



Hobby

LIVABLE CENTERS STUDY

FINAL REPORT
March 2017



PREPARED BY
DESIGNWORKSHOP

A COLLABORATION





Credit: Morris Malakoff, UP Art Studio

Hobby

LIVABLE CENTERS STUDY

MARCH 2017

Prepared for:
Houston-Galveston Area Council
Hobby Area Management District
City of Houston Planning Department
Texas Department of Transportation

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CONSULTANT TEAM

Design Workshop, Inc.

ESC Polytech Consultants, Inc.

Community Development Strategies

Lockwood, Andrews & Newnam, Inc.

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EXECUTIVE SUMMARY

The Hobby Area District, located 11 miles southeast from Downtown Houston, includes the area south of Dixie Drive, west of the Gulf Freeway (IH-45), north of Almeda Genoa Road and east of Mykawa Road. Home to the William P. Hobby Airport, the Hobby Area District is a gateway connecting the world to Houston's other international centers, such as the Texas Medical Center, Downtown, Museum District, Rice, University of Houston, and Texas Southern, which are attractive to national and international visitors.

Expansion of METRORail services along Telephone Road will enhance the role of the District as an international center and provide greater opportunity as a location for job growth with expanding business and industrial activity. By 2040, the District is expecting an increase in approximately 15,300 jobs and an additional 50,000 residents. Accompanying this growth will be the need for additional amenities, services and new spaces in which residents can live, work and play.

Livable Centers are places where people can live, work and play without relying on their cars because they are compact and mixed-use, designed to be walkable, and connected and accessible. Livable Centers provide mobility benefits by reducing the number of single-occupant vehicle (SOV) trips by providing transit, walking and bicycling options. Conceptual ideas in this document aim to create live/work/play destinations that further six livability principles, as defined by the U.S. Department of Housing and Urban Development (HUD):

1. Provide more transportation choices
2. Promote equitable, affordable housing
3. Enhance economic competitiveness
4. Support existing communities
5. Coordinate and leverage federal policies and investment
6. Value communities and neighborhoods

This Hobby Livable Centers Study, published in 2017, was a collaborative effort between the Houston-Galveston Area Council (H-GAC), Hobby Area District (the District), City of Houston and Texas Department of Transportation (TxDOT). It was the first coordinated planning effort specific to the District and gathered input from more than 270 business, civic and governmental leaders. This booklet summarizes outcomes of a yearlong public outreach and visioning effort. The community identified a common vision and four goals. Each recommendation reflects community aspirations and guides future investments that support growth and improve quality of life for existing residents.

This booklet provides a road map towards implementation of the vision and goals identified by Hobby stakeholders. Funding and implementation strategies are discussed, but it is important to note that creating vibrant places does not have to begin with expensive infrastructure investments. Simple and creative placemaking efforts can spark interest and spur catalytic change throughout the District. Three catalyst designs illustrate how change might occur in a way that supports Livable Centers goals. The community may prioritize recommendations as partnerships and funding opportunities for plan implementation become available. These recommendations work together to create a vibrant, lively and desirable District for people to live and businesses to invest.

VISION:

THE HOBBY AREA DISTRICT IS
CONNECTED, SUSTAINABLE,
VIBRANT AND SOCIAL.



CONNECTED

Create travel choices in the District to provide connections between neighborhoods, parks, goods, services and employment centers.



SUSTAINABLE

Improve environmental quality in the District through recommendations that prioritize open space, improve air quality and create stewardship of open spaces.



VIBRANT

Promote vibrancy within the District through recommendations that create meaningful places for residents and that draw visitors.



SOCIAL

Create quality places in the District such as housing and neighborhood centers. Recommendations prioritize the development of the District's spirit of place by activating the public realm and allowing opportunities for cultural expression.



Credit: Morris Malakoff, UP Art Studio



The Hobby Livable Centers Study builds upon efforts underway by partners dedicated to the success of the community.

Photographer: Roan Matthews, Cracked Fox Photography and Design

Introduction

The goal of the study is to create a Livable Centers plan for the Hobby Area District that will promote pedestrian accessibility, increase access to transit, provide a range of quality housing options and increase opportunities for private investment. The study includes practical implementation strategies to improve the quality of the living/working/civic environment in the area. It enhances the area as a destination which is walkable, transit-served, characterized by diverse housing and employment choices, thriving businesses, vibrant street life, and civic amenities.

PURPOSE

The Hobby Livable Centers Study is the result of collaborative planning efforts between the Houston-Galveston Area Council (H-GAC), Hobby Area District (the District), City of Houston, and Texas Department of Transportation (TxDOT).

The overall goal of the study is to create Livable Centers for the District that will spur reinvestment, help rediscover the character that made the Hobby area attractive, and create an environment that is rich in opportunities.

The Hobby Livable Centers Study is the first planning effort specific to the District. Through a thorough community engagement process, over 270 business, civic and governmental leaders provided input and feedback. The resulting plan represents a melding of the District's community ideals with principles of the Livable Centers program. Recommendations further the District's goals and improve safety and support upward mobility and economic opportunity for residents and businesses.

STUDY AREA LOCATION AND HISTORY

The District is located 11 miles southeast from Downtown Houston. The District includes the area south of Dixie Drive, west of the Gulf Freeway (IH-45), north of Almeda Genoa Road and east of Mykawa Road. The Hobby Area Management District was created in 2007 to harness the area's opportunities that strengthen the local economy, enhance property values and improve quality of life.

WILLIAM P. HOBBY AIRPORT

The location of William P. Hobby Airport within the District contributes to its historic identity and significance as a premier gateway into Houston. Many visitors travel from downtown to the William P. Hobby Airport. When visitors fly into the William P. Hobby Airport, Broadway Street is often the first (and last) impression they have of Houston.

William P. Hobby airport first opened its doors in 1927 as "W.T. Carter Field." In 1967, the airport changed its name to "William P. Hobby Airport." Passenger flights were moved to the City's new main aviation hub, George Bush Intercontinental Airport, in 1969. Two years later, passenger flights resumed at William P. Hobby Airport and in 2013 construction began on a new International Terminal that would once again transform the airport into a worldwide gateway of Houston.



William P. Hobby Airport lies at the center of the District.



Sims Bayou is a great natural and recreational asset within the District.

NEIGHBORHOODS

There are twenty-three neighborhoods within the District.

1. Houston Skyscraper Shadows
2. Suncrest
3. Sierra Vista
4. Easthaven
5. Gulf Freeway Oaks
6. Meadowbrook
7. Glenbrook Valley
8. Pecan Villas
9. Clara Vista
10. Broadview
11. Sims Bayou Estates
12. Santa Rosa
13. Oakland Plaza
14. Greenway Park
15. Tropicana Village
16. Andover Place
17. Southview
18. Dixeland Plaza
19. Bayou Oaks
20. Overbrook
21. Garden Villas
22. Robin Hood Poultry
23. Farms Allen Farms

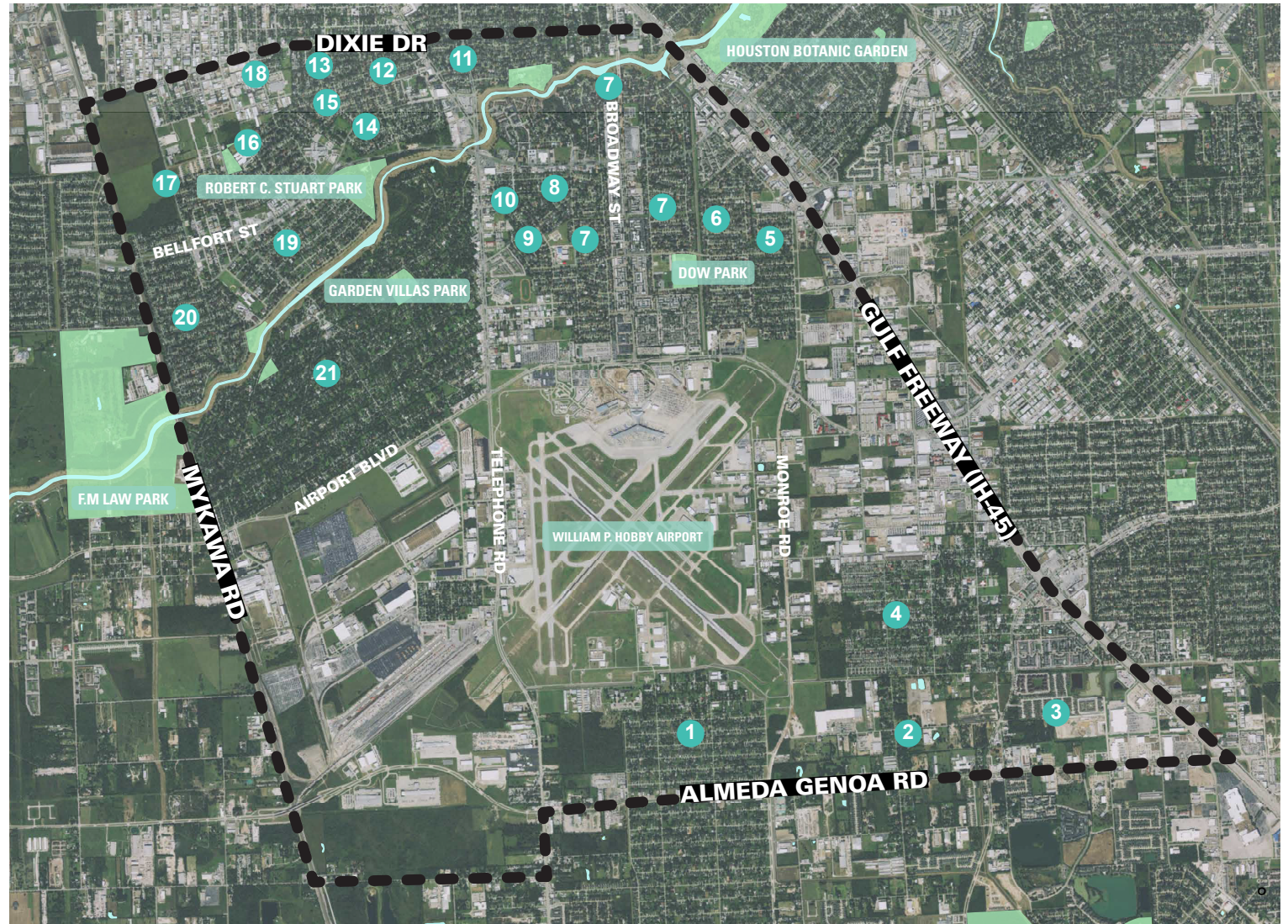


Figure 1: Hobby Area District Study Area and Neighborhoods

DEVELOPMENT AND GROWTH

Some of the oldest neighborhoods in the District are Park Place (1912), Garden Villas (1926), and the designated Historic community of Glenbrook Valley (developed 1953-1962). These communities still contain well-preserved architecture, walkable streets and are also home to many local businesses and retail shops that have developed around them over time.

Satellite imagery reveals just how much the area has boomed over the last century around the William P. Hobby Airport. The District will continue to experience considerable growth in the next 20 years.

By 2040, the area is expecting an increase in approximately 15,300 jobs and an additional 50,000 residents¹. Accompanying this growth will be the need for additional amenities, services and new vibrant spaces in which residents can live, work and play. Conceptual ideas in this document aim to create live/work/play destinations that further six livability principles, as defined by the U.S. Department of Housing and Urban Development (HUD). Also, on the following page, are four additional community-defined project goals that all work together to create Livable Centers.

WHAT IS A LIVABLE CENTER?

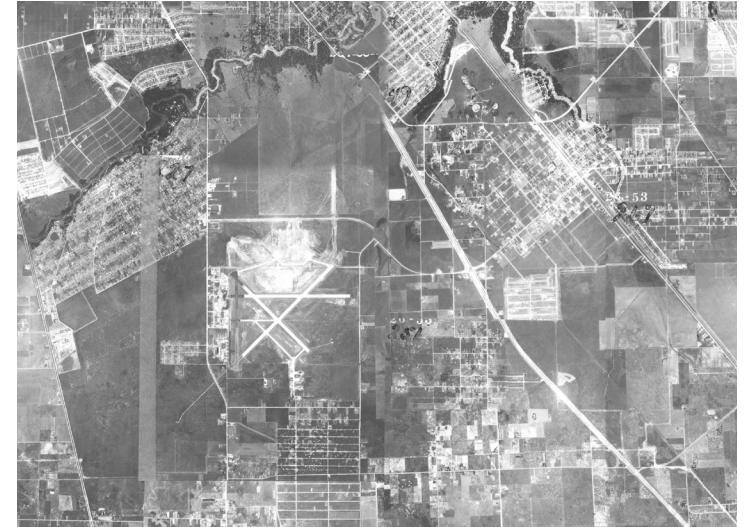
A Livable Center is safe, convenient and attractive. Livable Centers are places where people can live, work and play without relying on their cars because they are:

- Compact and mixed-use;
- Designed to be walkable; and
- Connected and accessible.

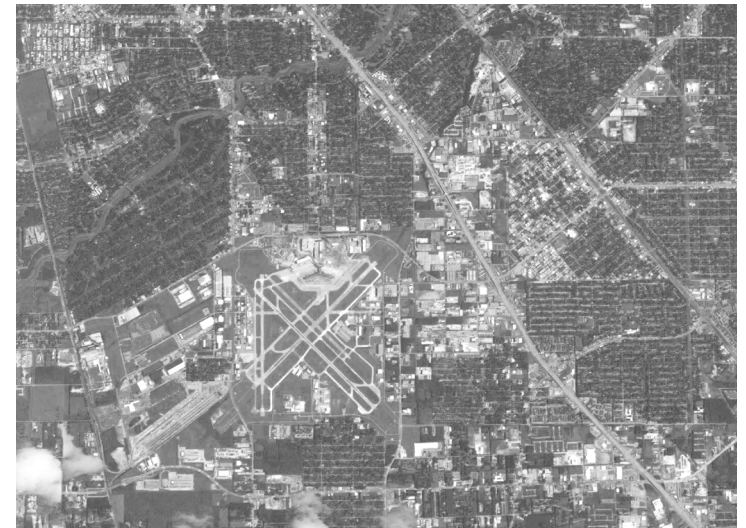
Livable Centers benefit their communities in several ways:

- **Economic Development:** Livable Centers are unique, identifiable destinations that help bolster civic pride. They are catalysts for investment and development where public investments leverage private investment.
- **Community:** Livable Centers are comfortable, appealing places that include features like open space, parks, plazas or marketplaces.
- **Environment:** Livable Centers increase access to parks and open space and propose new open spaces. They improve air quality by reducing the number of vehicle trips.

¹ CDS Community Development Strategies. Hobby Area Livable Center Market Assessment. 2016.



In the 1960's, the completion of planned neighborhoods, such as Glenbrook Valley, were underway. These mid-century neighborhoods remain the heart of the Hobby Area District.



Today, the District has grown to include new communities and abundant industry serving the William P. Hobby Airport.

- **Mobility:** Livable Centers make alternative forms of transportation like walking, bicycling, and transit more convenient. They do this by concentrating destinations and providing adequate walking and bike infrastructure.

Livable Centers provide mobility benefits by reducing the number of single-occupant vehicles (SOV) trips by providing more transit, walking and bicycling options. To date, H-GAC Livable Centers study areas have reduced SOVs by 416,541 trips per day. By 2040, they expect to reach an additional reduction of 155,719 trips. Further investments into physical infrastructure like sidewalks, bike facilities and pedestrian will help in maintaining this trend.

LIVABILITY PRINCIPLES BY U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

- 1 PROVIDE MORE TRANSPORTATION CHOICES
- 2 PROMOTE EQUITABLE, AFFORDABLE HOUSING
- 3 ENHANCE ECONOMIC COMPETITIVENESS
- 4 SUPPORT EXISTING COMMUNITIES
- 5 COORDINATE AND LEVERAGE FEDERAL POLICIES AND INVESTMENT
- 6 VALUE COMMUNITIES AND NEIGHBORHOODS

PROJECT GOALS

Through a thorough outreach process, the community and project team identified four common goals that provide a framework for future recommendations and bolster the District's sense of place. The common community vision expressed desires for a connected, sustainable, vibrant and social Hobby Area District.

