kurt Schulte, Walter P. Moore
Louis Cutaia, Walter P. Moore
Luis Guajardo, Asakura Robinson
Zakcq Lockrem, Asakura Robinson
Saima Musharrat, Asakura Robinson

COMMITTEE DISCUSSION GOALS

- Engage the community to understand mobility issues.
- Build on previous plans.
- Provide engaging and accessible activities which encourage broad-based participation.
- 4. Develop an implementation strategy.

AGENDA

- Bus tou
- 2. Welcoming attendees and sign-in
- 3. Elected officials' welcome remarks
- 4. Presentation
- Facilitated stations
- 6. Regroup, remarks, Q&A



JUNE 2018



BUS TOUR

An hour-long bus tour started from Harbach-Ripley Neighborhood Center and took the committee members through the study area for an overview of existing conditions. The route included segments of Dixie Dr, Park Place Blvd, Broadway St, Airport Blvd, Scott St, and frontage of 610. The intent was to call attention to representative mobility issues throughout the study area, including congestion and multimodal conflicts on Broadway St and other segments near IH 45, the important role of Hobby Airport as a regional destination, the planned intersection treatments and greenspace by Houston Parks Board along Sims Bayou Trail, and the need for evaluating existing intersections, sidewalks, and bus stops near the planned Sunnyside multi-service center, general roadway and sidewalk conditions throughout the community, and the limitations of access and connectivity within local neighborhoods.

MEETING NOTES

The meeting kicked off with a round of introductions that included committee members, elected and appointed officials, city staff, and consultant teams, followed by feedback of the hour-long bus tour that took place before the meeting. Several comments from the committee members included:

- The new Sunnyside Community Center will be built on Reed Road,
- · Bellfort Ave. from MLK to 288 needs improvements,
- · Scott Blvd/Airport and other streets are getting extra traffic from 288 expansion,
- · Telephone Road- pavement failure due to truck traffic,
- Investment in the Study Area has not kept up with the community's need,
- Need for comprehensive policy that includes land use, parking, streetscape, etc. and
- · Hobby Livable Centers Study as a resource.

Afterwards, a 15-minute presentation by Kurt Schulte oriented the committee members about the study area, project goals, timeline, and examples of study recommendations. The presentation ended with a group exercise that asked the following questions for input.

1. What does success look like in this project?

- Improved enforcement of existing policies and ordinances participants voiced concerns about the city not enforcing existing policies and ordinances in various communities within the study area and the need to start there.
- Improved access to services and programs the study area has many different communities with varying levels of assets. Participants suggested a more interconnected study area should focus on enhancing mobility to existing services and programs, as well as increased connections between neighborhoods.
- Improved coordination with utilities and examination of pedestrian obstructions natural and man-made barriers are prevalent throughout the study area and participants inquired about the project team's coordination with freight and energy sectors to develop realistic solutions.
- Improved streets and sidewalks with asphalt neighborhoods with industrial uses are dealing with degraded pavement conditions that do not lend themselves to low-cost multimodal restriping and may be costlier than estimated in city-wide plans. This plan should identify conditions on these corridors that have been identified for transit, bike, and/or pedestrian amenities to better estimate costs.

SOUTHWEST HOUSTON MOBILITY PLAN

2. Indicate your most important mobility goals.

- Connected communities fragmented communities throughout the study area could be improved through mobility recommendations.
- Comprehensive drainage plan for streets underground infrastructure investments are stifling revitalization opportunities.
- Multimodal mobility options for all road users people in the study area walk, bike, and ride transit more than in other areas of the city yet the roadway infrastructure does little to support these transportation needs.
- Pedestrian safety on streets and transit stops areas leading to transit stops remain unsafe, through lack of sidewalks, lighting, and maintenance of right of way.
- · High visibility on crosswalks better signage to motorists and cyclists about pedestrian crossing areas.
- Understand mobility patterns in the Study Area does the roadway network support people passing through the study area or support people living in the study area?
- · Educate residents about the recommendations
- · Access to and from, and within the Study Area
- Identify immediate impact projects as well as long-term projects the implementation component of the plan should clearly delineate between long term aspirational investments and those catalytic projects that can make an immediate impact to people's current transportation needs.
- Ensure share of City of Houston maintenance budget as the City of Houston revises its maintenance obligations throughout the city, communities in the study area should be prioritized for the legacy of neglect that exacerbated issues and costs.
- · Coordinated and phased investment strategy
- Leverage resources from TIRZ and Management District
- \bullet Create a resource pool from City, County and METRO leverage partnerships and align resources to maximize impact.





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 Identify key transportation gaps in the community. What major destinations (parks, schools, job centers, trails, etc.) should this project work to improve transportation choices to? (Use the Map in the next page to identify places)

This activity asked the committee members to use green dots to identify the major destinations and red dots to identify the gaps on the map. Participants identified the existing schools, parks, Hobby airport, and 1940 Air Terminal Museum as the major attractors in the study area. The upcoming mixed-use development at Bellfort Station in the Hobby Area Management District was identified as a major destination in near future, which will also generate high traffic volume. Several gaps identified in the study area included:

- · Truck traffic on Telephone Road,
- · Congestion around Ortiz Middle School,
- · Dangerous intersection at I-45 frontage road and College Ave,
- · Unsafe design of traffic circle on Park Place Blvd,
- Stray dogs in the neighborhood at the Park Place Blvd and Reveille St,
- · Traffic congestion on Woodridge Dr,
- · Connectivity issue to I-610 from Mykawa St.



SOUTHWEST HOUSTON MOBILITY PLAN

2. What are the biggest challenges and opportunities to mobility in this area?

Committee members identified the following challenges to mobility in Southeast Houston:

- · Infrastructure in need of repair,
- · Lack of bike connectivity and safety,
- · Drainage and open ditches,
- · Unequal distribution of resources to invest in different neighborhoods,
- Mixture of land uses that makes it difficult to design for different traffic volumes,
- · Need focus on all streets,
- · Lack of connections to civic destinations and business centers via transit.
- · Average driving distance in the study area may be longer (need to be looked at),
- · Access to transit is limited by the missing sidewalks and prevalence of open ditches,
- HISD transportation service provided to households 2 miles away from schools where families living within that boundary are caught between no bus service and poor multimodal options,
- · Limited mobility options for aging residents,
- · Lack of transit in the neighborhood retail and business,
- · Rigorous collaboration between METRO and rideshare options missing, and
- Proposed SH35 as a divider in the community.

Several opportunities identified by the members included:

- Proximity to Sims Bayou Greenway and open space along the bayou,
- · Proximity to Hobby airport, NRG stadium, 2 LRT stations,
- · Low congestion compared to the city,
- · Availability of wide Right-of-Way,
- · Road diet options to be implemented on the current wide lanes,
- · Microcosm of City of Houston,
- · Active participants in neighborhoods,
- · Better connectivity options in bike plan,
- · Identify neighborhood-level generators,
- · Build on existing mobility planning in the Study Area, and
- · Animal control.

JUNE 2018





2ND STEERING AND TECHNICAL COMMITTEE MEETING

Southeast Houston Mobility Plan Date: Tuesday, July 24, 2018 Time: 3:00pm-5:00pm

Meeting Location: Sunnyside Multi-Service Center

ATTENDEES

Melissa Beeler, City of Houston Paresh Lad, City of Houston Anita Hollman, HGAC Stephan Gage, HGAC

Jonathan Brooks, Link Houston Jennifer Ostlind, City of Houston

Amar Mohite, Harris County Precinct One Toby Stephens, Hobby Airport District

Regina Lindsey, Hobby Airport District

Tom Brents, Garden Villas

Maria Town, City of Houston Mayor's Office of People with Disabilities

Kay Barbour, South Belt Ellington Chamber Gusta Booker, GSM Uplift

Leroy West, Super Neighborhood 71/76

COMMITTEE DISCUSSION GOALS

- Engage the community to understand mobility issues.
- 2. Build on previous plans.
- Provide engaging and accessible activities
 which encourage broad-based participation.
- 4. Develop an implementation strategy.

AGENDA

- . Greetings and introductions
- 2. Presentation
- 3. Outreach for Public Meeting
- 4. Map Reference Book
- 5. Committee Activities, Goals and Metrics
- Regroup, remarks, Q&A

Susan Jaworski, METRO
Khang Nguyen, City of Houston Public Works
Jessica Wiggins, BikeHouston
Don Huml, TIRZ 08
Lisa Kasianovitz, Houston Parks Board
Roxie McKinney, Sagemont
Charles Airishunodion, TxDOT
Chelbi Mims, One World Strategy Group
Tracy Stephens, Gulfgate TIRZ, Sunnyside
Bryan Brown, Walter P. Moore
Kurt Schulte, Walter P. Moore
Louis Cutaia, Walter P. Moore
Luis Guajardo, Asakura Robinson
Saima Musharrat, Asakura Robinson
Colin Rice, City of Houston Hobby Airport



MEETING NOTES

1. Introductions

The meeting kicked off with a round of introductions that included committee members, elected and appointed officials, city staff, and consultant teams.