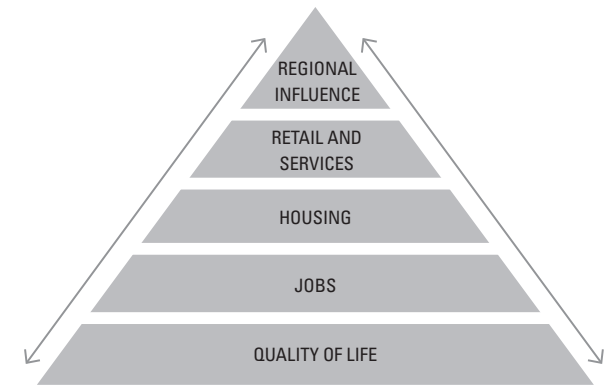


Figure 2: Livable Center Factors



CONNECTED

Create travel choices in the District to provide connections between neighborhoods, parks, goods, services and employment centers.



SUSTAINABLE

Improve environmental quality in the District through recommendations that prioritize open space, improve air quality and create stewardship of open spaces.



VIBRANT

Promote vibrancy within the District through recommendations that create meaningful places for residents and that draw visitors.



SOCIAL

Create quality places in the District such as housing and neighborhood centers. Recommendations prioritize the development of the District's spirit of place by activating the public realm and allowing opportunities for cultural expression.

Figure 3: Project Goals



NOW LEASING
(832) 678-4160

The design team looked at previous studies and generated new data to explore marketplace trends in the District.

Needs Assessment

A Livable Center is safe, convenient and attractive. Livable Centers are places where people can live, work and play without relying on their cars. What barriers exist to implementing change and what marketplace trends affect the District's future growth? Research conducted by the District and its partners explored existing conditions and related studies in order to comprehensively understand relevant factors. This research generated new data to quantify population trends and future market demands.

PREVIOUS STUDIES

The Hobby Livable Centers Study builds on several planning efforts completed over the last several years and those currently underway. This section outlines some of these efforts as they relate to our process.

HOBBY AREA DISTRICT 10-YEAR SERVICE PLAN (2008-2017)

The District establishes long-term goals for programs and projects through its service plan. Topic areas for the service plan include Security and Public Safety, Business Development, Transportation Planning and Visual Improvements and Cultural Promotion. The plan calls for mobility and transportation infrastructure improvements such as landscaping, streetscaping, lighting, bus shelters, seating, parks, trails and open space. Community art and the preservation of the District's Art Deco architectural style from the 1930s and 1940s are key themes of the service plan. The need for safety programs and additional maintenance for public spaces are also identified.

CITY OF HOUSTON PLAN HOUSTON (2015)

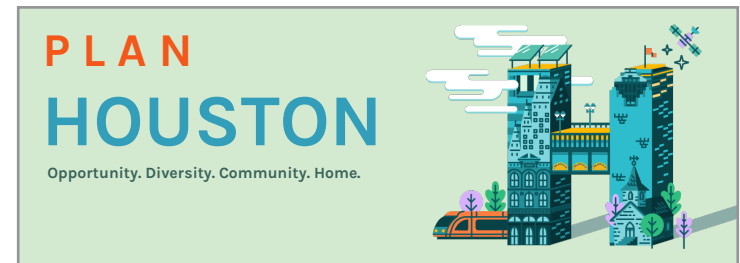
Plan Houston, the City's first general plan, was adopted in 2015. It describes a vision for Houston's future and identifies the City's long-term priorities. Core strategies were developed that the District should consider to help achieve the larger community's vision and goals. Core strategies relating to the Hobby Area Livable Centers Study include grow responsibly; communicate clearly and with transparency; sustain quality infrastructure; nurture safe and healthy neighborhoods; connect people and places; support our global economy; champion learning; and foster an affordable city.

CITY OF HOUSTON PARKS MASTER PLAN PHASE II (2015)

In 2015, the City completed a master plan to help guide growth in the parks and recreation system. Goals resulting from the plan that relate to the Hobby Livable Centers Study are to create connections, demonstrate environmental leadership and to provide equitable services for all citizens. The District is located in Park Sector 7. The report identifies this sector as being deficient in playgrounds, picnic shelters, trails, volleyball courts, dog parks, skate parks, community centers, swimming pools, outdoor spray grounds, softball and soccer fields. In 2014, residents prioritized recreational needs they felt were most important for their neighborhood. Top priorities were hike and bike trails, walking trails, upgraded community centers and playground areas. Additional needs identified by the 2014 survey were fitness and nutrition programming, swim lessons, dance, art programs and community gardens.



HOBBY AREA DISTRICT



CITY OF HOUSTON MAJOR THOROUGHFARE AND FREEWAY PLAN (2014)

Houston's Major Thoroughfare and Freeway Plan guides the implementation of thoroughfare and highway improvements by other governmental agencies within the City of Houston, including the Texas Department of Transportation. Interpretation of the plan through the City's Chapter 42 of the Code of Ordinances and the Public Works and Engineering's Infrastructure Design Manual continues to evolve as the city grows and changes.

HOUSTON BIKE PLAN (2016)

Plan Houston called for the development and maintenance of a citywide bicycle plan. The Bayou Greenways Initiative is expanding rapidly, while METRO and Houston B-cycle are connecting more neighborhoods with destinations. The City of Houston updated its bikeway plan in 2015 to include a new bicycle toolbox of projects and policies that help make Houston bicycle-friendly. The plan identifies future projects in the District (Figure 9: Bicycle Network on page 18) that will create a citywide bicycle network and tie into Houston's Bayou Greenways. The envisioned improvements serve people of all ages and skill levels and provide more transportation choices.

REIMAGINE METRO (2015)

A new transit plan, updated in 2015, reimagines METRO's new bus network. The new transit system is designed to be simpler, faster, more frequent and provide better service on weekends, and more ways to get to destinations. The reimagined network reduces the number of street-level freight rail crossings. It also features five bus routes that run through the District, all of which provide access to the William P. Hobby Airport (Figure 10: Reimagined Bus Service on page 19).

WILLIAM P. HOBBY MASTER PLAN UPDATE (2014)

The William P. Hobby Master Plan Update identifies facilities and services to accommodate passenger, cargo and aviation demands through the year 2030. It also identifies improvements and appropriate development for areas surrounding the William P. Hobby Airport including transportation, economic development and design recommendations.

BAYOU GREENWAYS 2020

Bayou Greenways 2020 is a public-private partnership among the Houston Parks Board, the City of Houston Parks and Recreation Department and the Harris County Flood Control District. Bayou Greenways 2020 will create a continuous park along Houston's major waterways and connect 150 miles of hike and bike trails. As part of this project a 10-foot trail will be built along Sims Bayou (which runs through the District) from S. Post Oak to IH-45.



THE DISTRICT TODAY

POPULATION TRENDS:

The District area is growing. In 2015 approximately 48,544 people lived within the District boundary.¹ By 2020 the population is expected to grow by an additional 2,000 people. The District's larger competitive market area is predicted to experience even more growth by approximately 11,000 people by the year 2020 and 50,000 people by the year 2040.²

EMPLOYMENT TRENDS:

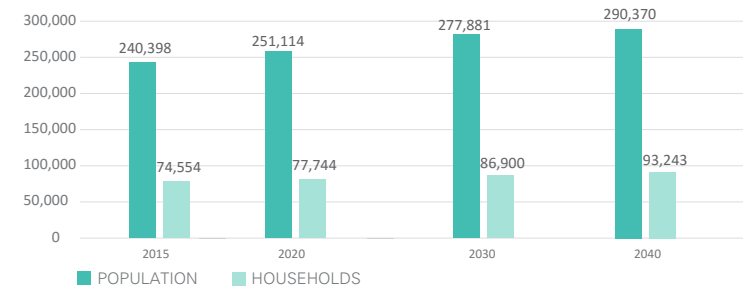
The District has a strong working class, with 42 percent of the employed population working in industrial jobs comprising 33 percent of the working population. Overall employment is expected to grow with forecasts suggesting the creation of 15,000 new jobs within the competitive market region by the year 2040.³

AFFORDABILITY TRENDS:

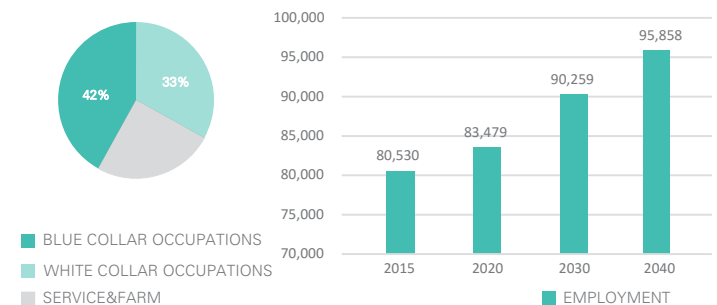
The District's affordability provides incentive for people to relocate to the Hobby Area. The majority of the District's housing stock was built before the 1980s, contributing to its affordability relative to the larger Houston region. There are an estimated 17,607 housing units located within the District, with over 78.2 percent of owner-occupied homes valued at less than \$200,000. The District's average home price is \$168,437 which is 41 percent lower than the Houston average of \$285,700.⁴

1 Hobby Area Management District, Existing Conditions Report, January 2016
 2 CDS Community Development Strategies. Hobby Area Livable Center Market Assessment. 2016.
 3 Hobby Area Management District, Existing Conditions Report, January 2016
 4 Hobby Area Management District, Existing Conditions Report, January 2016

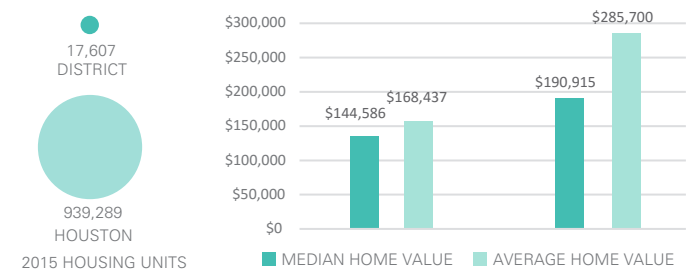
POPULATION GROWTH FOR COMPETITIVE MARKET AREA



EMPLOYMENT FORECASTS FOR COMPETITIVE MARKET AREA



AFFORDABILITY



FORECASTED MARKET DEMAND

A market analysis identified residential, office, commercial and retail types that the area could potentially benefit from in the future. This section includes existing conditions in and around the District related to real estate market performance.

SINGLE FAMILY:

Forecasted demand indicates a need for 361 single family homes by the year 2020, averaging 72 homes per year.

MULTI-FAMILY:

There will be an approximate demand for 344 apartments by the year 2020, averaging 69 units per year.

SENIOR HOUSING:

The District's population is aging and by the year 2020 there will be an additional need for 131 units needed for individuals above the age of 55.

RETAIL:

By 2021 retail sales are expected to increase by \$41 million, equating to a demand of 137,388 square feet of new retail space, or 27,477 square feet annually.

OFFICE:

By the year 2020, the study area will demand 117,616 square feet of office space. Demand will grow as population increases and employment growth continues. Increments of 10,000 - 20,000 square feet of space are likely to lease within 18-20 months.

HOSPITALITY:

Current demand indicates a need of 76 hotel rooms by the year 2020 and 114 more between the years 2021 and 2025.

INDUSTRIAL:

Employment projections suggest a demand for 250,892 square feet of industrial space within the District's competitive market area by the year 2020. This is in addition to the already proposed 151,440 square feet within the Hobby Area District.

2020 MARKET DEMAND SUMMARY

361

Single Family
Homes

344

Apartment
Units

131

Units Needed for New
Seniors Age 55+

140K

Square Feet
of New Retail
Space

118K

Square Feet
of New Office
Space

250K

Square Feet of
New Industrial
Space

EXISTING CONDITIONS ANALYSIS

LAND USE

A key ingredient of a Livable Center is having many uses near each other. At a district scale, the areas host a diverse mix of land uses areas. There are 9,358 single family homes in the Hobby Area District and 8,937 multi-family homes, which include apartments, townhomes, duplexes, tri-plexes and four-plexes. The newest development is Southview Villas along Hefferman Street, which includes “for lease” townhomes built in 2015. Glenbrook Valley, a subdivision of midcentury homes, is of growing interest to home buyers. Work destinations are limited outside of the airport, but businesses parks along Airport Boulevard and Telephone Road are home to 390 active industrial offices. Commercial activity is largely comprised of auto-dominant strip retail and is not necessarily well utilized by area residents, particularly those with disposable income. A detailed inventory of district destinations is provided in Appendix E on page 221.

LAND USE

- 0- AGRICULTURE PRODUCTION
- 1- SINGLE FAMILY RESIDENTIAL
- 2- MULTI-FAMILY RESIDENTIAL
- 3- COMMERCIAL
- 4- OFFICE
- 5- INDUSTRIAL
- 6- PUBLIC/INSTITUTIONAL [EXEMPT]
- 7- TRANSPORTATION/UTILITY [EXEMPT]
- 8- PARK/OPEN SPACES
- 9- UNDEVELOPED
- # - STUDY AREA BOUNDARY

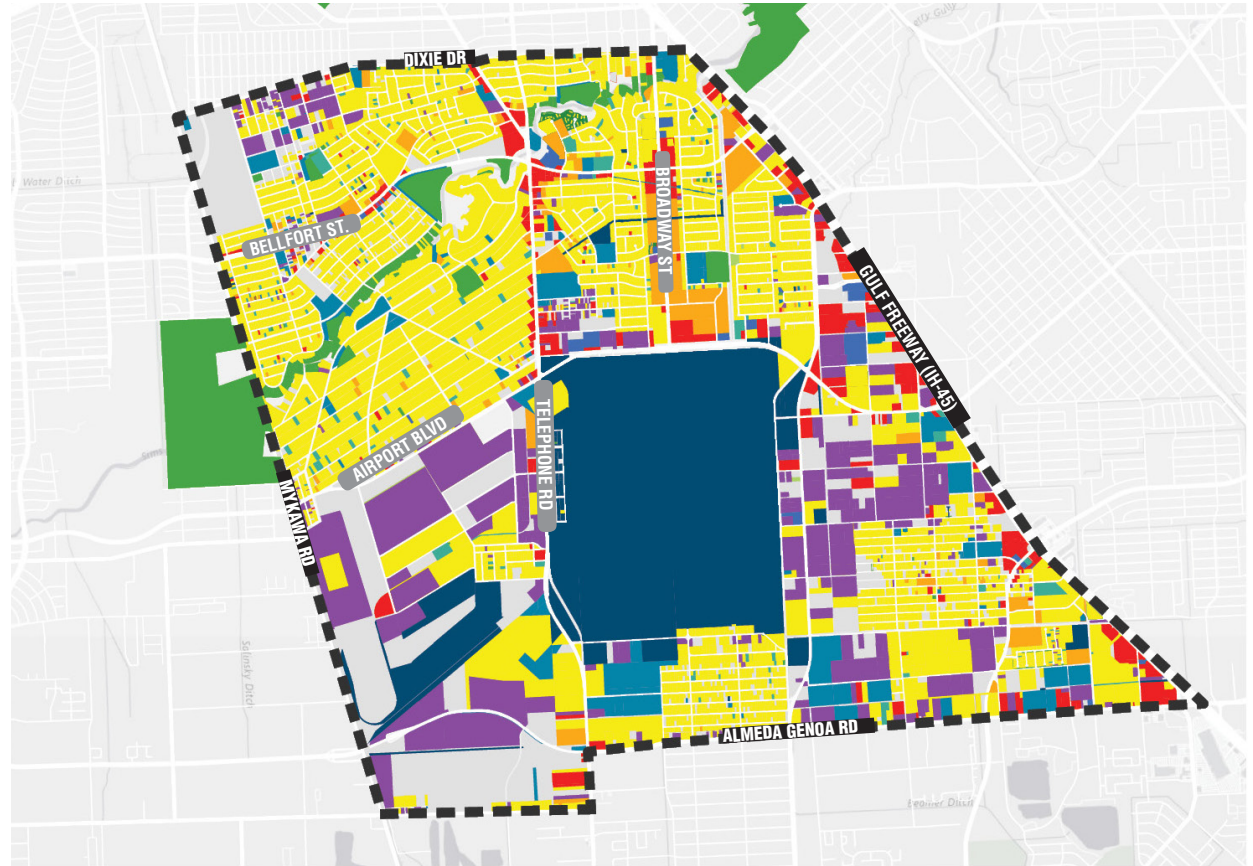
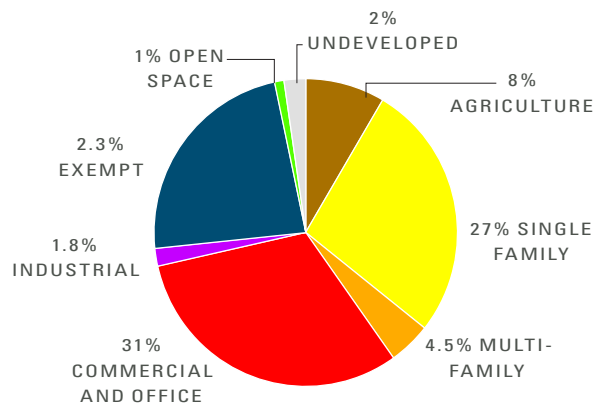