2. Presentation

- · Project timeline status and trajectory of next steps
- · Joint Committee Meeting #1 recap,
- Wikimap of the project area with comments from meeting#1, will get updated with feedback from participants in the meetings and online,
- Participants suggested including METRO's Origin/Destination Data into the wikimap (Link Houston has it cleaned up and will share); bike counts on METRO routes serving the study area; and, being mindful of the Hobby Airport area where data can be inaccurate or skewed Telephone Road-pavement failure due to truck traffic,
- Project area context maps: Bicycle Network, Capital Improvement Projects, Civic Destinations, Employment Density, Land Use, METRO Bus Routes, Major Thoroughfare and Freeway Plan, Median Household Income, Population Density, Average Daily Traffic, Crash Density, .

3. Outreach for Public Meeting

The study's first Public meeting is announced to be tentatively scheduled for August 22, 2018 in the evening. The consultant team shared some initial thoughts on getting the word out and scheduling the public meeting, though opened the floor to discuss the item. Participants made a series of suggestions to the public meeting.

- Open House style over the course of a couple hours so people can come and go at their convenient time.
- · Intro video loop with and introduction and instructions for the meeting.
- · Hold preferably on a Saturday morning.
- · Add short introduction about Mobility Plan. One World suggested potentially a video.
- · Add food from local vendors willing to sponsor in exchange for publicity.
- Publicize meeting flyers in grocery stores and churches, in addition to the normal community and social media channels.
- \bullet Location on high-frequency bus route preferred, maybe show the bus stop on the poster/flyer; ensure the facility and access to/from the bus stop are ADA compliant at minimum .
 - · Should be translated in Spanish and Vietnamese, and interpreters should be available at the meeting.
 - Reach out to Houston Abilities Expo to reach out to people with different abilities.
 - $\bullet \ \text{Non-digital platforms as many people may not have access to smartphones or internet.}$
 - Prepare a Meeting in a Box training session for stakeholders and community groups
 - Reasonable facility accommodations (i.e. Computer Assisted Real-Time Translation, CART).
 - · Notify COH if copies of posters needed
- SOUTHWEST HOUSTON MOBILITY PLAN



4. Map Reference Book

CDS presented on the CMA H-GAC employment and population growth estimates 2015-2045. 2045. Quick facts:

- Approximately 90% of residents working in the project area come from outside and 90% of residents living there go outside the project area for work.
 - · Add a graphics to show the people living and working in the area.
 - There was general discussion on data accuracy and new data availability.

5. Activities

Goals:

- · Improving existing substandard streets, bringing them to state of good repair
- · Infrastructure designed to manage vagrant occupancy under the freeways.
- · Infrastructure suitable for senior populations.
- · Resilience impact assessment of new development

Metrics:

Below is the table with participant feedback gathered at the second steering committee meeting. Participants included post-its under "how else would we measure?" and "additional thoughts?". A few of the more salient metric recommendations that stood out include:

• Resilience - Measuring mobility options during catastrophic rain events as a function of Resilience. For instance, what streets are likely to serve as evacuation routes or not likely to flood. Perhaps this also speaks to the the availability of flood emergency responders and first responder routes to safety.





JUNE 2018

- Neighborhood Connections the amount of high-comfort bikeways within a quarter-mile of transit stops, parks, bayou trail heads, and other community resources. How connected are transit nodes within a quarter and half-mile of each other? And finally, how frequent are transit lines in the area and the extent of transit service within the study area.
- Regional Access participants suggested measuring travel times to and from major activity centers via transit and bike and include the service span of transit service in the study area in comparison to workforce needs (i.e. comparing to industry/occupation and travel patterns).
- Transportation Choices participants encouraged the team to assess access to bike share, car share, TNCs, transit, and bike-ped facilities. It was also suggested that transit reliability be taken into account along existing services to gauge how effective these choices currently are.
 - · Health -- include visibility and lighting in the assessment · Resilience impact assessment of new development
- Partnerships participants suggested being more intentional with reporting back on successful partnerships that lead to implementation and the cost savings



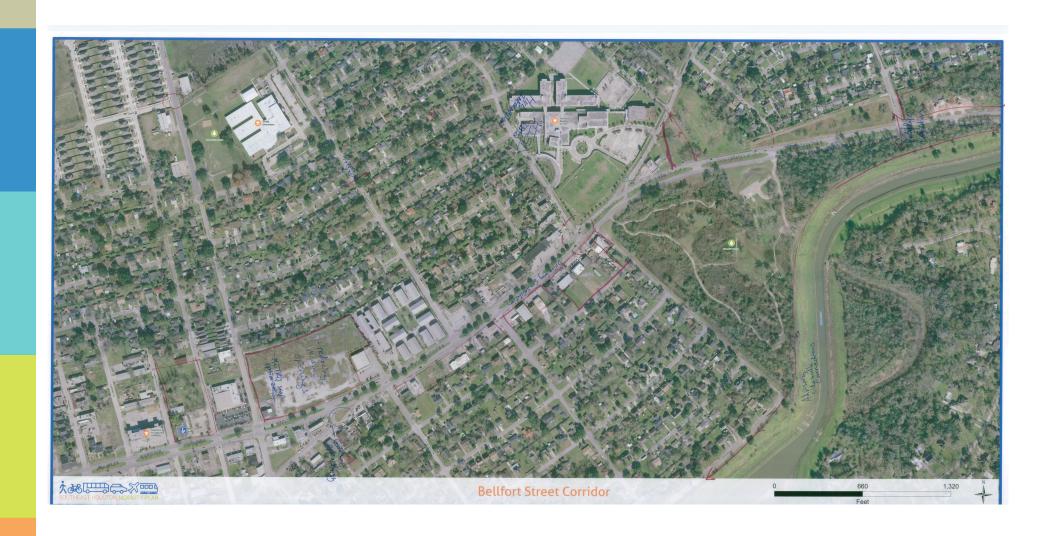
SOUTHWEST HOUSTON MOBILITY PLAN



COMMITTEE MEETING #3 - OCTOBER 30, 2018



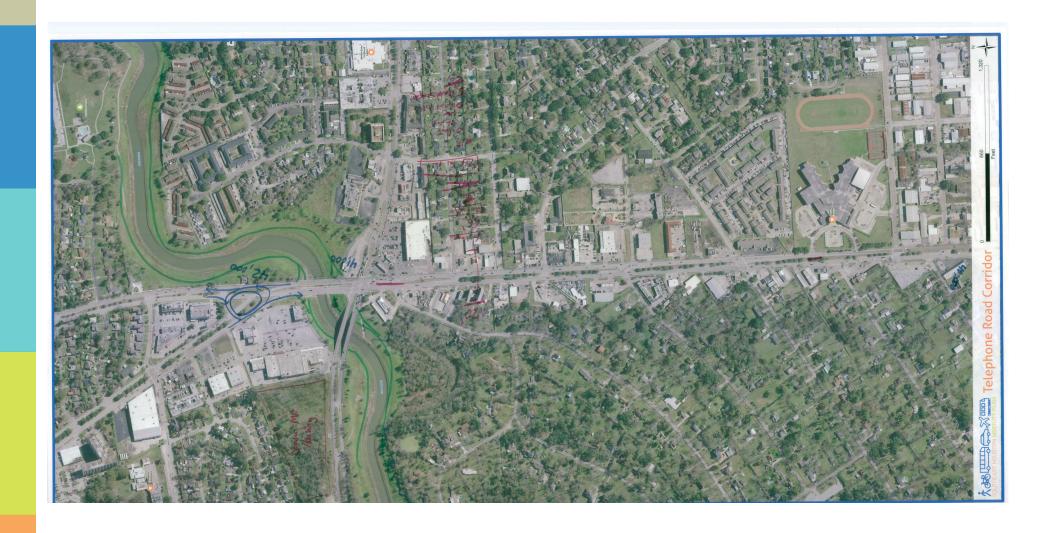






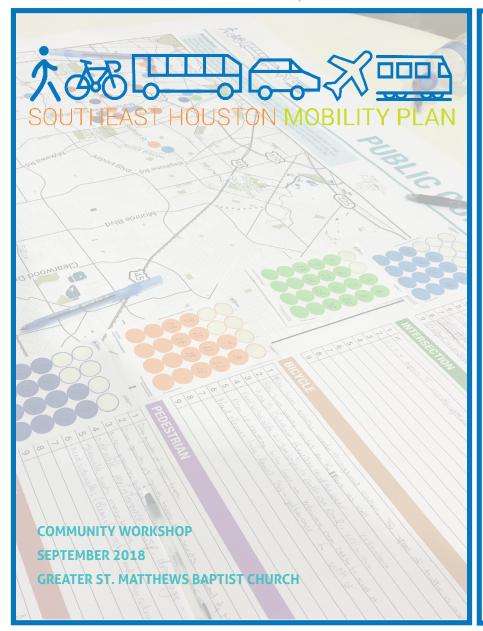








PUBLIC MEETING #1 - SEPTEMBER 8, 2018



PUBLIC ENGAGEMENT FRAMEWORK

The purpose of the Southeast Houston Mobility Plan is to conduct a comprehensive mobility study in the area defined as the "Southeast Houston Sub-Area," which is bound by Interstate 610 to the north, State Highway 288 to the west, State Highway Beltway 8 to the south, and Interstate 45 and Galveston Road to the east ("Area"). The Plan will be used to guide the City of Houston's short, medium, and long-term multi-modal mobility planning efforts and to identify implementation projects that will improve mobility and access in the Area.

A multi-layered approach to public involvement requires varying levels of participation from community stakeholders and the general public. The engagement approach is designed to carry on in a continuum – from those wishing to be engaged in every step of the planning process, to those simply desiring to be informed of the Plan's progress. Meaningful, two-way dialogue between the project team and the range of stakeholders is intended to cultivate ownership for the Plan's vision, goals, recommendations and implementation.

The project team is utilizing tools and strategies to develop deep understanding of the mobility challenges and opportunities in the study area by engaging residents, technical experts, community leaders, and elected officials through a steering committee, technical committee, public meetings, and pop-up tabling opportunities at community events.



1ST PUBLIC MEETING

This document is a summary of the Plan's first public meeting, held Saturday, September 8, 2018 between 9:00AM - 12:30PM at Greater St. Matthews Baptist Church within the study area in the South Park neighborhood. Over 40 people attended the meeting and provided input through a variety of stations. The meeting consisted of interactive presentations and activities that invited attendees to share transportation challenges and concerns in their community. Residents were also encouraged to visit various workstations where they contributed their thoughts and opinions on topics such as bike safety, roadway congestion, A.D.A. access, transit, walking, intersections, and overall mobility.

Over 1,000 flyers and points of contact in the weeks leading up to the event, including visits to area businesses, civic groups, and social media posts. Snacks and light refreshments were generously provided by the Houston Parks Board and the event space volunteered by church leaders at Greater St. Matthews Baptist Church.

SEPTEMBER 26, 2018



WHAT WE HEARD

GOALS PYRAMID

Participants were provided an opportunity to provide input on the goals of the study. This activity contained a list of goals established by community leaders and technical experts from the Joint Steering and Technical Committee. Participants were asked to sort listed goals in a pyramid hierarchy that ranged from low, mid, high, and very high priorities. Each participant received a pyramid worksheet accompanied by a sticker sheet that contained the committee's seven goals and six blank dots to write in additional goals.

Responses were counted and scored with a composite score and aggregated in the following way:

- Low = 1 point
- Medium = 2 points
- High = 3 points
- · Very high = 4 points

The highest ranked goals include neighborhood connections, safety, and health. People's additional write ins included recommendations to add a METRO shuttle to nearby transit centers, trash cleanup, more tree-lined streets, lighting, and sidewalk repairs.

GOAL	SCORE		
CONNECTIONS	66		
SAFETY	63		
HEALTH	52		
RESILIENCE	46		
CHOICES	41		
PARTNERSHIPS	29		
REGIONAL ACCESS	27		





Public Mee September Greater St.		Church		The strength was the	er Versen vertre en		
	Southeast Housto with measurable, connections that v	tt usten Mobility Plan ad e. The Plans strategies achievable and ambid will promote the area? t goals? What other go	, actions and perfor ous projects, policie s economic competi	mance measures wi is, and programs tha thriness and well-be	II build on previous e g will create and reen	fforts	
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What do we value?							

PICTURING TRIPS

This station attempts to better understand the public's interest in the transportation and land use nexus. Participants were asked to identify the type of places most frequented by selecting images at the workstation and combine them with the types of transportation facilities used to access these destinations. One half of the sheet demonstrates destinations (parks, schools, employment, medical, or retail). The opposite half displayed desirable transportation facilities for these uses (highways, major roadway, transit, bikeways, complete street, offstreet trails, curb extensions, raised crosswalks, etc.). Participants then were asked to draw an arrow from left to right (i.e. travel mode to destination).

The concept is to get a glimpse for how people would prefer to travel to these destinations, all things being equal in the built environment, particularly if similar conditions persisted between modes pertaining to travel times, safety, and convenience.

SIDEWALKS

Participants selected sidewalks primarily to parks, school, work and shopping destinations. A couple of participants drew lines from sidewalks down to public transit, representing the reality of riding the bus or rail.

BIKEWAYS

Participants identified bikeways as a travel mode for each of the five destinations with parks and museums receiving the higher share of the distribution and proving the most versatile travel mode on this exercise. One participant made the bikeway to public transit connection, demonstrating how she frequents museums by starting out with a bike ride from home to public transit then getting off in the Museum District.

OFF-STREET TRAIL

Not surprisingly, off-street trails were linked more closely to park destinations. A few lines also were made to medical and museums though not as much as parks. This connection reinforces the preference of







SEPTEMBER 26, 2018



the community to use off-street trails for recreation or fitness activities rather than active commute to work or shopping trips.

PUBLIC TRANSIT

Participants connected public transportation to medical, museum, and work destinations in its overwhelming majority. A few minor lines demonstrated the preference for shopping destinations through most participants cited the need to carry large volumes of groceries as being inefficient for public transit.

MAJOR ROADWAY

Medical and shopping were the most prevalent choices for major roadway usage. People cited the preference to use a private automobile if they were in need of visiting a doctor while ill or the ability to shop more autonomously by not having to depend on a bus schedule or having to carry items onto a

HIGHWAY

Selected the least in this exercise, highways were primarily identified for work, medical, and shopping trips. Most participants manifested minimal preference for using highways in an all things being equal scenario though that is contrary to the mobility choices people make on a daily basis.

RE-IMAGINING STREETS

This activity provided an opportunity for people to creatively design their street. Sheets with a city block in perspective view were provided to color and draw what the public right of way should resemble. The sheet included an outline of a street and buildings, intended to give people a canvas to reflect their ideas onto.







PUBLIC COMMENT MAP

This activity is the analog version of the digital wikimap station that asked participants to include public comments pertaining to the five online categories (i.e. roadway, intersection, bicycle, pedestrian, or safety). Participants were able to identify mobility and access issues on the map by placing a numbered color dot on the map and list their comment on the side of the map where a number is listed to correspond with each dot placed on the map.

50 total comments were collected through this exercise and were added as input to the online wikimap by the project team.

ROADWAYS

A total of eighteen comments were captured for roadways. Comments here reflect the public's desire for complete reconstruction of streets rather than patchwork repairs and repaving. Various east-west arterials were identified as needing repairs from Cullen to U.S. Highway 288, in addition to north and south arterials the entire study area (MLK, Cullen, and Scott). Participants also encouraged road reconstruction projects to better deal with ponding and flooding, with a preference away from open ditches.

INTERSECTION

Only four comments were made for intersections. Participants flagged the most dangerous and crash-prone areas here that include Cullen at Bellfort and Bellfort at Crestmont

BICYCLE

Ten comments were captured for bicycles in this exercise. The predominant requests favored enhancing neighborhood connections to Sims Bayou off-street trails; providing protected bikeways or enhancing the separation on major arterials such as Bellfort and Cullen; and, improving maintenance and overgrown landscaping near Sims Bayou trails.







SEPTEMBER 26, 2018





PEDESTRIAN

Eight comments were made for pedestrian features. Comments overwhelmingly reflective of landscaping and maintenance issues on existing sidewalks throughout the study area. Participants also identified Cullen and Reed as the sight of multiple hit and runs and expressed an interest in connecting neighborhoods on the edges of the study area to regional parks and destinations adjacent to the project study area (i.e. El Franco Lee Park and Robert Stuart Park).

SAFETY

Ten safety comments were captured in this exercise. Participants suggested more traffic calming measures are needed in neighborhood streets that connect to arterials (i.e. minor collectors). Cullen Blvd. was flagged for various accident-prone areas, particularly near Reed Rd. Participants also suggested enhancing lighting and visibility by better maintenance that could allow people to make more use of existing sidewalks.