Figure 4: Existing Land Use

Source: City of Houston GIS Public Data, 2016



KEY TAKEAWAYS:

- 9,400 ACRE DISTRICT AREA
- NEWEST RESIDENTIAL DEVELOPMENT ALONG HEFFERMAN STREET
- GLENBROOK VALLEY, A SUBDIVISION OF MIDCENTURY HOMES, IS OF GROWING INTEREST TO HOME BUYERS
- THERE IS POTENTIAL TO ENCOURAGE MANUFACTURING, WHICH BOOSTS EMPLOYMENT AND DAYTIME ACTIVITY, POSITIVELY IMPACTING RETAIL AND RESIDENTIAL USES

TRAFFIC CORRIDORS

A significant number of cars travel through the District each day. Most traffic along Gulf Freeway (IH-45) is regional pass-through traffic, which ranges from 169,910 to 233,380 vehicles per day. The IH-45 corridor poses barriers to mobility for residents within the District due to high traffic volumes and limited pedestrian crossing availability.

Telephone Road is the second heavily traveled road, carrying 22,000 - 34,138 vehicle trips per day. Additional key corridors in the district include Broadway Street, Bellfort Street, Airport Boulevard, Mykawa Road, Dixie Drive and Alameda Genoa Road.

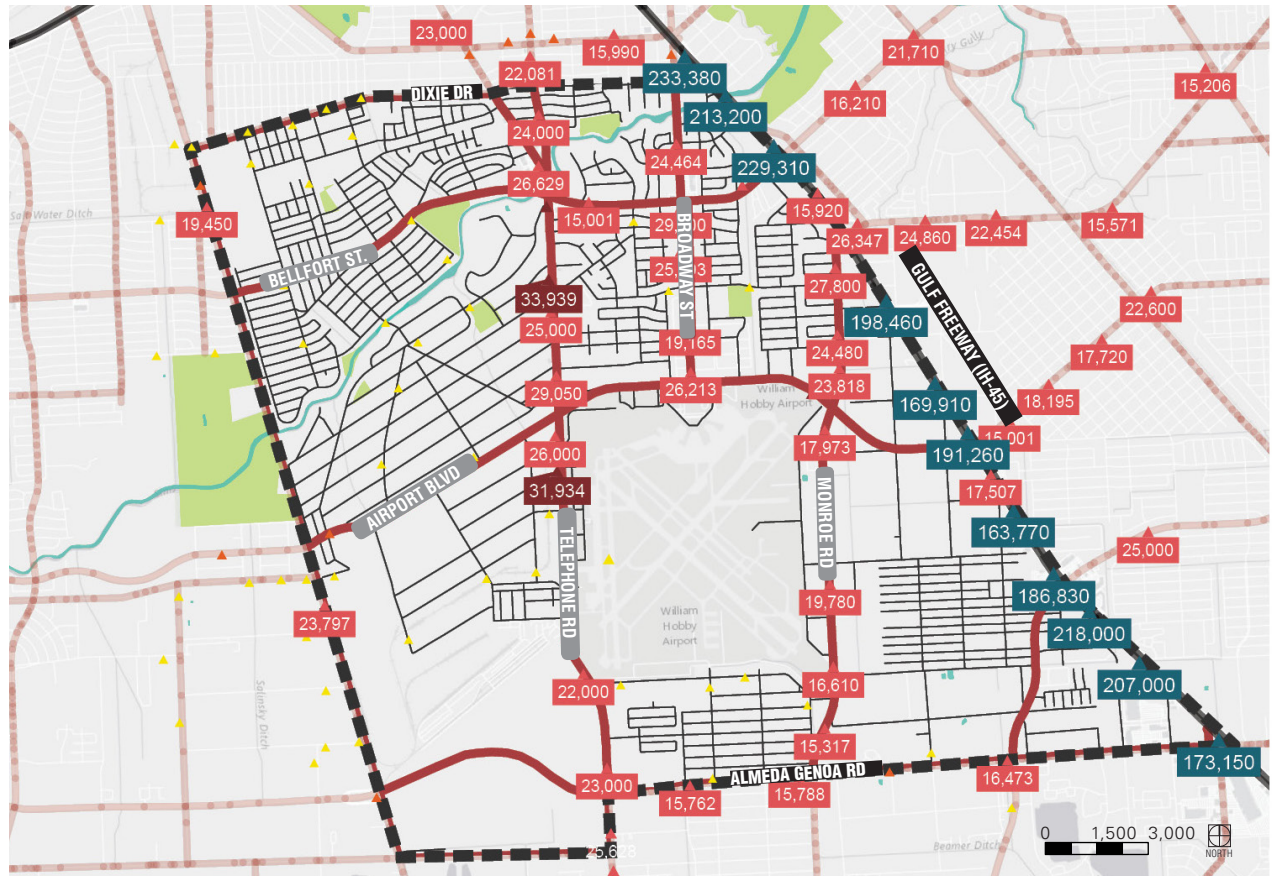


Figure 5: Road Network and Vehicle Trips

Source: Hobby Area Management District Existing Conditions Report, 2016; 2015 Market Planning Solutions Inc.

NUMBER OF VEHICLES PER DAY

- ▲ UP TO 6,000
- ▲ 6,0001 - 15,000
- ▲ 15,0001 - 30,000
- ▲ 30,001 - 50,000
- ▲ 50,001 - 100,000
- ▲ MORE THAN 100,000

ROAD TYPE

- HIGHWAY
- THOROUGHFARE STREET
- LOCAL STREET
- STUDY AREA BOUNDARY

KEY TAKEAWAYS:

- TELEPHONE ROAD IS THE THOROUGHFARE STREET CARRYING THE MOST VEHICLE TRAFFIC THROUGH THE DISTRICT
- CERTAIN STREETS SUCH AS BELLFORT STREET AND DIXIE DRIVE ARE CLASSIFIED AT THOROUGHFARES BUT CARRY LESS TRAFFIC THAN OTHER MAJOR CORRIDORS

PEDESTRIAN INFRASTRUCTURE

The Bayou Greenways 2020 planned trail will create a 10-foot wide concrete pedestrian and bicycle trail along the banks of Sims Bayou from IH-45 to South Post Oak. This trail will serve as a key connection between trails along Sims Bayou and the new Broadway Street improvements.

A study of sidewalks revealed that over half of the District does not provide safe walking conditions for pedestrians. Figure 6: Existing Sidewalk Conditions on page 14 reveals that many missing segments occur within residential neighborhoods and near existing parks. This means that many residents do not have a clear or safe route to walk to nearby destinations. For example, sidewalks along Bellfort Street, which serves as a main connection to parks, schools, and bus stops are in poor condition.

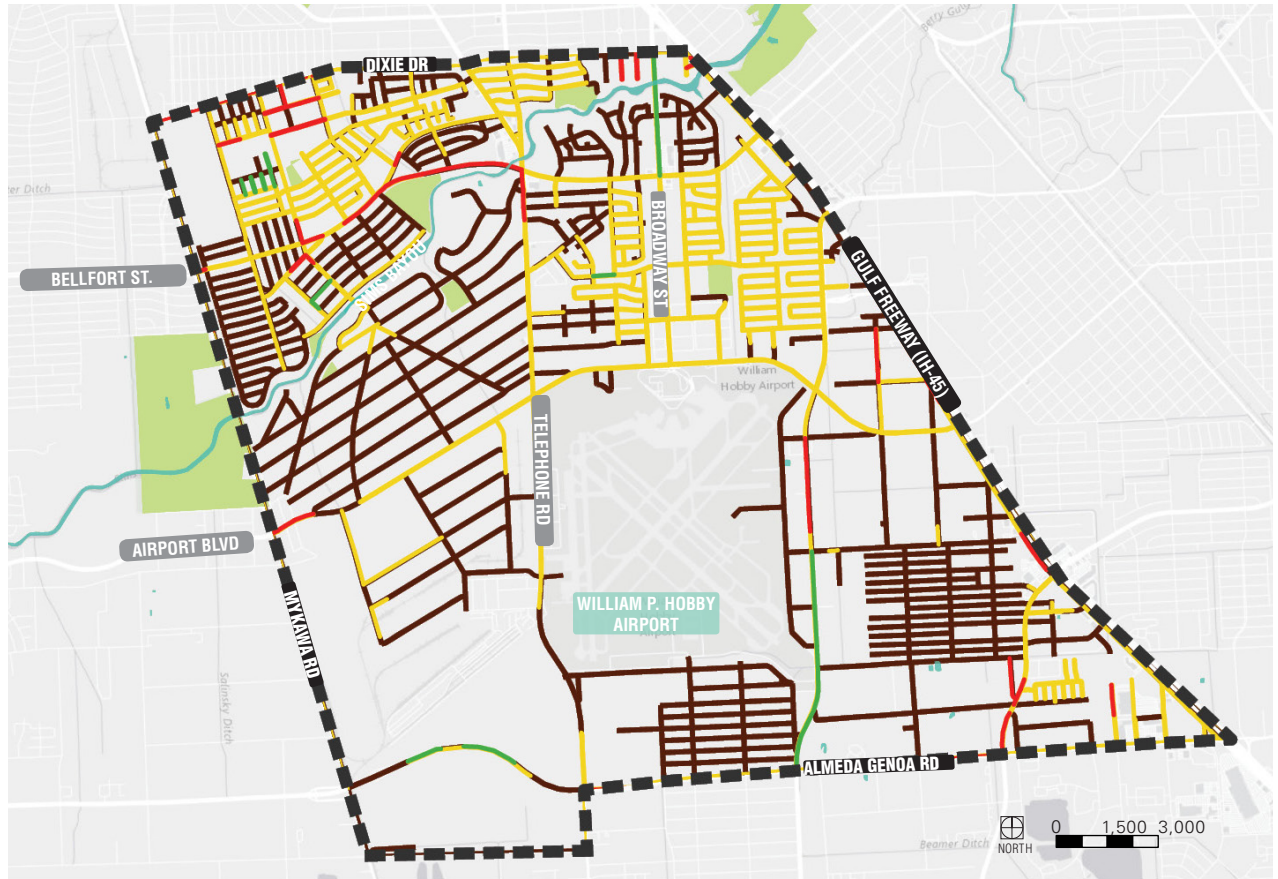
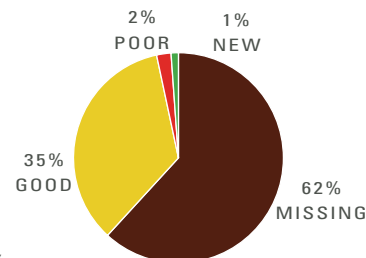


Figure 6: Existing Sidewalk Conditions

Source: LAN, 2016; City of Houston GIS Public Data, 2016

SIDEWALK CONDITIONS:

- NEW
- GOOD
- POOR
- MISSING
- STUDY AREA BOUNDARY



KEY TAKEAWAYS:

- 150 MILES OF RIGHT OF WAY
- 300 MILES OF SIDEWALK OPPORTUNITY
- 64% OF SIDEWALKS ARE MISSING OR IN POOR CONDITION
- MOST MISSING SIDEWALKS OCCUR WHERE THE MOST RESIDENTS LIVE

PEDESTRIAN AND BICYCLE COUNTS

As part of this Livable Centers Study, the Houston-Galveston Area Council (H-GAC), in partnership with the Texas Transportation Institute (TTI), installed temporary counters to measure the number of people using off-street pedestrian and bicycle facilities. A detailed data report from fourteen counter locations along shared use paths, sidewalks and informal pathways near the William P. Hobby Airport is included in the Appendix of this document. Infrared technology was used to count the number of people passing each counter.

The counters do not differentiate between pedestrians and bicyclists, but count the total number of users. The report shows that areas showing the highest average daily user activity are Belfort Street eastbound west of Broadway Street (181 daily users), Sims Bayou Trail at Reveille Park (96 daily users), Telephone Road at Oak Vista Street (87 daily users), Belfort Street eastbound at Leonard Street (72 daily users) and Sims Bayou Trail at Broadway Street (67 daily users). Less pedestrians were observed near William P. Hobby Airport, with the highest average daily count of only 24 people.

Information on pedestrian incidences from the years 2011-2015 was also gathered, revealing a significant amount of incidences occurring along the eastern portions of Belfort Street and Airport Boulevard.

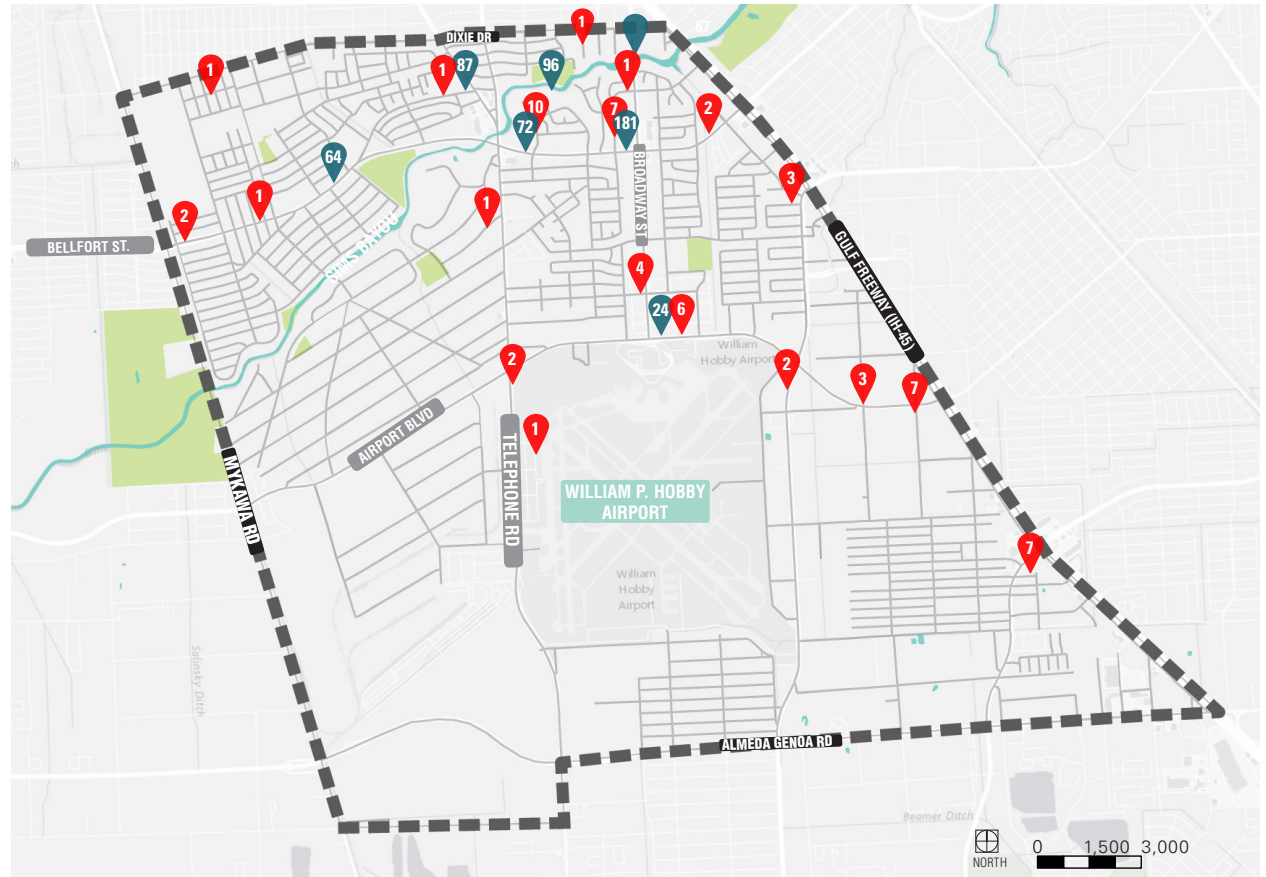


Figure 7: Pedestrian and Bike Counts

Source: Hobby Area Management District; LAN, 2016



KEY TAKEAWAYS:

- MOST PEDESTRIAN/BICYCLIST ACTIVITY OCCURS CLOSE TO TRANSIT
- BELFORT STREET AND BROADWAY STREET HAVE HIGHEST PEDESTRIAN/BICYCLIST COUNTS, INDICATING NEED FOR PEDESTRIAN INFRASTRUCTURE
- POPULAR DESTINATIONS INCLUDE SIMS BAYOU TRAIL AT REVEILLE PARK

OPEN SPACE

The District has 80 acres of parkland and three SPARK park locations at Ortiz Middle School, Garden Villas Elementary School and Cornelius Elementary School. SPARK Parks are a way to increase recreation in Houston by using public school grounds as neighborhood parks after school hours. The analysis looked at areas served by a 5- and 10-minute walk from each park sidewalk conditions. While a significant portion of the District's residential neighborhoods north of Airport Road are within walking distance of a park, significant gaps within the sidewalk network pose a barrier for residents to access park. Meanwhile, the southern portion of the District does not have any parks within walking distance of residents.

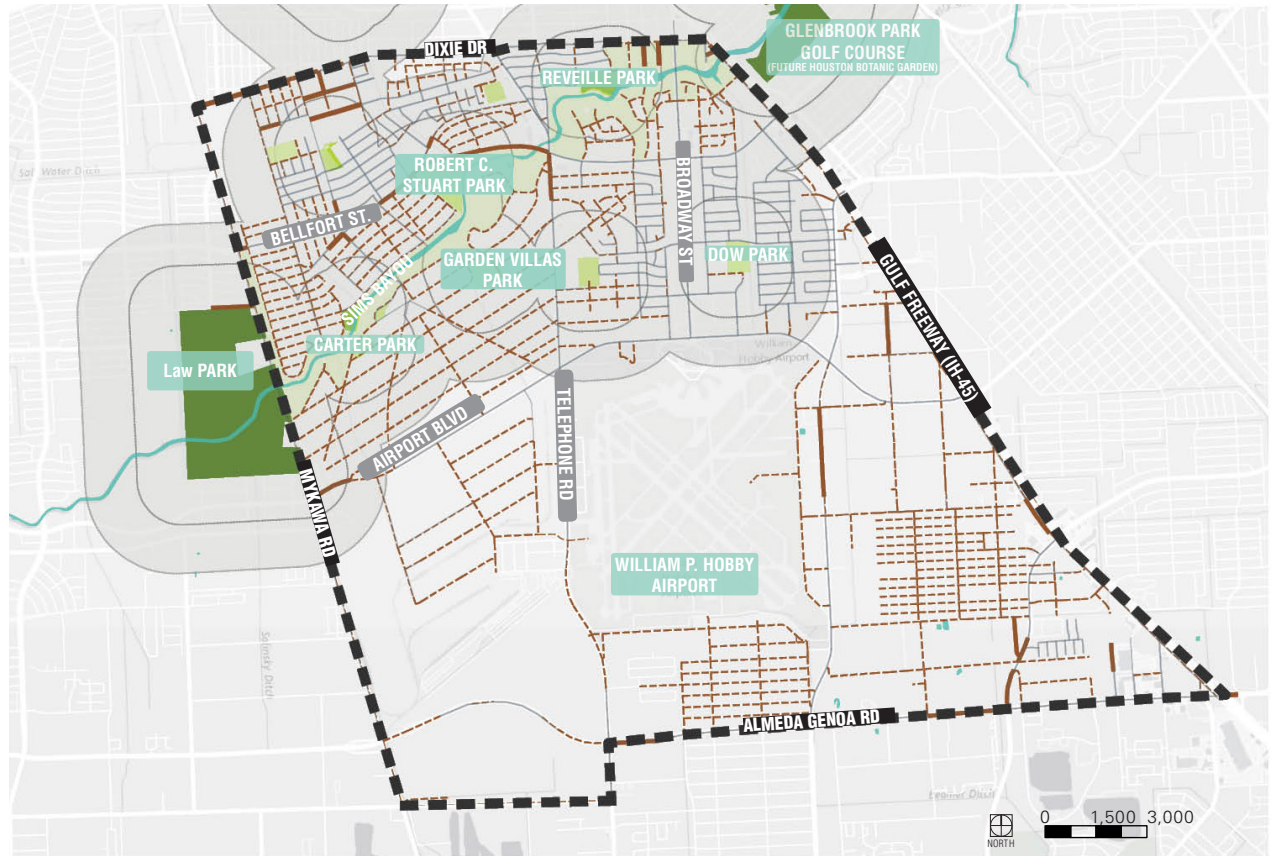
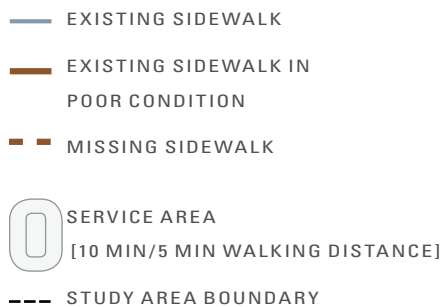


Figure 8: Park Service Area

Source: LAN, 2016; City of Houston GIS Public Data, 2016



KEY TAKEAWAYS:

- 80 ACRES OF PARK SPACE
- 40 % OF THE DISTRICT IS WITHIN A HALF MILE WALK FROM A PARK
- 53% OF SIDEWALKS ARE MISSING WITHIN THE PARK SERVICE AREA

CLASSIFICATIONS	TYPICAL DEVELOPMENT	SERVICE AREA (SQ MI) + POPULATION SERVED	RECOMMENDED HOUSTON PARKS MASTER PLAN STANDARD	HOBBY AREA DISTRICT PARKS
NEIGHBORHOOD PARK				
Parks that may range up to 15 acres and serve as a recreational and social space for neighborhoods. They are an integral and basic entity of a community.	Open Space, natural habitat, walk trails, multi-use courts, sports fields and covered picnic shelters, on-street and maintenance parking.	1/2-mile radius Serves 3,000 to 10,000 people	1.0 acre/ 1000 people	Andover Park Carter Park Stewart Park Garden Villas Park Dow Park Stuart (Robert C.) Park
COMMUNITY PARKS				
Community parks are larger in size, 16-150 acres and usually serve several adjoining neighborhoods. Surrounding uses should be predominately single or multi-family residential..	Playground, multi-use courts, trails, group picnic, open space and natural habitat, practice/game lights, site furniture and plantings.	1-mile to 5-mile Radius Serves 10,000 to 50,000 people	1.5 acres/1000 people	Reveille Park
REGIONAL PARKS				
Regional parks are 151+ acres and act as a regional destination for the larger Houston area.	Playground, multi-use courts, trails, group picnic, open space and natural habitat, practice/game lights, site furniture and plantings.	>5-mile radius Serves > 50,000 people	8 acres/1000 people	Law Park Glenbrook Park Golf Course (Future Houston Botanic Garden)
SPARK PARKS				
SPARK Parks are developed as a way to increase park space in Houston by utilizing public school grounds into neighborhood parks after school hours. (In this case, SPARK Parks are considered part of the Neighborhood Parks category)	Playground, multi-use courts, trails, group picnic, open space and natural habitat, practice/game lights, site furniture and plantings.	1/2-mile radius Serves 3,000 to 10,000 people	1.0 acre/1000 people	Garden Villas Elementary School Cornelius Elementary School Ortiz Middle School

Table 1: *Park Classifications*

BICYCLE NETWORK AND TRAILS

The District has minimal bike infrastructure. The existing signed bike routes lead cyclists down busy roads, many of them showing signs of wear and tear. Routes are not separated from the roadway and do not have striped designated bike lanes or sharrow markings.

The Houston Bike Master Plan has identified streets for future designated bike routes, including well marked, on street shared routes and off street shared use trails. These recommendations can be seen to the right in Figure 9: Bicycle Network.

In addition, the Bayou Greenways 2020 Initiative will add 2.5 miles of shared use path along the northern bank of Sims Bayou. Future shared-use paths will be extended from the Gulf Freeway (IH-45) and the Houston Botanic Garden to Law Park at Maykawa Road.

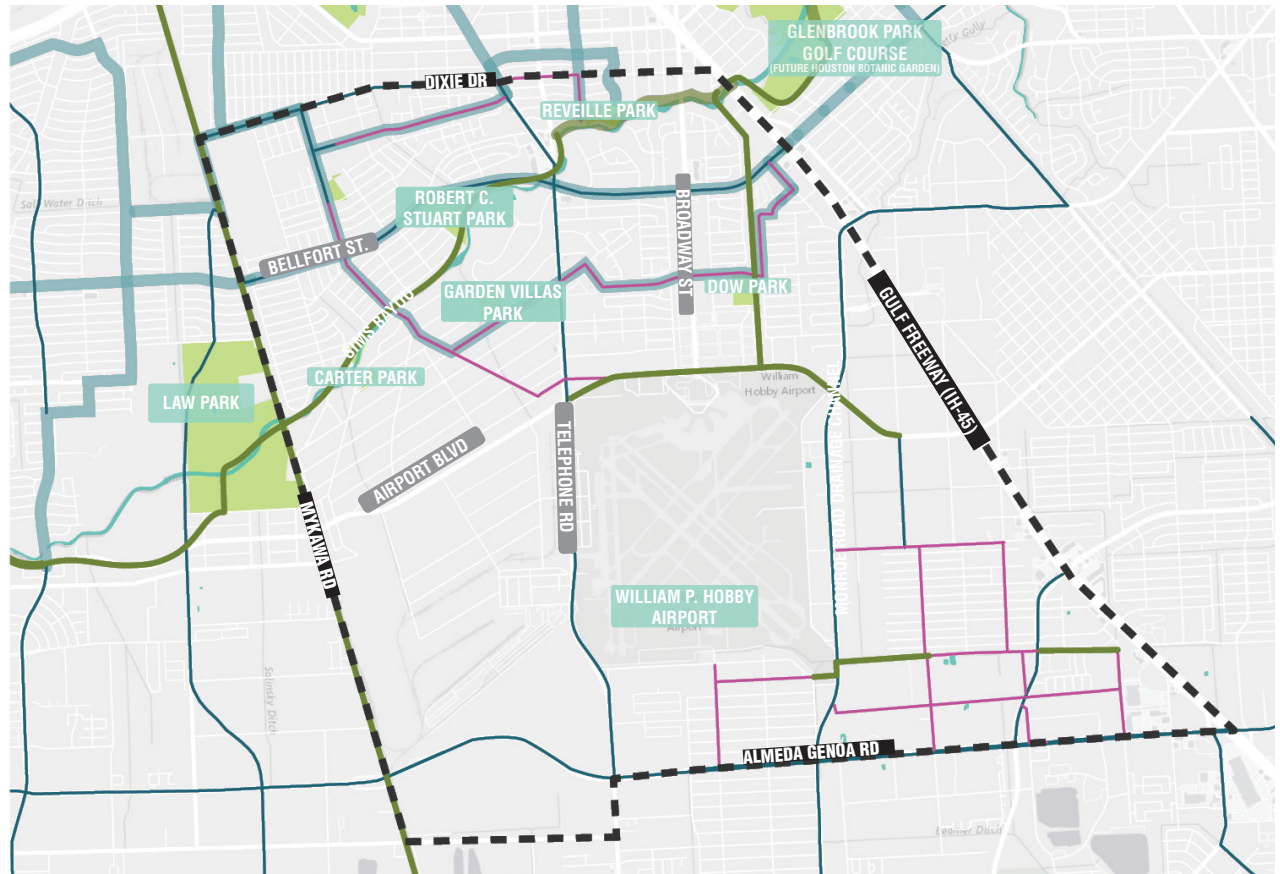


Figure 9: Bicycle Network

Source: City of Houston Bike Plan ; City of Houston GIS Public Data, 2016

- EXISTING SIGNED BIKE ROUTE*
 - EXISTING OFF-STREET TRAIL
 - FUTURE OFF-STREET TRAIL
 - FUTURE DEDICATED IN STREET RIGHT OF WAY
 - FUTURE SHARED ON-STREET
- *SIGNED BIKE ROUTES DO NOT INCLUDE A STRIPED BIKE LANE

KEY TAKEAWAYS:

- 9.7 MILES OF EXISTING BUT DANGEROUS AND POORLY MARKED BIKE ROUTES
- PLANNED 34.5 MILES OF UPDATED BIKE ROUTES

BUS SERVICE

METRO's new transit plan, the System Reimaging Plan, has revamped Houston's transit system to provide bus service links to more destinations city wide. Service improvements feature high-frequency stops and weekend service. Simpler routes improve connections and ensure there are fewer transfers to navigate to reach regional destinations. There are four METRO bus lines serving the district that all provide access to the William P. Hobby Airport. Many residents near the Gulf Freeway (IH-45) are within a quarter mile radius (or five-minute walk) of a bus stop, and stops are at 15-20 minute intervals along key corridors, such as Broadway Street, Bellfort Street and Telephone Road. Route 88 along the eastern portion of Alameda Geona Road provides service at 60 minute intervals.

A few neighborhoods such as Garden Villas, Meadowbrook and Easthaven have all or significant portions that lie outside of the five minute walking radius. The southwestern portion of the Hobby Area District bordered by Airport Boulevard and Telephone Road is also completely disconnected from bus transit.