WORKSHOP DOCUMENTATION

GOALS PYRAMID











SOUTHEAST HOUSTON MOBILITY PLAN

SEPTEMBER 26, 2018

Houston-Galvest

























SEPTEMBER 26, 2018





PICTURING TRIPS









RE-IMAGINING STREETS











SEPTEMBER 26, 2018





REINAGINING STREETS RECORD TO A CONTROL OF THE PROPERTY OF TH

PUBLIC COMMENT MAP











PUBLIC MEETING #2 - FEBRUARY 6&9, 2018



PUBLIC ENGAGEMENT FRAMEWORK

The purpose of the Southeast Houston Mobility Plan is to conduct a comprehensive mobility study in the area defined as the "Southeast Houston Sub-Area," which is bound by Interstate 610 to the north, State Highway 288 to the west, State Highway Beltway 8 to the south, and Interstate 45 and Galveston Road to the east ("Area"). The Plan will be used to guide the City of Houston's short, medium, and long-term multi-modal mobility planning efforts and to identify implementation projects that will improve mobility and access in the Area.

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The project team is utilizing tools and strategies to develop deep understanding of the mobility challenges and opportunities in the study area by engaging residents, technical experts, community leaders, and elected officials through a steering committee, technical committee, public meetings, and pop-up tabling opportunities at community events.



2ND PUBLIC MEETING

This document is a summary of the Plan's sencond public meetings, held Wednesday February 6, 2019 at the Sunnyside Multiservice Center and Saturday, February 9, 2019 at the Charlton Community Center. Both meetings were held within the study area, in the Sunnyside and Park Place neighborhoods respectively. Over 100 people attended this round of workshops and provided feedback through a variety of stations. The workshop consisted of a presentation and interactive table sessions focused on presenting the consultant team's findings and draft recommendations for improved mobility. Residents were encouraged to review and discuss the recommendations at different stations where they could leave public comments on their preferences related to roadway congestion, safety, public transit, and bicycle and pedestrian facilities.

FEBRUARY 2019



WHAT WE HEARD

ENGAGEMENT AND GOALS

Participants were provided an opportunity to provide feedback on the goals of the study that were developed from the results of the first public meeting and with guidance by the project's steering committee. This activity contained the results of the Goals Pyramid activity from the first Public Meeting and asked participants if this listed goals and their ranking were consistent with their priorities. Each participant received a feedback form, which included questions asking if the results reflect their priorities and needs. This station included boards with the goals exercise recreated and the results, in addition to a map of public comments logged online.

Overall, participants supported the community driven results and felt the feedback from the first meeting reflected their priorities and needs. Trends emerged in participant responses, many reiterating the highest ranked goals from the first meeting. Comments providing support and further input regarding connectivity, transit access, safety and resilience were the most prominent.

Additionally, many participants addressed the overlap of many of the goals, and that neighborhood projects could address multiple concerns, such as increased bus/metro routes increase access, transportation choice and impact the areas safety.









PICTURING CONNECTIONS

This station was designed to better understand what type of neighborhood connections are preferred in the community. Connections were the favored goal at the first public meeting and the project team intended to better understand people's preferred mobility choices in accessing nearby retail, schools, employment, parks, transit and services by displaying precedent images of different mobility options. Participants had the opportunity to rank each with a low, mid, or high interest through an assortment of color dots. The neighborhood connections were:

- high quality sidewalks, crosswalks, and bikeways
- closer destinations, infill, and mixed use development
- street connectivity
- microtransit (flexible service/on demand)
- bike share
- scooters

Each participant was provided with red, yellow, and green sticker dots which corresponded with the priority levels and ranked each image by placing a color sticker next to each image. The responses were counted and scored below. The highest ranked characteristics/amenities included high quality sidewalks, crosswalks and bikeways; closer destinations, infill and mixed use development; and microtransit.



NEIGHBORHOOD AMENITY	HIGH	MID	LOW
HIGH QUALITY SIDEWALKS, CROSSWALKS, BIKEWAYS	41	0	0
CLOSER DESTINATIONS, INFILL, MIXED USE DEVELOPMENT	21	1	1
STREET CONNECTIVITY	7	8	0
MICRO- TRANSIT	21	3	0
BIKE SHARE	3	8	15
SCOOTERS	1	2	17

FEBRUARY 2019

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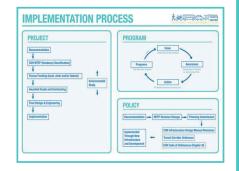


NEIGHBORHOOD CHAMPIONS

This station included the typical steps and process required to implement recommended projects, policies, and programs through a series of diagrams. This is intended to inform participants of the different stages and gauge their interest in becoming neighborhood champions at the policy, program, or project level. This station will also feature information on current and ongoing transportation initiatives in the study area, to connect participants to other interests such as the planned MLK Bikeway, METRO's Long Range Plan, and TXDOT's Call for Projects on Safe Routes to School

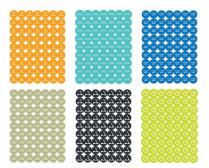
MOBILITY TOOLBOX

Participants at this station reviewed maps addressing a variety of improvements for roadways, intersections, transit service, bicycle networks or pedestrian connectivity. Similar to previous stations, participants were then asked to place their preferred Mobility Solutions stickers on the corresponding map where they would like to see improvements made. Participants were also encouraged to provide feedback on their top three priority projects via written comments. The goal of the station was to identify the most crucial and transformative mobility solution projects for the study area.





MOBILITY STICKERS



ROADWAY IMPROVEMENTS

A total of eight comments were captured for roadways. Comments here indicated high priority areas for road improvements from general repair, widening, and the addition of sidewalks and bikeways along particular roadways and new construction. Various artierals were identified such as Mykawa, Belfort, Jutland and Reed Street, with a particular comment requesting Fuqua Street be built out to connect to Telephone.

TRANSIT IMPROVEMENTS

Tweleve comments were collected regarding transit improvements. Comments referenced a need for neighborhood connectivity to clinics, Hobby airport and additional ciricular services. A desire for extended service hours was indicated as well. Expansion of the Red Line/LRT was mentioned multiples times with varying levels of support.

INTERSECTION IMPROVEMENTS

Each of the seven comments collected called for improved intersections with dedicated turn lanes or better traffic signaling. In addition, one participant expressed the need for ADA crosswalks and traffic signals. A variety of specific intersections were identified such as: Cullen and Kennedy Heights Blvd, 820 and Black Rock Road

PEDESTRIAN IMPROVEMENTS

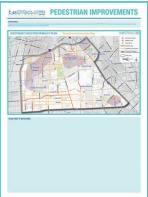
Twelve participants provided commentary for predestrian improvements. Comments overwhelmingly addressed lack of connectivity or gaps in sidewalks throughout the study area. Participants were concerned with neighborhood safety for all, but particularly for those around schools or with mobility needs and ADA compliance.

BICYCLE IMPROVEMENTS

Two comments were captured for bicycle improvements. Comments here reflect the impact better and more connected bike trails could have on the community. Safe travel by bike could improve neighborhood connectivity, and allow choice in transportation to neighborhood and retail jobs or the workplace and connected to Hobby Airport.











WORKSHOP DOCUMENTATION

AGENDA AND ROOM LAYOUT
ENGAGEMENT AND GOALS
PICTURING CONNECTIONS
NEIGHBORHOOD CHAMPIONS
MOBILITY TOOLBOX WALL



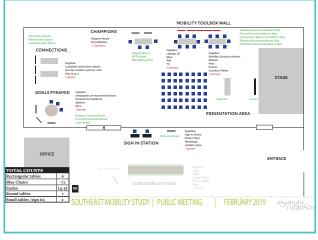
SOUTHEAST HOUSTON MOBILITY PLAN

FEBRUARY 2019



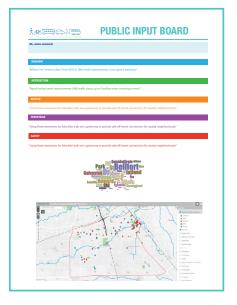






ENGAGEMENT & GOALS STATION

| Conceptions |



FEBRUARY 2019



9

ENGAGEMENT & GOALS

Metro light Rail ungently weeded From Hobby to Bownform!

A vegetable ganden of Charlen Pank would be noce > better health For PP Residuels. Large Victorness commisty on area are excellent graduous. Is surgare lasting into Spection grammary of mysical comming out of specting parameter of our Asian Resultans?

Proceeding to our Asian Resultans?

Please Fox our Sidewalks - I have seen children / heighbors Fall in Frent of my house close went to bus entermore to P.P. Elem. School !! 3718 Hashings Street-please check the Sidewalks - they are a total was!

ENGAGEMENT & GOALS

Does this feedback reflect your priorities and/or needs's

fee. Connectivity is very important the you could access to work, education and play it access.