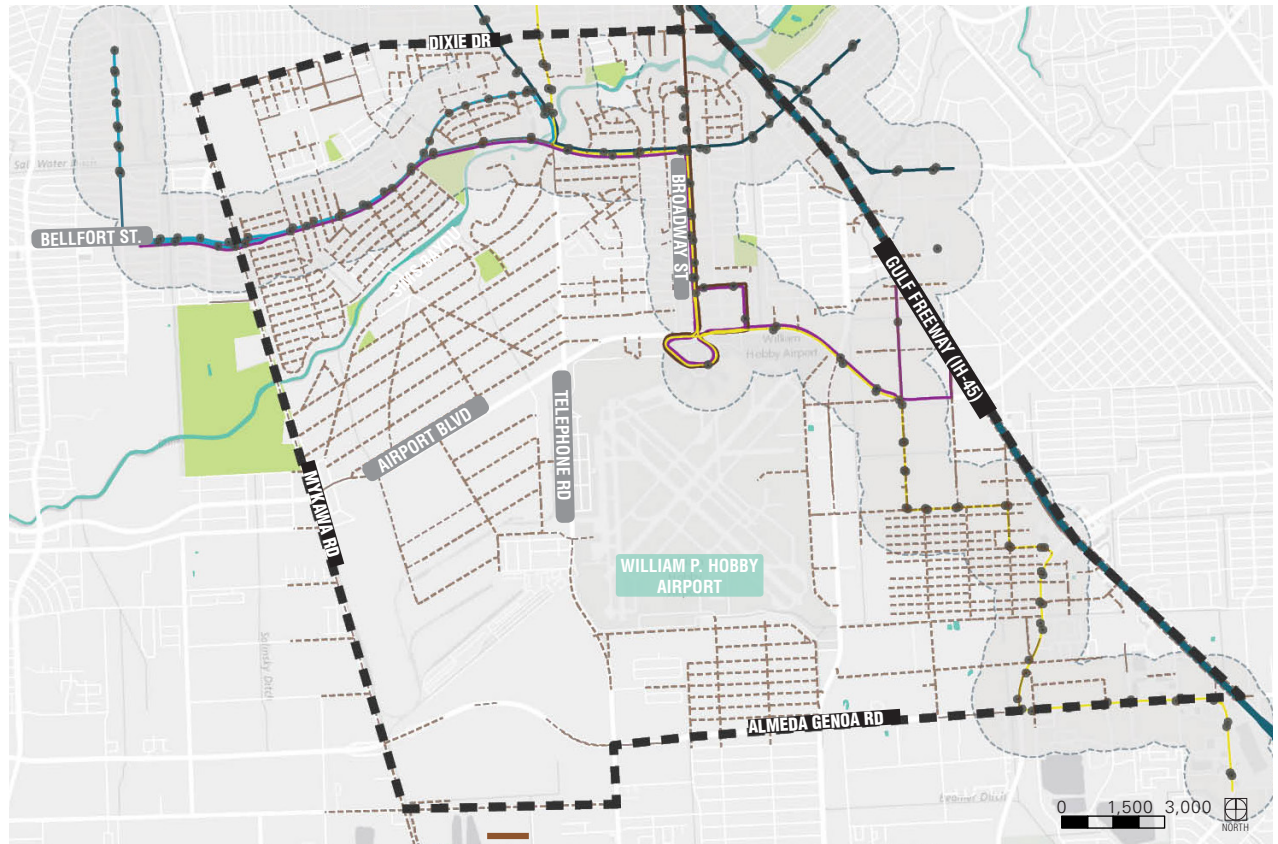


Figure 10: Reimagined Bus Service

LAN, 2016; City of Houston GIS Public Data, 2016



KEY TAKEAWAYS:

- 4 BUS LINES SERVE THE DISTRICT
- 32% OF THE DISTRICT IS WITHIN A 5 MINUTE WALK FROM A BUS STOP
- 53% OF SIDEWALKS ARE MISSING WITHIN A 5 MINUTE WALK OF BUS STOPS

DISTRICT DESTINATIONS

The District has many destinations that help residents live, learn, work, shop and play. In addition to single family neighborhoods (Figure 3: Project Goals on page 5), there are 46 multifamily communities in the District that provide homes and affordable places for residents to live. Learning destinations include Houston Independent School District (HISD) elementary schools, middle school and three alternative/charter schools. HISD serves 7,508 students, while Pasadena ISD enrolls 1,704 students. Alternative/charter enrollment is 821 students.

LEARN	PLAY
1. 1940 AIR TERMINAL MUSEUM	1. ANDOVER PARK
2. ACADEMY OF ACCELERATED LEARNING	2. CARTER PARK
3. BELLFORT ECC ACADEMY	3. DOW PARK
4. DANIEL ORTIZ MIDDLE SCHOOL	4. GARDEN VILLA PARK
5. GREGG ELEMENTARY SCHOOL	5. REVEILLE PARK
6. GARDEN VILLAS ELEMENTARY	6. ROBERT C. STUART PARK
7. HARBACH-RIPLEY NEIGHBORHOOD CENTER	7. STEWART PARK
8. HARTMAN JUNIOR HIGH SCHOOL	8. LAW PARK
9. J.P. CORNELIUS ELEMENTARY	
10. LEWIS ELEMENTARY	
11. MOUNT CARMEL ACADEMY	
12. RICK SCHNEIDER MIDDLE SCHOOL	
SHOP	WORK
1. ALMEDA MALL	1. AIRPORT BOULEVARD BUSINESS PARK
2. BELLFORT PLAZA	2. TELEPHONE ROAD BUSINESS PARK
3. HOBBY SOUTH SHOPPING	3. WILLIAM P. HOBBY AIRPORT
4. MONROE PLAZA	
5. ROWLETT RETAIL CENTER	

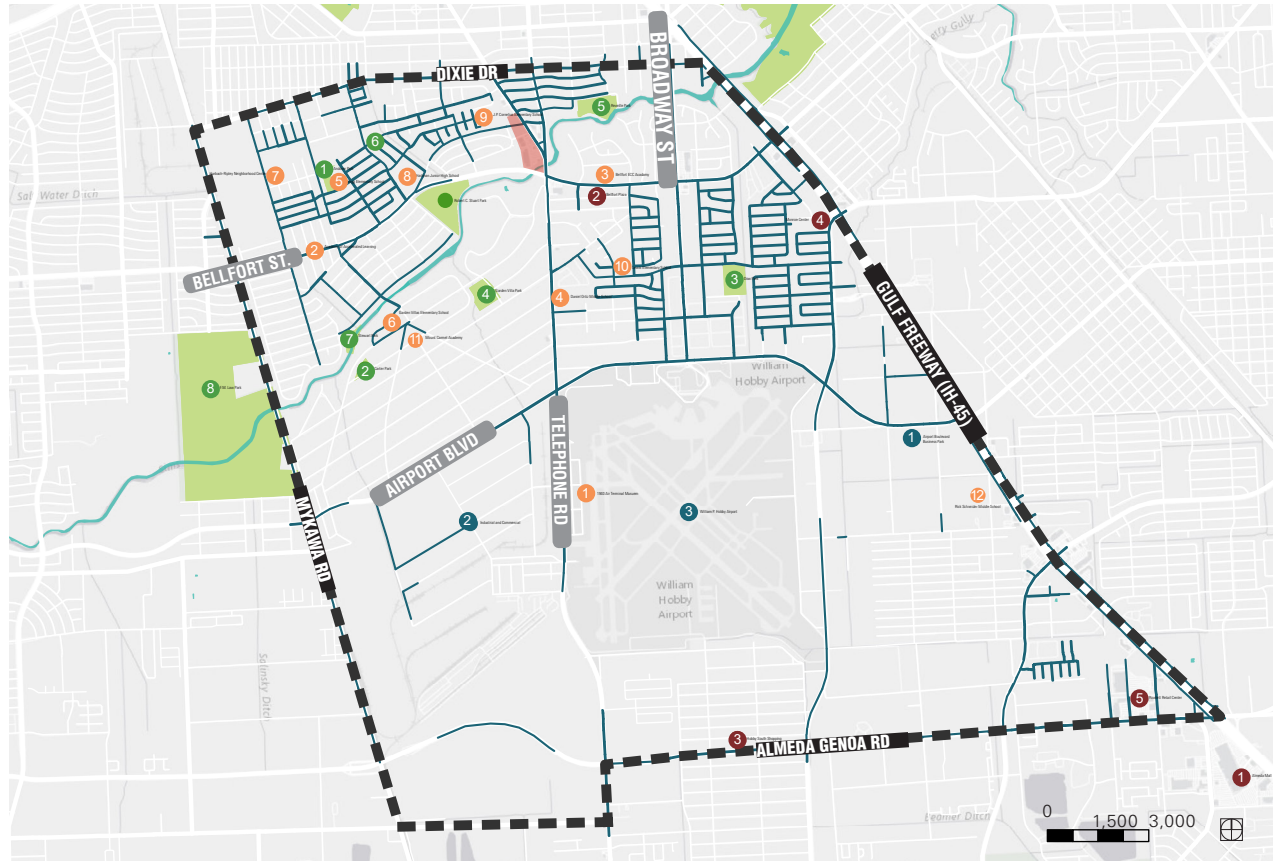


Figure 11: District Destinations

Source: Hobby Area Management District Existing Conditions Report, 2016

— EXISTING SIDEWALKS
 --- STUDY AREA BOUNDARY

KEY TAKEAWAYS:

- 70% OF DESTINATIONS ARE LOCATED WITHIN THE NORTHERN HALF OF THE DISTRICT

ENVIRONMENTAL/FLOODWAY

The 100-year and 500-year floodplains are dominant natural features within the study area. Sims Bayou begins near Missouri City inside Beltway 8 and meanders until it reaches Buffalo Bayou. Along the way, it passes Robert C. Stuart Park and Glenbrook Park Golf Course. Sims Bayou has recently undergone flood control improvements through the Federal Flood Damage Reduction project partnership between the U.S. Army Corps of Engineers and the Harris County Flood Control District.

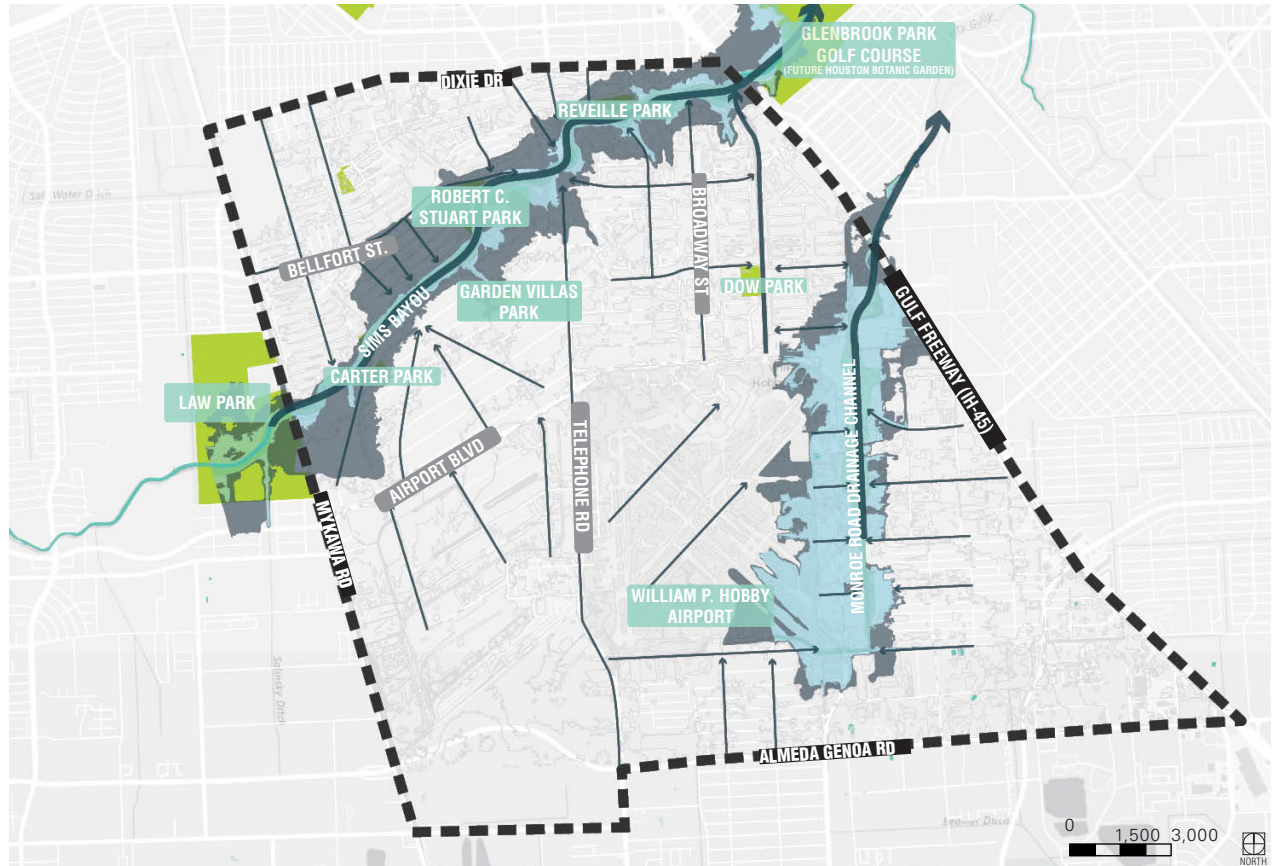


Figure 12: Flood Prone Areas

Source: LAN, 2016; City of Houston GIS Public Data, 2016

- FLOODWAY
- 100- YEAR FLOODPLAIN
- 500- YEAR FLOODPLAIN
- PARK
- STUDY AREA BOUNDARY

KEY TAKEAWAYS:

- 2 MAJOR DRAINAGE CHANNELS - SIMS BAYOU AND MONROE ROAD
- 10% OF THE DISTRICT SITS WITHIN THE 500-YEAR FLOOD PLAIN



A year-long outreach effort gathered input from 171 workshop attendees, 395 online poll participants and residents who provided 450 written comments.

Photographer: Roan Matthews, Cracked Fox Photography and Design

Envisioning Livable Centers

How can the District balance population and job growth while maintaining a place in which current and new residents can live, work and play? These challenges can be addressed at a variety of scales through planning and design. This chapter summarizes outcomes of a year long public outreach and visioning effort. The resulting vision and recommendations presented in the following pages is a direct result of community feedback. Each recommendation strives to reflect the community's desires and provides a vision that guides future investments in a way that supports growth and improves the quality of life for existing residents.

Note: Concept designs are for illustrative purposes only and have not been formally reviewed nor approved by the City. Should these concept designs mature, they will undergo a formalized plan, design and construction process with appropriate permitting.

STAKEHOLDER ENGAGEMENT

The Livable Centers' mission revolves around people. Therefore, stakeholder engagement was an essential step in achieving the vision. The planning team engaged with residents, business owners, interest groups, local community leaders, officials and stakeholders through five focus groups, three community workshops, several stakeholder interviews and three online polls. The year-long outreach effort gathered input from a total of 171 public workshop attendees, and 395 online poll participants and stakeholders who provided 450 written comments to the project team.

FOCUS GROUPS

Stakeholders with specific interests were invited to participate in one of five focus groups so the team could gain more information about the priorities of business owners and neighborhood leaders as they relate to the area's economic development, civic and recreational interests.

INTERVIEWS

The project team engaged many stakeholders in one-on-one interviews and dialogue throughout the planning process. Examples include focused interviews with the Metropolitan Transit Authority of Harris County (METRO), Harris County Flood Control District, William P. Hobby Airport, Houston Parks Board, Neighborhood Centers, Inc and more.



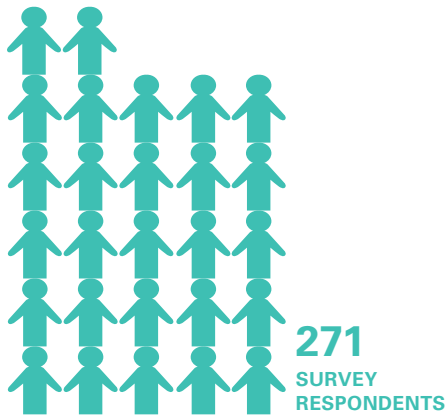
Community members discuss the assets of the Hobby Area District during the first vision workshop.



Participants discussing opportunities within the District.

VISION WORKSHOP + ONLINE POLL

The first workshop and online poll (May/June 2016) was focused on the discovery of the District’s spirit of place and the cultivation of the community’s common goals. These goals provide a direction for recommendations. Stakeholders were informed of the planning process and encouraged to participate in a series of activities that helped the team understand the current assets and shortcomings of the District. Participants were asked questions such as, “What makes Hobby more than a gateway?” They were also asked to identify key cultural, natural, economic and built assets within the area.



CONNECTED
Create travel choices in the District to provide connections between neighborhoods, parks, goods, services and employment centers.



SUSTAINABLE
Improve environmental quality in the District through recommendations that prioritize open space, improve air quality and create stewardship of open spaces.



VIBRANT
Promote vibrancy within the District through recommendations that create meaningful places for residents and that draw visitors.



SOCIAL
Create quality places in the District such as housing and neighborhood centers. Recommendations prioritize the development of the District’s spirit of place by activating the public realm and allowing opportunities for cultural expression.

Figure 14: Project Goals

VALUES WORKSHOP + ONLINE POLL

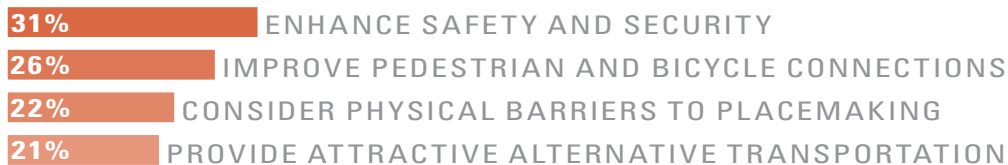
The second workshop (July/August 2016) focused on narrowing the goals identified in the first workshop and discovering the community's specific needs and desires that would lead to a livable center. The team presented feedback from the previous workshop and the four goals were further broken down into strategies that are easily transferred into implementable steps. These strategies were gleaned from previous conversations with the public.

KEY PAD POLLING

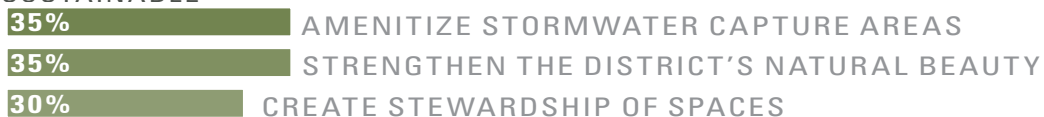
Participants were asked to provide feedback on concepts, share their top priorities and offer additional ideas. During the workshop the project team used keypad polling as a method for gathering live responses about project values. Participants were given a list of potential implementation strategies relating to each goal category and were asked to pick the one they valued most. Participants were also encouraged to write down additional ideas on comment cards. The results list shown in Figure 15 provided a basis that would transform into recommendations reflecting the true needs of the community.



CONNECTED



SUSTAINABLE



VIBRANT



SOCIAL



Figure 15: Keypad Polling Results - Participants picked their top priority within each goal category.

IMPLEMENTATION WORKSHOP + ONLINE POLL

At the last workshop (October 2016) the project team presented preliminary project recommendations based on the community values gathered at the previous workshop.

As part of this workshop, participants were given a series of cards with preliminary recommendation descriptions. They were asked to collaborate within groups to rank each project recommendation in the order of the group's priorities. Each table presented their reasonings back to the room.

The community rankings provided the team with a starting point for recommendations beginning on page 28 and project, program and policy recommendations found in Roadmap for Implementation on page 87.



Community members ranked recommendation options with their groups during the third workshop.

 35
ATTENDEES

 60
SURVEY
RESPONDENTS



Each table was asked to report their rankings back to the room.

OVERALL VISION

The following seven enhancements, as depicted in Figure 16: Overall Vision and detailed in the following pages, provides a framework for Hobby Area improvements. Given that the District performs important functions at many levels– 1) globally (internationally) with William P. Hobby Airport, 2) regionally with attractions like the 1940 Air Terminal Museum and Sims Bayou, 3) community-level with community-serving retail and services and 4) at the neighborhood scale with convenience retail and neighborhood parks–the stakeholders encouraged the project team to focus on functions that provide crossover between visitor amenities and local amenities.

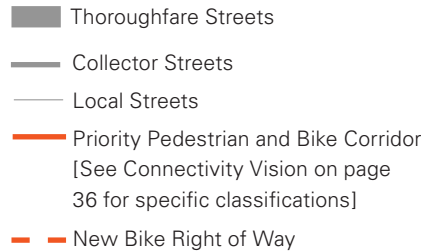
The variety of centers and the open space network both perform at these various levels. To address the needs of visitors and the community’s current residents, it is important to continue to enhance these needs individually and fill gaps with new centers and parks when possible. The circulation network with district-wide road reconstruction, bicycle facilities and pedestrian improvements will ensure that maneuvering between these amenities and centers is not only feasible, but convenient.

The three catalyst projects represent areas where many recommendations come together to create a strong livable center that can achieve stakeholders’ aspirations. The recommendations are not numbered in the order of significance or community preference. The community may prioritize recommendations as partnerships and funding opportunities for plan implementation become available.

LIVABLE CENTERS



CONNECTIONS



PARKS AND OPEN SPACE



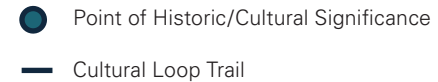
BAYOU GATEWAYS



DISTRICT WAYFINDING



POINTS OF HISTORIC AND CULTURAL SIGNIFICANCE



CATALYST OPPORTUNITY

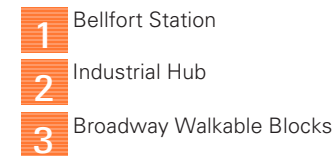




Figure 16: Overall Vision

CENTERS VISION

Creating places where people can live, work and play is crucial to the development of a livable center. This often takes place at key activity centers. An activity center is considered an area where the local community gathers due to the presence of more than one type of use. A healthy community should have a balance of walkable centers that provide services at a variety of scales.

The Centers Vision indicates priority areas where infill development, jobs, multi-modal transportation, goods and services, and mixed use housing should be focused. The centers proposed in this Vision occur at three scales—international, regional, community and neighborhood—and take on different characters and uses as outlined in the following pages.

ASSOCIATED PROJECTS

Inviting Transit Stops
Neighborhood Goods and Services
Senior Housing
Safe Pedestrian and Bike Crossings at Intersections
Walkable Blocks
Sidewalk Connections
Bayou Facing Retail
Light Rail Transit Center

ASSOCIATED PROGRAMS

Mobile Vendors and Pop-Ups
Tree Planting

ASSOCIATED POLICIES

Shared Parking Incentives
Design Guidelines

GOALS ACHIEVED*:



LIVABILITY PRINCIPLES**:



*AS DEFINED ON PROJECT GOALS ON PAGE 5.

**AS DEFINED BY U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT (HUD).

ACHIEVED METRICS:

- 88% OF RESIDENTIAL LAND USES WILL BE WITHIN A 1/2 MILE WALKING DISTANCE OF A CENTER



Figure 17: Centers Vision

CENTERS

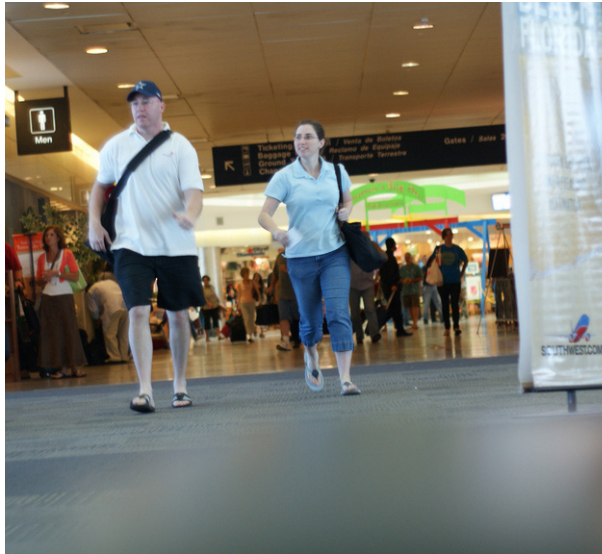


INTERNATIONAL HUB

International Centers attract visitors that are traveling through the region. These are transit hubs that also provide accommodations, such as hotels, business centers, restaurants, convenience stores and other services. Houston has light rail that connects its International Centers, such as Downtown, Uptown, the Museum District and the Texas Medical Center. Today, the Hobby Area serves as an important hub for travelers accessing these International Centers, as William P. Hobby Airport accommodates regional and international visitors, business and industry. Planned expansions to METRORail services in the future provide a great opportunity to solidify the Hobby Area as an international hub that both serves and benefits from Houston's larger framework of International Centers.



Light rail line carries riders from downtown Houston south to the Texas Medical Center, an international center.



As an international airport, William P. Hobby attracts visitors and travelers to the District.



The Galleria is an example of an international center in Houston.



REGIONAL CENTERS

Regional Centers function as destinations and draw visitors from the surrounding Houston area. They support a cluster of 30,000 or more square feet of entertainment, dining and shopping experiences sufficiently unique to the Hobby District that they are capable of drawing the interest of people outside of the area.

The plan suggests the development of a Regional Center in the southern portion of the District near the 1940 Air Terminal Museum. With the implementation of the proposed Industrial Hub catalyst and its associated projects, programs and policies, [see page 78] this area has the ability to serve its immediate community through expanded job and entrepreneurial opportunities and nearby workers and residents with a unique and enhanced mix of food and services.

The presence of the iconic 1940 Air Terminal Museum, the unique flexible and industrial character of the immediate area, and the distinctive shops, dining and entertainment opportunities associated with the Industrial Hub could result in a destination that is unique to the Hobby area. Festivals, street fairs, and other regular events add to the excitement of this area as a regional draw.



The 1940 Air Terminal Museum acts as the nucleus of a future regional center. Currently, the museum hosts special events that attract aviation fans from around the region.



The unique typology of flexible warehouse provides a space for creative retail and industry to flourish.
Source: Google Street View, 2016



Pop-up street fairs and farmers markets draw visitors from the Houston region.



COMMUNITY CENTERS

Community Centers draw from a catchment area of approximately 10 miles and support roughly 30,000-50,000 square feet of entertainment, shopping and dining activities. These nodes can support development patterns with increased density where mixed-use building may be appropriate and feasible. Entertainment, shopping and dining activities are intended to meet the needs and interests of residents, employees and guests in the general area, but are not sufficiently unique to draw from the region. Typical uses include goods and services such as grocery stores, pharmacies and restaurants. Community Centers are recommended at the intersections of:

- Telephone Road and Bellfort Street
- Broadway Street and Bellfort Street
- Broadway Street and Rockhill Street



Community Centers should be human scaled and walkable.



Sidewalks should be wide enough to support sidewalk cafes, and active uses within the public realm.



Community Centers support mixed-use developments ranging from two to four stories. These developments occur at key intersections and support restaurants, retail, grocery stores and other community services.



NEIGHBORHOOD CENTERS

Neighborhood Centers create an identifiable center of a neighborhood. They typically provide between 10,000 to 20,000 square feet of commercial resources for a roughly 2 mile radius. Retail uses are usually comprised of small corner stores and other services. They are often located near residential areas and at intersections of Local Streets with Collector Streets [street types defined in the Connectivity Vision on page 36]. Neighborhood Centers are recommended at the following intersections:

- Nunn Street and Belfort Street
- Telephone Road and Almeda Genoa Road
- Monroe Road and Almeda Genoa Road
- Dixie Drive and Waltrip Street
- Kopman Drive and Airport Boulevard
- Villa Drive and Ashburn Street



Source: Jason Groves, 2007

Neighborhood Centers provide small scale services within predominantly low scale residential communities such as small grocery stores, coffee shops, convenience stores and other services.



Rice Village is an example of a Neighborhood Center. While Neighborhood Centers take on a lower density development pattern, they should still strive for walkability through the activation of sidewalks and presence of on-street parking.

CONNECTIVITY VISION

Characteristics of street rights of way have a significant impact on the livability and functionality of a district. Width of sidewalks, distance between the sidewalk and travel lanes, presence of landscaping and interesting features, amount of traffic and speed of traffic, and a variety of other factors, all influence pedestrian comfort and overall walkability within a district. Similarly, the presence and width of bike lanes, safety and separation from vehicular traffic, conditions and intersection treatments, among other traits, greatly effect the comfort and safety of cyclists.

Streets within the study area are largely under the jurisdiction of the City of Houston and fall into classifications identified by Houston's Functional Thoroughfare and Freeway Plan. This includes Thoroughfares, Collectors and Local Streets. The Connectivity Vision proposes lane widths and bike and pedestrian infrastructure appropriate for the desired character of each street type as it passes through the Hobby Area.

In addition, the Connectivity Vision identifies the corridors most suitable for pedestrian and bike traffic. These streets should be prioritized for bike infrastructure and sidewalk improvement projects. The Houston Bike Plan's existing recommendations were taken into consideration during the identification of priority street corridors. These corridors were selected by examining the walking radius from existing and proposed centers, parks, schools, and bus stops and placing emphasis on streets that provided connections between neighborhoods and these important destinations.

ASSOCIATED PROJECTS:

Safe Pedestrian and Bike Crossings at Intersections
Sidewalk Connections
Safe Bicycle Routes

ASSOCIATED POLICIES:

Design Guidelines

GOALS ACHIEVED*:



LIVABILITY PRINCIPLES**:



*AS DEFINED ON PROJECT GOALS ON PAGE 5.

**AS DEFINED BY U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT (HUD).

ACHIEVED METRICS:

- 48 MILES OF SIDEWALK ADDED AND/OR IMPROVED ALONG PRIORITY STREETS
- 3 MILES OF EXISTING SIDEWALK IN POOR CONDITION REPLACED
- 50 MILES OF BIKE INFRASTRUCTURE ADDED
- 1,248 TON REDUCTION IN GHG EMISSIONS A YEAR WITH IMPROVEMENTS ALONG AIRPORT BOULEVARD, BELLFORT STREET, AND TELEPHONE ROAD APPENDIX D ON PAGE 215.

Considerations for Human Comfort and Safety

Creating human comfort is essential to successful connectivity in Houston. The temperature can often be higher than 100 °F and from May to October. Humidity can exceed 90 percent. Without addressing this issue, other physical improvements to the pedestrian, bicycle and transit environment may be unsuccessful.

In addition to basic safety, accessibility and lighting, improvements that address human comfort and promote safety is important. Buildings can provide shade for pedestrians, however, there are few buildings in the District today that are tall enough to provide ample summer afternoon shade for sidewalks.

Other elements of human comfort include the perceived safety of an area at all times of day. Since the mid 1960s, the concepts of "Defensible Space" and "Crime Prevention Through Environmental Design" (CPTED) have guided urban designers to create spaces that help people keep themselves, their families, and their communities safe from crime. Eliminating dark streets and trails, minimizing areas without vehicular access, tunnels, or lack of visibility all help to make sure public spaces are comfortable and perceived as safe for all users. Additional information about CPTED strategies and benefits are available at the National Crime Prevention Council website (<http://www.ncpc.org>).