Nork: from home to business or work place

School need access to higher institutes of learning

Itealta: need cognity to get to health facilities

Resilience: Drew space access is colling? creats health

ENGAGEMENT & GOALS

1. To weare ganger plan and septly , at the loop 610 South I BALK INTERDETION, BOOK - TOEN POWER ME needed por the N. TO S. left THEN lowers. There appears TO AS SUPPLIENT EVEN TO ACCOMPLY This, and some our wereing dose Trans illegally.

2. Supery concerns; were not est up MIK and Adapted T BLVL we st sound leve (but side). High worm levels IN Ems Bayer cours bytachic possess to were plow

AND LIFT the MANNEY COVERS AT This METERSOLESIA. Has begand several times, and I have good a VIX for.

3. There is no cas ente pron theery prepart weining the longth of August Blot.) They Collas

*** ENGAGEMENT & GOALS

I here in The Cost Merdens Regionsity. I'm so offer in our civil dute The degrage Deen los at all only talk; muting, no

the love do occur to police towards from in our commenty. the used with shape in gordenacti in our more wity

*** ENGAGEMENT & GOALS

Does this feedback reflect your priorities and/or needs?

Yes Man A focus on mobility is needed throughout the city. However, the concern is with the direction of the plans to come We welcome the improvements being proposed whe don't welcome the displacent

Why or why not?

ENGAGEMENT & GOALS

Up and no , network connections are great but I'm more interested in health.

I believe our neighbourhood needs more healthy opins Especially with mental healths, learning disabilities and developmental deby. We need more facilities that address their issues, we need more access to these

ENGAGEMENT & GOALS

Heath Renbuce Trongestation chain

1) of you can't get to the Weatherd count Soft is very engator

if agree to the character

ENGAGEMENT & GOALS

Does this feedback reflect your priorities and/or needs?

I would definitely like to see the Metropoil come through Sunnyside and connect us to downtown and Hobbay Areport.

Would love to see sidewalks in my neighborhood of Sunnyside.

Satisfy issue needs to be addressed as I would like to utilize Public teans it hat am afraid to.

*** ENGAGEMENT & GOALS

Jes

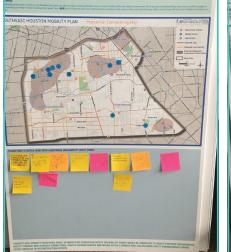
Plage add more sidewally on cullen, belifort, Why or why not?

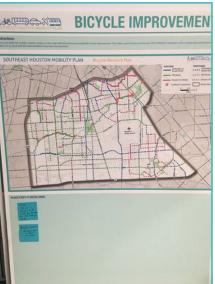
I hate seeing my Students play in the middle of the street

Staci Childs Choustonisd org









FEBRUARY 2019

11

10

SOUTHEAST HOUSTON MOBILITY PLAN







ONLINE COMMENTS SUMMARY

COMMENT	LOCATION	TION COMMENTS COMMENT DATE LATITUDE		LATITUDE	LONGITUDE
TYPE	LOCATION	COMMENTS	COMMENT DATE	LATITODE	LONGITUDE
Intersection	IH 45 Frontage and College Ave	Dangerous Intersection	7/25/2018 12:41	29.65258148	-95.2509239
Intersection	Park Place Blvd	Unsafe design of traffic circle	7/25/2018 12:42	29.6858433	-95.27725247
Safety	Park Place Blvd and Reveille St	Stray dogs in the neighborhood	7/25/2018 12:43	29.6853027	-95.29027728
Safety	Ortiz Middle School	Congestion around Ortiz Middle School	7/25/2018 12:44	29.66313547	-95.28753069
Roadway	IH 610 from Mykawa St	Connectivity issue to IH 610 from Mykawa St	7/25/2018 12:46	29.69148189	-95.32574635
Roadway	Woodbridge Dr	Congestion on Woodbridge Dr	7/25/2018 12:47	29.6946519	-95.29843662
Roadway	Telephone Road	Pavement failure due to truck traffic	7/25/2018 12:48	29.67856374	-95.29187398
Roadway	Bellfort Ave	Bellfort Ave "street surface" from MLK to 288 needs improvements. (Low spots & potholes)	7/25/2018 12:49	29.6696148	-95.36071019
Roadway	Scott St	Scott St/Airport Blvd getting traffic from 288 expansion	7/25/2018 12:49	29.66230591	-95.36826329
Roadway	Airport Blvd	Scott St/Airport Blvd getting traffic from 288 expansion	7/25/2018 12:50	29.64410597	-95.377533
Roadway	Suicide Circle	This intersection under I-45 is dangerous for driving - sharp turns, unclear vision lines	9/8/2018 14:31	29.68595218	-95.2778067
Bicycle	Suicide Circle	Children that are zoned to the nearby schools have a hard time crossing this intersection, having a safe bicycle route would be helpful.	9/8/2018 14:32	29.68580305	-95.27721661
Pedestrian	Suicide Circle	Traffic coming at all times - hard for pedestrians to safely cross to get to the nearby park and schools.	9/8/2018 14:34	29.68586597	-95.27731049
Intersection	Bellfort and Westover	Dangerous intersection near school - intersection could be redesigned = hard line of sight for motorists	9/8/2018 14:35	29.67237449	-95.30131894
Intersection	MLK & Griggs	Traffic Signal Timing Improvements on Griggs going west (AM) time)	9/8/2018 14:35	29.69720938	-95.33655054
Pedestrian	Bellfort and Westover	Need a safe crossing from school to Stuart Park	9/8/2018 14:37	29.67229991	-95.30128675
Bicycle	Sunnyside Park	Having safe bicycle/ped routes from neighborhoods to their park is important! Keep them in the plan	9/8/2018 14:40	29.66641291	-95.37094909

* No data entered



COMMENT TYPE	LOCATION	COMMENTS	COMMENT DATE	LATITUDE	LONGITUDE
Safety	Bellfort (288 to Cullen)	Standing water when it rains.	9/8/2018 14:41	29.66950753	-95.37232048
Bicycle	Old Galveston Road to Chavez High School	Consider placing a hike/bike trail, bigger than typical sidewalk, to Chavez High School. Students have a hard time walking this road and are often seen walking on the UP Railroad.	9/8/2018 14:43	29.68963263	-95.25954085
Pedestrian	Cullen (Going North & South for blocks)	Improved lighting is needed, it has been a number of Vehicle & Pedestrian interractions	9/8/2018 14:43	29.66697185	-95.35545475
Bicycle	CenterPoint Easement from FM Law Park	Using these easements for hike/bike trails are a great way to provide safe off-street connections for nearby neighborhoods	9/8/2018 14:45	29.6650052	-95.32430011
Bicycle	Bellfort (288 to Telephone)	Current bike lane can be improved.	9/8/2018 14:48	29.66915996	-95.36651081
Roadway	On Airport just east of MLK	It is a very big DIP in the road.	9/8/2018 14:51	29.64409859	-95.33368058
Roadway	On Mykawa (South of Airport to the Beltway)	The Roads are VERY bad potholes on both sides going north & south on mykawa.	9/8/2018 14:54	29.64311898	-95.31050629
Roadway	Southbank from Southford to Reed	PavementImprovements	9/8/2018 14:55	29.67432176	-95.33235015
Roadway	Bellfort to S end of Study Area	Redo Street similar to north segment	9/8/2018 14:56	29.65972278	-95.3365344
Safety	On Bellfort (From the Park to Kroger)	Flooding happens when it rain for more then 30 min	9/8/2018 14:57	29.67381114	-95.29419846
Roadway	Reed Rd (Reed @ Hemingway)	Reed needs to be extended through the park (Stuart Robert C. Park) and connected to Bellfort. Reed should continue through the park on the southeast side of park, running along side of the bayou. This will remove the speeding/through traffic that utilizes Waltrip."	9/8/2018 14:59	29.66845112	-95.29827542
Safety	Waltrip (bellfort to Reed)	Speed cushions are needed to (slow/ prevent) through traffic. The cushions can be used on Bullinch St too	9/8/2018 15:03	29.6670714	-95.30115075
Intersection	Bellfort (Nunn & Swallow)	Signal timing needs improvements (AM) traffic backs up on Swallow when traveling to work .	9/8/2018 15:08	29.66785449	-95.30853218