PRIORITY STREET RECOMMENDATIONS

STREET NAME	LIMITS	HOUSTON BIKE PLAN	BIKEWAY TYPE	ROW IMPROVEMENTS
Airport Blvd.	Linnet Ln. - Modley Rd.	key connection [Telephone Rd. - Hansen Rd.]	off-street	fits within current ROW
Ashburn St.	Kopman Dr. - Prentiss Dr.	not included	shared on-street	fits within current ROW
Bellfort St.	Mykawa Rd. - IH-45	future project	dedicated on-street	widening
Berry Bayou Trail	Monroe Rd. - IH-45	not included		fits within current ROW
Brace St.	Prentiss Dr. - Telephone Rd.	potential short term	shared on-street	fits within current ROW
Braniff Ave	Telephone Rd. - Cub Ln.	not included	shared on-street	fits within current ROW
Broadway St.	Airport Blvd. - IH-45	not included - Part of Broadway Blvd. Beautification project	shared on-street	fits within current ROW
Clearwood St.	Alemda Genoa Rd. - IH-45	Future Project	dedicated on-street	widening
Cub Ln.	Monroe Road - Jet Pilot Ave	not included	shared on-street	fits within current ROW
Easthaven Blvd.	Scranton St. - Meldrum St.	potential short term	shared on-street	fits within current ROW
C106-01-00 Berry Creek	Meldrum Ln. - Airport Blvd.		off-street	N/A
C-0537 Drainage Corridor	Airport Blvd. - Sims Bayou	Key Connection/Future Project	off-street	N/A
Dixie Dr.	Mykawa Rd. - Telephone Rd.	potential short term	dedicated on-street	widening
Dixie Dr.	Telephone Rd. - Poplar St.	potential short term [Telephone Rd. - Poplar St.]	shared on-street	widening
Dover St.	Bellfort St. - Santa Elna St.	not included	shared on-street	fits within current ROW
Drouet St.	Telephone Rd. - Hollygrove Dr.	potential short term	shared on-street	fits within current ROW
Edgebrook Dr.	Block west of Radio Rd. - Clearwood Street	not included	shared on-street	fits within current ROW
Fauna St	Prentiss Dr. - Airport Blvd.	potential short term	shared on-street	fits within current ROW
Glen Valley Dr.	Morley St. - Glen Dell Ct.	not included	dedicated on-street	fits within current ROW
Glenscot St.	Ruthby St. - Mattby St.	potential short term	shared on-street	fits within current ROW
Glenvista St.	Stone St. - Monroe Blvd.	not included	shared on-street	fits within current ROW
Hansen Rd.	Scranton St. - Airport Blvd.	potential short term	dedicated on-street	fits within current ROW
Hansen Rd.	Airport Blvd. - Canniff St.	not included	dedicated on-street	fits within current ROW
Hansen Rd.	Scranton St. - Canniff St.	potential short term [Scranton St. - Airport Blvd.]	dedicated on-street	fits within current ROW
Hemmingway Dr.	Bellfort St. - Reed Rd.	not included	shared on-street	fits within current ROW
Hollygrove Dr.	Brace St - Rockhill St.	potential short term	shared on-street	fits within current ROW

Table 2: *Bike Infrastructure Recommendations By Street*

Jet Pilot St.	Randolph St. - Alameda Genoa Rd.	potential short term	shared on-street	widening
Jet Pilot - Meldrum Connection	Jet Pilot St. - Meldrum Ln.	key connection	off-street	N/A
Kompan Dr.	Airport Blvd. - Santa Fe Dr.	not included	dedicated on-street	widening
Kompan Dr.	Airport Blvd. - Neuhaus Ave.	not included	dedicated on-street	fits within current ROW
La Paseo St.	Nunn St - Plainview St.	potential short term	dedicated on-street	fits within current ROW
La Paseo St.	Plainview St. - Telephone Rd.	potential short term	shared on-street	fits within current ROW
Mattby St.	Glenscott St. - Stone St.	potential short term	shared on-street	fits within current ROW
Meldrum Ln.	Monroe Rd. - First 90 degree turn	Key Connection - Future Retrofit	shared on-street	fits within current ROW
Meldrum Ln. [C-0111 Drainage Corridor]	Meldrum Ln. - Dexter Blvd.	Key Connection - Future Project	off-street	N/A
Meldrum Ln.	Dexter Blvd. - Clearwood St.	Potential Short-Term/Future Retrofit	shared on-street	fits within current ROW
Meldrum Ln./ C-0111 Drainage Corridor	Clearwood St. - Minnesota St.	future project	off-street	N/A
Minnesota St. Connection	Meldrum Ln. - southern portion of Minnesota St.	future project	off-street	N/A
Minnesota St.	Southern portion of Minnesota from north of Tavenor Ln. - Alameda Genoa Rd.	Future Retrofit	shared on-street	fits within current ROW
Mosley Rd.	Scranton St. - Gulf Freeway (IH 45)	not included	dedicated on-street	fits within current ROW
Monroe Rd.	Alameda Genoa Rd. -IH-45	future project	dedicated on-street	widening
Neuhaus Ave.	S. Kompan Dr. - Travelair St.	not included	dedicated on-street	fits within current ROW
Northdale St.	Dixie Dr. - Southbrook Drive	not included	shared on-street	fits within current ROW
Nunn St.	Dixie Dr. - Roxbury Rd.	potential short term	dedicated on-street	fits within current ROW
Nunn St.	Roxbury Rd. - Westover St.	potential short term	shared on-street	fits within current ROW
Radio Rd.	Scranton St. - Meldrum St.	potential short term	shared on-street	fits within current ROW
Radio Rd. connection		key connection/future project	off-street	N/A
Radio Rd.	Meldrum St. - Alameda Genoa Rd	potential short term	shared on-street	fits within current ROW

Randolph St.	Braniff St. - Almeda Genoa Rd.	potential short term	shared on-street	fits within current ROW
Reed Rd.	Crosswell St. - Whitefriars Dr.	not included	shared on-street	fits within current ROW
Rockhill St.	Hollygrove Dr. - Ruthby St.	potential short term	shared on-street	fits within current ROW
Ruthby St.	Rockhill Dr. - Glenscott St.	potential short term	shared on-street	fits within current ROW
Santa Elna St.	Dover St. - IH-45	not included	shared on-street	fits within current ROW
Santa Fe Dr.	Airport Blvd. - Telephone Rd.	not included	shared on-street	fits within current ROW
Scranton St.	Monroe Rd. - Hansen Rd	not included	shared on-street	fits within current ROW
Scranton St.	Hansen Rd. - Mosley Rd.	potential short term	dedicated on-street	widening
Scranton St.	Mosely Rd. - Easthaven Blvd.	potential short term	shared on-street	fits within current ROW
Sims Bayou		IN PROGRESS		fits within current ROW
S. Haywood Dr.	Santa Fe Dr. - Brace St.	not included	shared on-street	fits within current ROW
Stone Rd.	Bellfrot St. - Mattby St.	potential short term	shared on-street	fits within current ROW
Stone Rd.	Mattby St. - Glenvista St.	not included	shared on-street	fits within current ROW
Swallow St.	Bellfort Dr. - Santa Fe Dr.	potential short term	shared on-street	fits within current ROW
Telephone Rd.	Almeda Genoa Rd. - Dixie Dr.	Future Project	dedicated on-street	widening
Tewantin Dr.	Major St. - Airport Blvd.	not included	dedicated on-street	widening
Travenor Ln.	Monroe Rd. -Yearling Branch Dr.	potential short term	shared on-street	fits within current ROW
Travenor Ln.	Yearling Branch Dr. - Minnesota Rd.	potential short term	dedicated on-street	fits within current ROW
Villa Dr.	Airport Blvd. - Ashburn St.	not included	shared on-street	fits within current ROW
Westover St.	Bellfort St. - Telephone Rd.	not included	dedicated on-street	widening

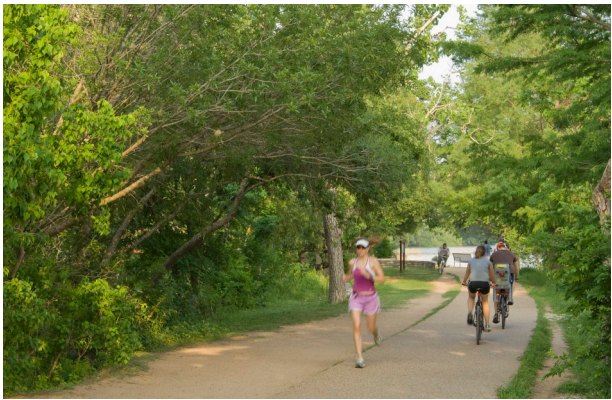
BIKEWAYS

Bike infrastructure should stay consistent with the recommendations proposed within the Houston Bike Plan. Bikeway infrastructure recommendations in addition to those recommended in the Houston Bike Plan were chosen using the Plan’s same criteria of bikeway comfort seen in the chart below.

Table 1: Bike Infrastructure Recommendations By Street lists the priority streets and their specific bike recommendations.

		MORE COMFORTABLE		LESS COMFORTABLE	
		1	2	3	4
SHARED ON-STREET	SPEED LIMIT residential	25 MPH or less	30 MPH	30 MPH	35+ MPH
	SPEED LIMIT non-residential	25 MPH or less	25 MPH or less	30 MPH	35+ MPH
	NUMBER OF LANES	2 LANES	2-3 LANES	2-3 LANES	4+ LANES
	INTERSECTING STREETS	NARROW, CALM	CALM	BUSY	WIDE, BUSY
DEDICATED BIKE LANES		1	2	3	4
	SPEED LIMIT	30 MPH or less	30 MPH	35 MPH	40+ MPH
	LANES EACH DIRECTION without median	1 LANE	1 LANE	2+ LANES	2+ LANES
	LANES EACH DIRECTION with median	1-2 LANES	2 LANES	3+ LANES	3+ LANES
	BIKE LANE WIDTH	6 FEET	5-6 FEET	5 FEET	<5 FEET
OFF-STREET	INTERSECTION TREATMENTS	CONTINUOUS	SHARED	SHARED	NONCONTINUOUS
	SEPARATION	SEPARATION MOVES A FACILITY ONE COMFORT LEVEL TO THE LEFT			
		1	2	3	4
	CROSSING FREQUENCY	RARE	INFREQUENT	MODERATE	FREQUENT
	TYPE OF CROSSINGS	CALM & NARROW OR CONTROLLED	UNCONTROLLED BUT NARROW	UNCONTROLLED WIDE OR FAST	UNCONTROLLED WIDE & FAST

OFF-STREET TRAIL
Dedicated path or trail, often shared with people walking or jogging, that is completely separated form parallel traffic.



DEDICATED BIKE LANE
Dedicated space for bicyclist within street right of way. Typically a bike lane which may have a barrier or buffer between bicyclists and vehicle traffic. In some situations, a side path behind the curb may be determined as the most appropriate bikeway for a corridor.



SHARED ON-STREET ROUTE
Locations where bicyclists share the travel way with vehicles. Most appropriate for low volume, low-speed streets.



STREET HIERARCHY

THOROUGHFARE STREETS

Thoroughfares accumulate traffic from Collector Streets and other Thoroughfares for distribution to the freeway system. These streets are typically four to six lanes, sometimes with medians and turn lanes. They carry medium to high volume traffic and provide access to commercial, mixed use and residential areas.

SIDEWALKS:

Sidewalks should be set back from the curb and buffered with planting strips to separate pedestrians from high speed traffic. These roads are often difficult to cross and intersections should include applications that improve the safety and visibility of crossings such as signalized crossings, and raised pedestrian platforms.

As future development occurs along Thoroughfares, curb cuts should be minimized and joint access agreements encouraged.

BIKE LANES:

Bike lanes along these streets should be buffered or separated cycle tracks whenever possible. At a minimum they should be striped and a minimum width of 6-feet.

TRANSIT:

Future alternative transit and rail is most appropriate along Thoroughfares. Their typically large right of way and presence of center medians provides flexible space for the addition of rail.

THOROUGHFARE STREETS:

- Airport Boulevard
- Reveille Street
- Telephone Road
- Alameda Genoa Road east of Telephone Road
- Clearwood Street
- Monroe Road
- Mykawa Road
- Orem Drive



A planted buffer zone should separate sidewalks from vehicle lanes



New rail connections are most appropriate along Thoroughfare Streets.



Cycle tracks or buffered bike lanes should be prioritized along Thoroughfare Streets.

THOROUGHFARE STREET WITH SHARED USE PATH - AIRPORT BOULEVARD FROM TELEPHONE ROAD TO HANSEN ROAD

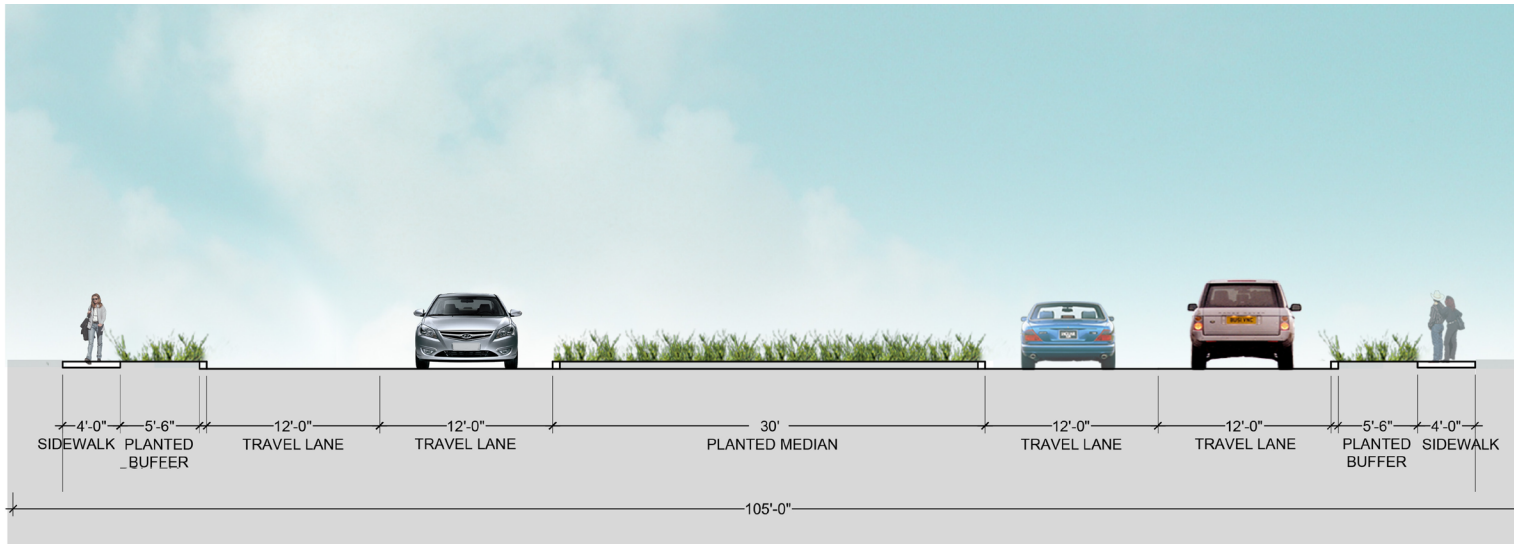


Figure 19: Existing Thoroughfare Conditions - Airport Boulevard

IMPROVEMENTS:

- Add street trees to the center median and in vegetated buffers along the edge of the street.
- Incorporate a shared-use path along one side of street to accommodate bike and pedestrian traffic.
- Increase sidewalk width to 6-feet on other side of street so two people can stroll side by side comfortably.
- In certain conditions additional right of way may be needed in order to provide wider sidewalks or planting areas.