^{*} No data entered



COMMENT TYPE	LOCATION	COMMENTS	COMMENT DATE	LATITUDE	LONGITUDE
Intersection	Bellfort (going west at mykawa)	Traffic light timing needs improvements	9/8/2018 15:10	29.66649341	-95.31784481
Roadway	Jutland from Bellfort to Reed	Dangerous Street	9/8/2018 15:44	29.66595939	-95.34882155
Safety	Bellfort from Jutland to Mykawa	There is trash on the medians from Jutland to Mykawa. There is no monitoring of the trash being placed out there. That is debilitating for the aesthetics of our community.	9/8/2018 15:53	29.66676945	-95.34848276
Safety	Bellfort Street from Jutland to MLK	Cameras needed for monitoring. Cars parked in the median which turns it into mud.	9/8/2018 15:59	29.66672749	-95.34821991
Roadway	Willow Glen between Jutland and Herschelwood	Standing water and drainage	9/8/2018 17:03	29.67193983	-95.34471714
Safety	Willow Glen between Jutland Herschelwood	Senior citizen not able to afford tree trimming	9/8/2018 17:04	29.67185127	-95.34437919
Bicycle	77033	Senior citizens need better sidewalks in 77033. We bike, walk, scooter and need better sidewalks that can't be bought with soc security	9/12/2018 16:21	29.6662556	-95.3372801
Roadway	MLK Blvd	need to connect MLK to the beltway for opportunity to bring development of retail and shopping	9/28/2018 19:03	29.61256213	-95.34092791
Intersection	Park Place and Broadway	At the intersection, which crosses under I-45 the lights are poorly timed. Exit traffic from the southbound side at Park Place often requires waiting through 2 lights at peak traffic times. Each side of I-45 is gridlocked at the "traffic circle".	10/14/2018 13:49	29.69774219	-95.26968843
Roadway	River Dr at I-45 Northbound, exiting Park Place	EVERY time ANYTHING happens on the Northbound exit from I-45 at Park Place, motorist inundate our small neighborhood of houses. We do not have sidewalks, and part of the area has deep ditches. This forces any who are biking or walking to be at risk of being hit by cars that are speeding through angry that they can't get where they are going. This happens frequently and with the construction project that is ongoing, it has become a daily ritual. It is difficult to exit our driveways when cars are blocking them lined up bumper to number. There are 2 schools to which parents and kids walk. St. Christopher church and Park Place Elementary schools are affected weekdays.	10/14/2018 13:54	29.69177746	-95.28410799





COMMENT TYPE	LOCATION	COMMENTS	COMMENT DATE	LATITUDE	LONGITUDE
Safety	Glenview Drive	Speed bumps on this street do not slow down the traffic. Cars are always speeding and sometimes passing up slower cars.	10/18/2018 18:45	29.6806672	-95.26578314
Intersection	*	Howard Dr and Arizona traffic light needs to be retimed to allow turns off Howard onto Arizone. Currently the signal at Howard and Arizona is timed as such that the traffic from Galveston Road completely takes up the signal time and does not allow for traffic turning off Howard onto Arizona. Additionally this flow through allows excessive speeding. Also, the green light signal on Arizone at Howard is excessively long considering the traffic is coming out of a neighborhood.	10/18/2018 20:56	29.68029435	-95.26168472
Safety	*	excessive speeding of vehicles on Bonner Drive between Deeda and Alaska. Often the vehicles do not stop for the intersection STOP signs.	10/18/2018 21:04	29.67863516	-95.26702768
Intersection	*	Signal at Howard Dr and Winkler needs to have protected turn from from Winkler onto Howard-both directions. Currently one only exists when tuning off Howard onto Winkler.	10/18/2018 21:05	29.67650986	-95.26672728
Safety	*	a warning/stop flashing light needs to be installed on Galveston Rd at Fire Station 29 to let vehicles know when firetrucks or ambulances are leaving the building.	10/18/2018 21:08	29.68392957	-95.25398142
Pedestrian	*	a better bus stop needs to be installed on Galveston Rd across from Chavez H S. Currently there is only a sign post and no actual place for pedestrians to stand and wait for a bus or get off a bus.	10/18/2018 21:11	29.68523448	-95.25565512
Pedestrian	*	the home at the corner of Radcliffe and north side of Howard uses the pedestrian crosswalk as a driveway to their property. This was not the intention of the installation of crosswalks and it will cause the crosswalk to break down and become unsafe.	10/18/2018 21:13	29.68184167	-95.2598179
Safety	*	home at corner of Howard (northside) and Arizona has fencing and parked vehicles that makes it difficult for vehicles to make right on red turns from Arizona onto Howard, Visibility is extremely limited and often the vehicles have to pull into the intersection to see if they can make the turn or not.	10/18/2018 21:15	29.68046213	-95.26157743

^{*} No data entered



COMMENT TYPE	LOCATION	COMMENTS	COMMENT DATE	LATITUDE	LONGITUDE
Roadway	*	a drop in the pavement on Radcliffe between Howard and Wier affects automobile handling when hit. Usually vehicles move to the left side of the roadway which makes it bad for oncoming traffic. The drop off affects the steering of the vehicles thus the safety issue.	10/18/2018 21:19	29.68221451	-95.2600754
Safety	*	no TXDOT ligting on feeders (north and south) along I 45 at Howard/Bellfort. Additionally no underpass lighting which is dangerous due to homeless people living under the freeways.	10/18/2018 21:23	29.67590513	-95.267601
Pedestrian	*	walkways along Galveston Road often overgrown and unsafe for young adults walking to and from school at Chavez H S.	10/18/2018 21:25	29.68306389	-95.25296687
Intersection	*	street sign needed on north side of Howard at Radcliffe	10/18/2018 21:35	29.68180993	-95.25998353
Safety	Kilkenny Drive and Cullen	Cars drive extremely fast down the road into the neighborhood. Should implment speed bumps	11/20/2018 5:13	29.62573171	-95.35599119
Safety	cullen and Kilkenny	Many cars speed on this street daily, speed bumps or more police should be visible	11/20/2018 5:16	29.62485867	-95.35582607
Safety	Swingle and Donegal	Cement Business is located here, they should be responisble for street cleaning. Lots of debri and trash in the road. road need major repair	11/20/2018 5:19	29.62105111	-95.35934781
Pedestrian	Southacres	All of this area need sidewalks. There is a school in the neighbor where kids walk from home to go to school or catch the shool bus at the school.	11/20/2018 5:20	29.62478173	-95.36419724
Roadway	Orem	Should open to the highway	11/20/2018 5:22	29.62877334	-95.36514138
Safety	Trash	The city has to do something about the dumping issue in this area. tires and debris end up in the street	11/20/2018 5:22	29.6259755	-95.3601632
Roadway	Train/tram	I think a tram should come through on this stree.	11/20/2018 5:23	29.63190683	-95.33964967
Pedestrian	Glenbrook Valley	There are almost no sidewalks in this area which is a public health hazard.	11/20/2018 16:03	29.67664036	-95.30462152
Roadway	Winkler between Howard Dr & I-45 S	Congestion caused by 4+ bus stops and 9+ street turnoffs into subdivision, apartment complexes, and businesses. Road needs to be widened to 4 lanes to allow passing.	1/5/2019 19:02	29.67643529	-95.26656634

* No data entered



COMMENT TYPE	LOCATION	COMMENTS	COMMENT DATE	LATITUDE	LONGITUDE
Safety	Alaska Dr between Baker Dr and Lenore St	Pedestrians cross train tracks at non-crosswalk areas illegally.	1/5/2019 19:27	29.68447251	-95.25510258
Pedestrian	Howard Dr & Old Galveston Rd	No train crosswalk ramp for disabled to cross train tracks.	1/5/2019 19:37	29.68487563	-95.25546468
Safety	N Bayou Dr between Alaska St & Arizona St	Speeding - need speed cushions or traffic calming devices.	1/5/2019 19:51	29.68860156	-95.25926135
Pedestrian	Old Galveston Rd & Howard Dr (Foodarama corner)	Pedestrian crosswalk signal never seems to work properly.	1/5/2019 19:56	29.68504108	-95.25505564
Intersection	Train crossing @ Howard Dr and Old Galveston Rd	Noise pollution - Trains honk horn too loud, too often, and too long around residential area.	1/5/2019 20:04	29.68483602	-95.25542042
Safety	Howard Dr between Old Galveston Rd and Winkler.	Speeding	1/5/2019 20:22	29.68476145	-95.2557101
Intersection	N Bayou Dr & E Villa St	Needs Stop sign due to speeding	1/5/2019 20:36	29.68827534	-95.26029131
Safety	N Bayou Dr & Radcliffe	Needs Stop Sign due to speeding	1/5/2019 20:53	29.68397384	-95.26203475
Safety	Barkley St between Garland and Neal	Speeding	1/5/2019 20:57	29.68386199	-95.25514684
Safety	N Bayou Dr & Neal	Needs Stop sign due to speeding	1/5/2019 22:46	29.68665822	-95.26154122
Safety	N Bayou Dr & E Villas	Needs Stop signs due to speeding	1/5/2019 22:48	29.68778601	-95.26072583
Safety	N Bayou Dr & Radcliffe	Needs Stop sign due to speeding	1/5/2019 22:49	29.68533468	-95.26336513

^{*} No data entered



APPENDIX C

Intersection Improvement Table

ID	INTERSECTION NAME	IMPROVEMENT TYPE	COMMENT
11	Airport @ S Wayside	New Intersection	
23	Almeda Genoa @ S Wayside	New Intersection	
31	Bellfort @ Crosswell	New Intersection	
33	Bellfort @ Fuqua	New Intersection	
40	Bellfort @ S Wayside	New Intersection	
45	Bellfort @ Westover	New Intersection	HPB Recommendation
55	Brunswick Meadows @ Scott	New Intersection	
57	Cottingham @ Schurmier	New Intersection	
61	Cullen @ Schurmier	New Intersection	
68	Dixie @ Wayside	New Intersection	
70	E Orem @ S Wayside	New Intersection	
72	Fuqua @ Cottingham	New Intersection	
73	Fuqua @ Cullen	New Intersection	
78	Fuqua @ Wayside	New Intersection	
93	Park Place Elementary @ Park Place	New Intersection	Botanic Garden
94	Reed @ Crestmont	New Intersection	
95	Reed @ Jutland	New Intersection	
96	Reed @ Mykawa	New Intersection	
101	Schurmier @ Wayside	New Intersection	
102	Scott @ E Orem	New Intersection	
103	Scott @ Fuqua	New Intersection	
112	Beltway 8 @ S Wayside	New Intersection	
137	SH-288 @ E Orem	New Intersection	
44	Bellfort @ Waltrip		Align with Hemingway/Safety-ADA Ramps,
	· .	Offset Intersection	Enhanced Crosswalks, Sidewalk
63	Cullen @ Wilmington	Offset Intersection	Span Wire to Mast Arm/ADA Ramps
15	Almeda Genoa @ Cullen	Recently Completed	
18	Almeda Genoa @ Martin Luther King	Recently Completed	
29	Bellfort @ Broadway	Recently Completed	
50	Broadway @ Dixie	Recently Completed	
52	Broadway @ Morley	Recently Completed	
53	Broadway @ Rockhill	Recently Completed	
54	Broadway @ Santa Elena	Recently Completed	
64	Cullen Blvd @ Brunswick Ln	Recently Completed	
87	Martin Luther King @ St Lo	Recently Completed	
88	Martin Luther King @ Van Fleet	Recently Completed	
1	Airport @ Broadway	Safety Improvements	Safety-Enhanced Crosswalk, Sidewalk
4	Airport @ Leitrum	Safety Improvements	Safety-ADA Ramps, Enhanced Crosswalk, Sidewalk/Trail Conenctivity
6	Airport @ Leitrum Airport @ Monroe	Safety Improvements	Safety- ADA Ramps, Enhanced Crosswalk
F .	All bolt (@ Molling	Salety improvements	Safety-ADA Ramps, Enhanced Crosswalk,
8	Airport @ Mykawa	Safety Improvements	Sidewalk/NE Curb Radius
13	Airport @ Telephone	Safety Improvements	Safety-ADA Ramps/Remove Median
17	Almeda Genoa @ Kleckley	Safety Improvements	Safety-Enhanced Crosswalk
19	Almeda Genoa @ Minnesota	Safety Improvements	Safety-ADA Ramps, Enhanced Crosswalk
20	Almeda Genoa @ Monroe	Safety Improvements	Safety- ADA Ramps, Enhanced Crosswalk
22	Almeda Genoa @ Rowlett	Safety Improvements	Safety-ADA Ramps, Enhanced Crosswalk
24	Almeda Genoa @ Scott St	Safety Improvements	Safety-Enhanced Crosswalk
35	Bellfort @ Jutland	Safety Improvements	Safety-ADA Ramps, Enhanced Crosswalk
36	Bellfort @ Martin Luther King	Safety Improvements	Safety-ADA Ramps, Enhanced Crosswalk
	1	, pre-tamento	*



ID	INTERSECTION NAME	IMPROVEMENT TYPE	COMMENT
37			
	Bellfort @ Mykawa	Safety Improvements	Safety-ADA Ramps, Enhanced Crosswalk, Sidewalk
38	Bellfort @ Northdale	Safety Improvements	Safety-Enhanced Crosswalk
41	Bellfort @ Scott	Safety Improvements	Safety-Enhanced Crosswalk
48	Brinkley @ Cullen	Safety Improvements	Safety-Enhanced Crosswalk, Sidewalk
60	Cullen @ Reed	Safety Improvements	Safety-Enhanced Crosswalk
67	Dixie @ Telephone	Safety Improvements	Safety-ADA Ramps, Enhanced Crosswalk
69	Danaha @ Mukawa	Cofoty Improvements	Safety-ADA Ramps, Enhanced Crosswalk, Sidewalk
75	Donoho @ Mykawa Fugua @ Monroe	Safety Improvements	Safety-Enhanced Crosswalk
	Holmes @ Scott	Safety Improvements Safety Improvements	Safety-Enhanced Crosswalk
79			Safety-ADA Ramps, Enhanced Crosswalk
83 85	Long @ Wayside Martin Luther King @ Selinsky	Safety Improvements	Safety-ADA Ramps Safety-ADA Ramps
	Orem @ Martin Luther King	Safety Improvements	Safety-Enhanced Crosswalk
89	Orem @ Martin Editier King	Safety Improvements	Safety-Efficience closswark
90	Orem Turnaround	Safety Improvements	Safety-ADA Ramps, Enhanced Crosswalk, Sidewalk
91	Orem Turnaround	Safety Improvements	Safety-ADA Ramps, Enhanced Crosswalk, Sidewalk
			Safety-ADA Ramps, Enhanced Crosswalk,
105	SH-3 @ Howard	Safety Improvements	Sdiewalk/Remove Turn Median
109	Telephone @ Woodridge	Safety Improvements	Safety-ADA Ramps, Enhanced Crosswalk, Sidewalk
110	Beltway 8 @ Beamer	Safety Improvements	Safety-ADA Ramps, Enhanced Crosswalk, Sidewalk
111	Beltway 8 @ Pearland Pkwy	Safety Improvements	Safety-ADA Ramps, Enhanced Crosswalk
113	I-45 @ Airport	Safety Improvements	Safety-Enhanced Crosswalk
114	I-45 @ Almeda Genoa	Safety Improvements	Safety-Enhanced Crosswalk
115	I-45 @ Bellfort	Safety Improvements	Safety-Enhanced Crosswalk
116	I-45 @ Bellfort	Safety Improvements	Safety-Enhanced Crosswalk
118	I-45 @ Edgebrook	Safety Improvements	Safety-Enhanced Crosswalk
119	I-45 @ Fuqua	Safety Improvements	Safety-Enhanced Crosswalk
120	I-45 @ Monroe	Safety Improvements	Safety-Enhanced Crosswalk
121	I-45 @ Monroe	Safety Improvements	Safety-Enhanced Crosswalk
122			Safety-Enhanced Crosswalk/Turning Radii-SE/SW
	I-610 @ Broadway	Safety Improvements	Corner
123	I-610 @ Calais	Safety Improvements	Safety-ADA Ramps, Enhanced Crosswalk, Sidewalk
124	I-610 @ Crestmont	Safety Improvements	Safety-Enhanced Crosswalk
125	I-610 @ Cullen	Safety Improvements	Safety-ADA Ramps, Enhanced Crosswalk
126	I-610 @ Long	Safety Improvements	Safety-ADA Ramps, Enhanced Crosswalk, Sidewalk
127	I-610 @ Martin Luther King	Safety Improvements	Safety-ADA Ramps. Enhanced Crosswalk
130	I-610 @ Scott	Safety Improvements	Safety-ADA Ramps, Enhanced Crosswalk
131	I-610 @ Telephone	Safety Improvements	Safety-Sidewalk
133	I-610 @ Woodridge	Safety Improvements	Safety-ADA Ramps, Enhanced Crosswalk
134	SH-288 @ Airport	Safety Improvements	Safety-ADA Ramps, Enhanced Crosswalk, Sidewalk
135	SH-288 @ Almeda Genoa	Safety Improvements	Safety-ADA Ramps, Enhanced Crosswalk, Sidewalk
136	SH-288 @ Bellfort	Safety Improvements	Safety-ADA Ramps, Enhanced Crosswalk
138	SH-288 NB @ Reed	Safety Improvements	Safety- ADA Ramps, Enhanced Crosswalk, Sidewalk



ID	INTERSECTION NAME	IMPROVEMENT TYPE	COMMENT
			Span Wire to Mast Arm/Safety-ADA Ramps,
2	Airport @ Cullen	Signal Head Improvement	Enhanced Crosswalk/Trailhead Connection
-	Airport to dalleri	olghar riedd improvement	Span Wire to Mast Arm/Safety-ADA Ramps,
3	Airport @ Hansen	Signal Head Improvement	Enhanced Crosswalk, Sidewalk
<u> </u>	/ in port to richiden	olghar redd improvement	Span Wire to Mast Arm/Safety-Enhanced
5	Airport @ Martin Luther King	Signal Head Improvement	Crosswalk/Trailhead
	A superior de martin Eather rung	orginal ricad improvement	Span Wire to Mast Arm/Safety-ADA Ramps,
7	Airport @ Mosley	Signal Head Improvement	Enhanced Crosswalk, Sidewalk
	1, 1, 0, 1, 1, 1,		Span Wire to Mast Arm/Safety-ADA Ramps,
9	Airport @ Rosehaven	Signal Head Improvement	Enhanced Crosswalk, Sidewalk
			Span Wire to Mast Arm/Safety-ADA Ramps,
10	Airport @ Ruthby	Signal Head Improvement	Enhanced Crosswalk, Sidewalk
10			Span Wire to Mast Arm/Trailhead
12	Airport @ Scott	Signal Head Improvement	Connection/Safety-ADA Ramps
14			Span Wire to Mast Arm/Safety-ADA Ramps,
14	Almeda Genoa @ Clearwood	Signal Head Improvement	Enhanced Croswalk
16			Span Wire to Mast Arm/Safety-ADA Ramps,
	Almeda Genoa @ Easthaven	Signal Head Improvement	Enhanced Crosswalk, Sidewalk
21			Span Wire to Mast Arm/Safety-ADA Ramps,
	Almeda Genoa @ Mykawa	Signal Head Improvement	Enhanced Crosswalk, Sidewalk/NE Curb Radius
25			Span Wire to Mast Arm/Safety-ADA Ramps,
	Almeda Genoa @ Telephone	Signal Head Improvement	Sidewalk
26		0' 111 11	Span Wire to Mast Arm/Safety-ADA Ramps,
_	Almeda Genoa @ Telephone	Signal Head Improvement	Sidewalk, Enhanced Crosswalk Span Wire to Mast Arm/Safety-ADA Ramps,
27	Arimona	Ciamal I land Imamus canana	Enhanced Crosswalk
_	Arizona @ Howard	Signal Head Improvement	Span Wire to Mast Arm/Safety- Enhanced
28	Beamer @ Fuqua	Signal Head Improvement	Crosswalk
	Dearner @ r uqua	Signal Flead Improvement	Span Wire to Mast Arm/Safety-Enhanced
30	Bellfort @ Crestmont	Signal Head Improvement	Crosswalk
32	Bellfort @ Cullen Blvd	Signal Head Improvement	Span Wire to Mast Arm
			Span Wire to Mast Arm/Safety-Enhanced
34	Bellfort @ Glenloch	Signal Head Improvement	Crosswalk, Sidewalk
	-		Span Wire to Mast Arm/Safety-ADA Ramps,
39	Bellfort @ Nunn	Signal Head Improvement	Enhnaced Crosswalk, Sidewalk
40			Span Wire to Mast Arm/Safety-Enhanced
42	Bellfort @ Southbank	Signal Head Improvement	Crosswalk
43			Span Wire to Mast Arm/Safety-ADA Ramps,
	Bellfort @ Telephone	Signal Head Improvement	Enhanced Crosswalk
46			Span Wire to Mast Arm/Safety-ADA Ramps,
<u> </u>	Blackhawk @ Fuqua	Signal Head Improvement	Enhanced Crosswalk
47	Drace @ Telephone	Cianal Haad Income	Span Wire to Mast Arm/Safety- Enhanced Crosswalk
	Brace @ Telephone	Signal Head Improvement	Span Wire to Mast Arm/Safety-ADA Ramps,
49	Brisbane @ Telephone	Signal Head Improvement	Enhanced Crosswalk, Sidewalk
<u> </u>	prisparie (m. reiebriorie	Signal Head Improvement	Span Wire to Mast Arm/Safety-ADA Ramps,
51	Broadway @ Hartford	Signal Head Improvement	Enhanced Crosswalk, Sidewalk
\vdash	Diodaway (w Hartiora	olgital ricad improvement	Span Wire to Mast Arm/Safety-ADA Ramps,
56			Enhanced Crosswalk, Sidewalk/Remove Left Turn
"	Chaffin @ Long	Signal Head Improvement	Lane
58	Cullen @ Kennedy Heights	Signal Head Improvement	Span Wire to Mast Arm
59	Cullen @ Orem	Signal Head Improvement	Span Wire to Mast Arm/Offset Intersection
62	Cullen @ South Acres	Signal Head Improvement	Span Wire to Mast Arm
UZ	odiicii (w ooddii Aores	orginal ricad improvement	- h



ID	INTERSECTION NAME	IMPROVEMENT TYPE	COMMENT
			Span Wire to Mast Arm/Safety-ADA Ramps,
65	Dillon @ Telephone	Signal Head Improvement	Enhanced Crosswalk, Sidewalk
66	Dixie @ Reveille	Signal Head Improvement	Span Wire to Mast Arm/safety-ADA Ramps
71			Span Wire to Mast Arm/Safety-ADA Ramps,
71	Fairway @ Telephone	Signal Head Improvement	Enhanced Crosswalk, Sidewalk
74			Span Wire to Mast Arm/Safety-ADA Ramps,
/4	Fuqua @ Kingspoint	Signal Head Improvement	Enhanced Crosswalk, Sidewalk
76			Span Wire to Mast Arm/Safety-ADA Ramps,
10	Fuqua @ Sabo	Signal Head Improvement	Enhanced Crosswalk
77			Span Wire to Mast Arm/Safety-ADA Ramps,
- ' '	Fuqua @ Telephone	Signal Head Improvement	Sidewalk
80			Span Wire to Mast Arm/Safety-ADA Ramps,
	Howard @ Winkler	Signal Head Improvement	Enhanced Crosswalk, Sidewalk
81	Joplin @ Reville	Signal Head Improvement	Span Wire to Mast Arm/Safety-ADA Ramps
82			Span Wire to Mast Arm/Remove Center
	Long @ Telephone	Signal Head Improvement	Median/Safety-ADA Ramps, Enhanced Crosswalk
84			Span Wire to Mast Arm/Safety-ADA Ramps,
	Martin Luther King @ Reed	Signal Head Improvement	Enhanced Crosswalk
86		at the tr	Span Wire to Mast Arm/Safety-ADA Ramps,
	Martin Luther King @ South Acres	Signal Head Improvement	Enhanced Crosswalk
92	Park Place @ Reveille	Signal Head Improvement	Span Wire to Mast Arm/Safety-ADA Ramps
97		6: 111 11	Span Wire to Mast Arm/Safety-ADA Ramps,
	Reed @ Rosehaven	Signal Head Improvement	Enhanced Crosswalk, Sidewalk
98	D	0:	Span Wire to Mast Arm/Safety-Enhanced Crosswalk
100	Reed @ Scott	Signal Head Improvement	Span Wire to Mast Arm/Safety-ADA Ramps
100	Reveille @ Thurow	Signal Head Improvement	Span Wire to Mast Arm/Salety-ADA Ramps Span Wire to Mast Arm/Salety-ADA Ramps,
104	CLL 2 @ Control	Cinn al I land Inamusyamant	Enhanced Crosswalk, Sidewalk
	SH-3 @ Central	Signal Head Improvement	Span Wire to Mast Arm/Safety-ADA Ramps,
106	SH-3 @ Park Place	Cianal Haad Improvement	Enhanced Crosswalk, Sidewalk
-	SH-3 (W PAIK Place	Signal Head Improvement	Span Wire to Mast Arm/Safety-ADA Ramps,
107	Telephone @ King's Row	Signal Head Improvement	Sidewalk
100	Telephone @ West Over	Signal Head Improvement	Span Wire to Mast Arm/Safety-ADA Ramps
108 128	I-610 @ Mykawa	Signal Head Improvement	Span Wire to Mast Arm/Eastbound Curb Radius
128	1-010 @ IVIYKAWA	Signal Head Improvement	Span Wire to Mast Arm/Safety-ADA Ramps,
129	I-610 @ Scott	Signal Head Improvement	Enhanced Crosswalk
	1 010 @ 30011	orginal ricau improvement	Span Wire to Mast Arm/Safety-ADA Ramps,
132	I-610 @ Wayside	Signal Head Improvement	Enhanced Crosswalk
99	Reveille @ Telephone	Studied by Others	Bellfort Station Study/T Intersection/Trailhead
		, , ,	TxDOT Intersection Study- ADA Ramps/Enahnced
117	I-45 @ Broadway	Studied by Others	Crosswalk