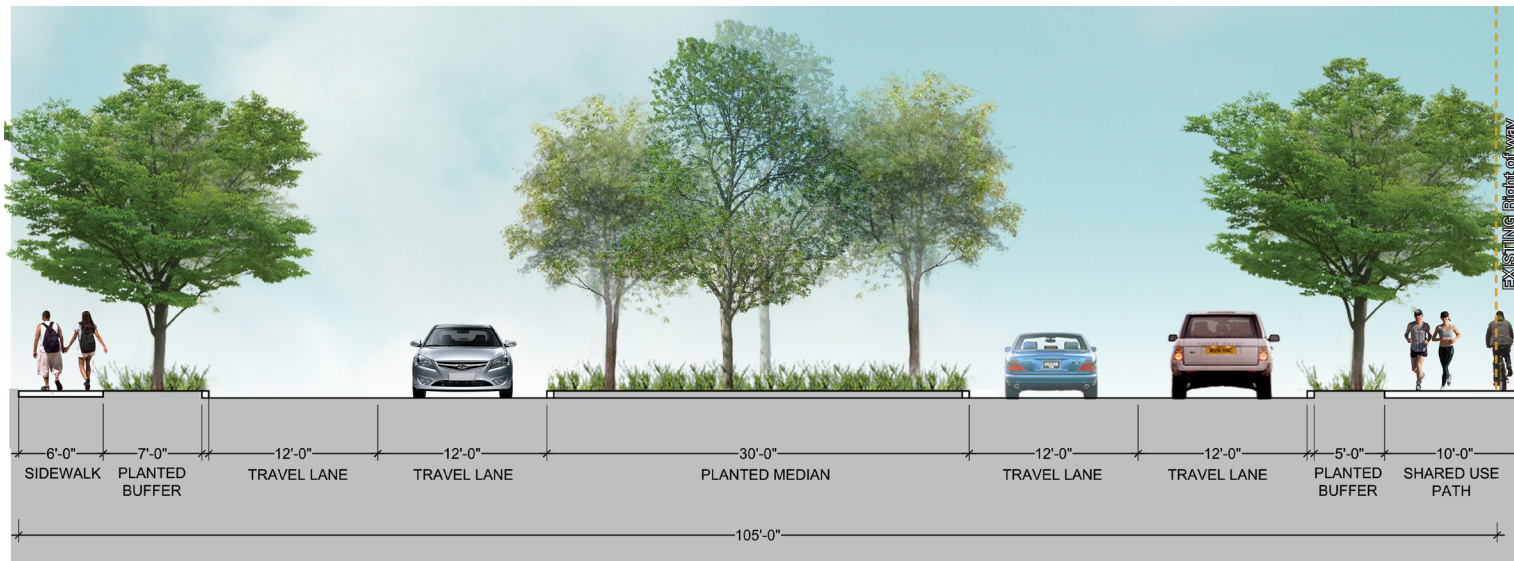


Figure 20: Proposed Thoroughfare Conditions With Shared Use Path - Airport Boulevard

THOROUGHFARE STREET WITH DEDICATED BIKE LANES - MONROE ROAD

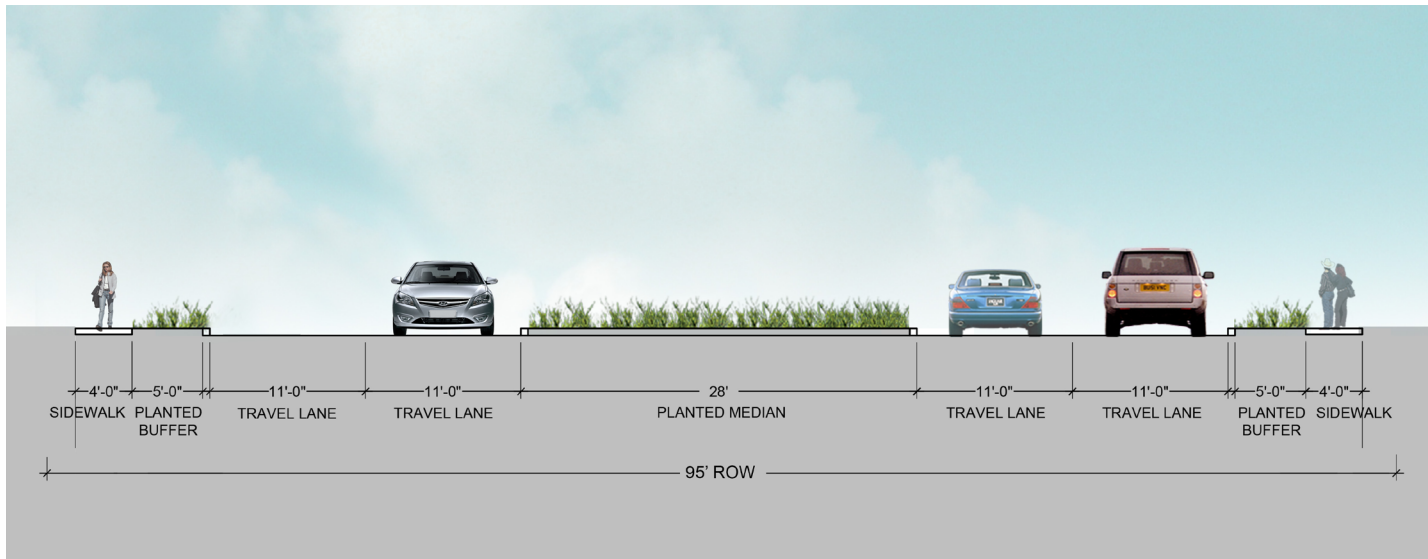


Figure 21: Existing Thoroughfare Conditions - Monroe Road

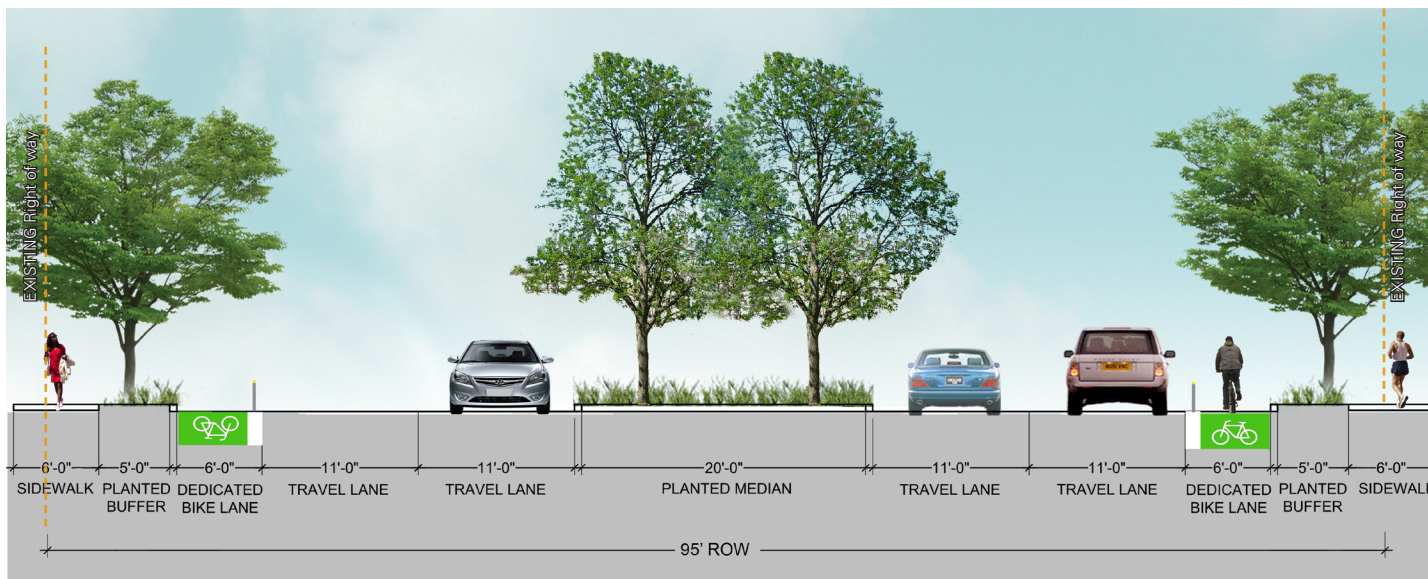
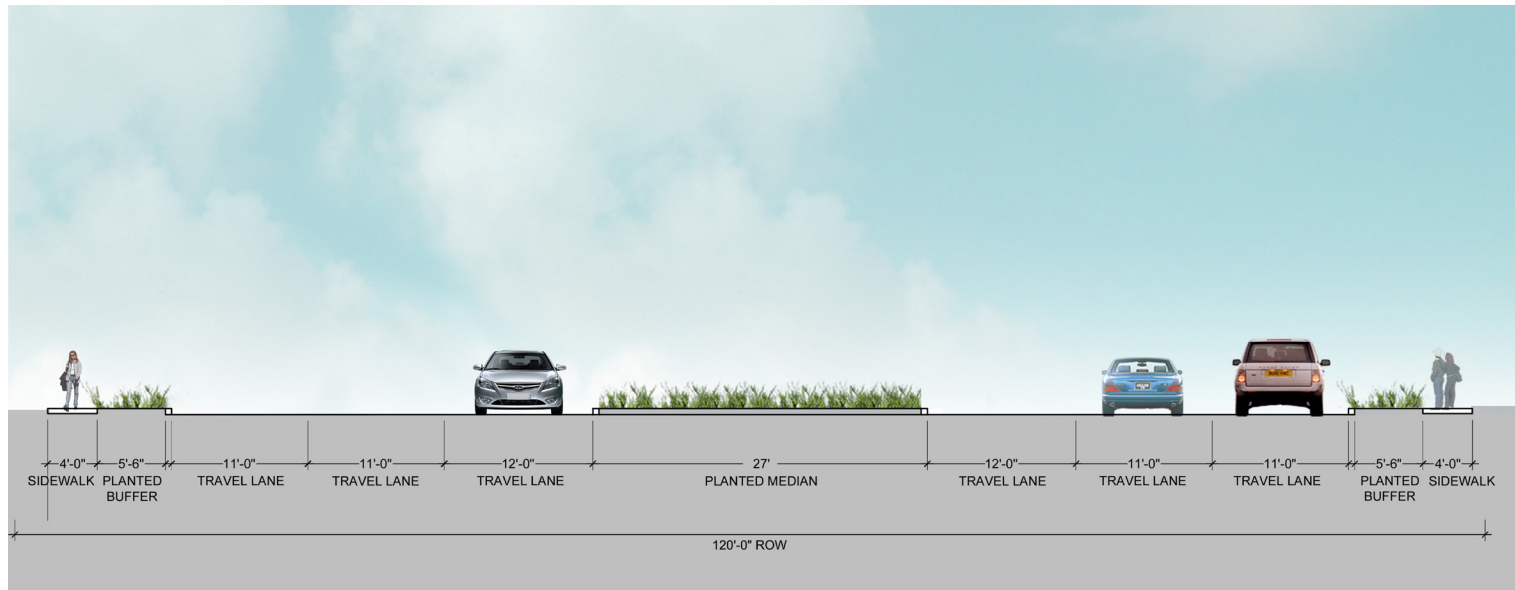


Figure 22: Monroe - Proposed Thoroughfare Conditions With Dedicated Bike Lanes - Monroe Road

IMPROVEMENTS:

- Add street trees to the center median and in vegetated buffers along the edge of the street.
- Increase sidewalk width to 6-feet so two people can stroll side by side comfortably.
- Add dedicated on-street bike lanes with a buffer between lanes and vehicle lanes.
- In certain conditions additional right of way may be needed in order to provide wider sidewalks or planting areas.

THOROUGHFARE STREET WITH SHARED USE PATH AND LIGHT RAIL - AIRPORT BOULEVARD FROM TELEPHONE ROAD TO MONROE ROAD



IMPROVEMENTS:

- New light rail transit options down center median.
- Add street trees along edge of the street.
- Incorporate a shared-use path to accommodate bike and pedestrian traffic along on one side of street.
- Increase sidewalk width to 6-feet on other side of street so two people can stroll side by side comfortably.
- In certain conditions right of way acquisition will need to be considered in order to provide ideal sidewalk and planting buffer widths.

Figure 23: Existing Thoroughfare Conditions - Airport Boulevard

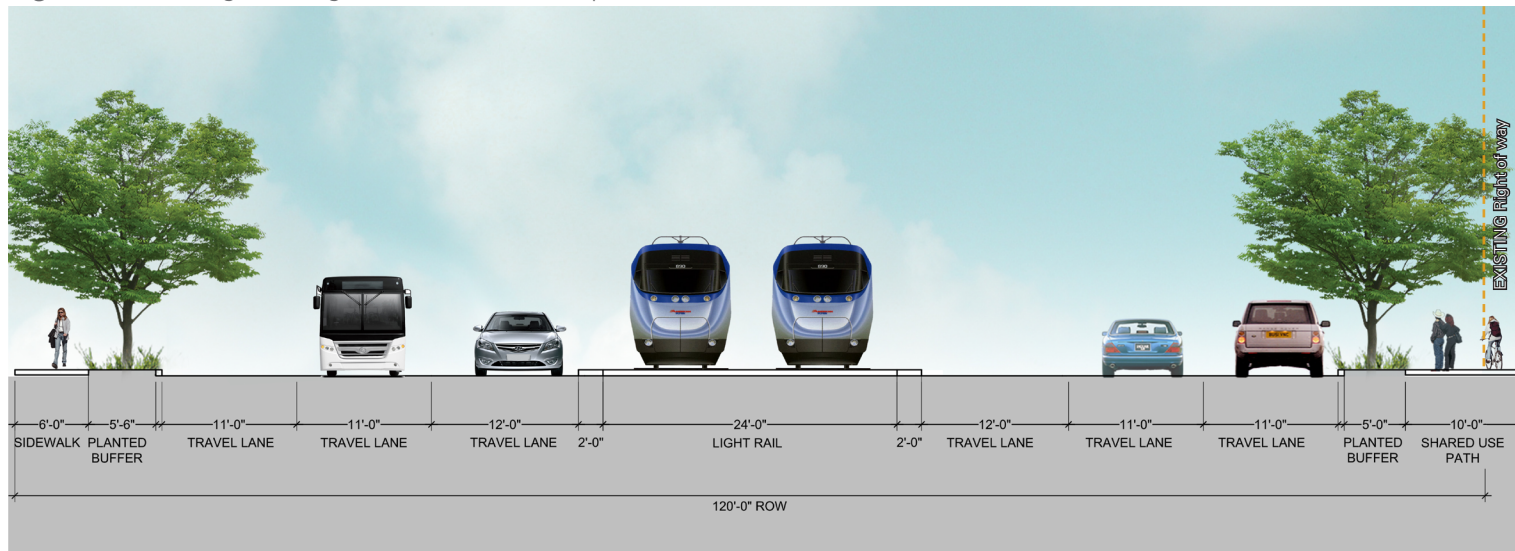


Figure 24: Proposed Thoroughfare Conditions With Shared Use Path and Light Rail- Airport Boulevard

THOROUGHFARE STREET WITH DEDICATED BIKE LANES AND LIGHT RAIL - TELEPHONE ROAD.

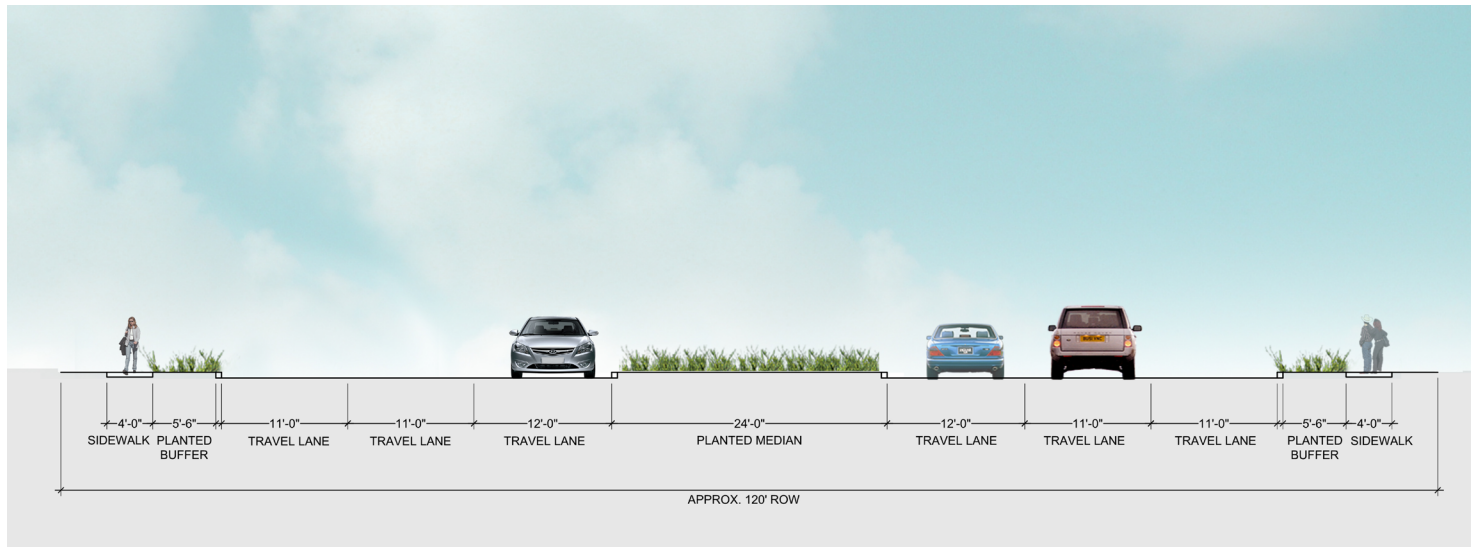


Figure 25: Existing Thoroughfare Conditions - Telephone Road

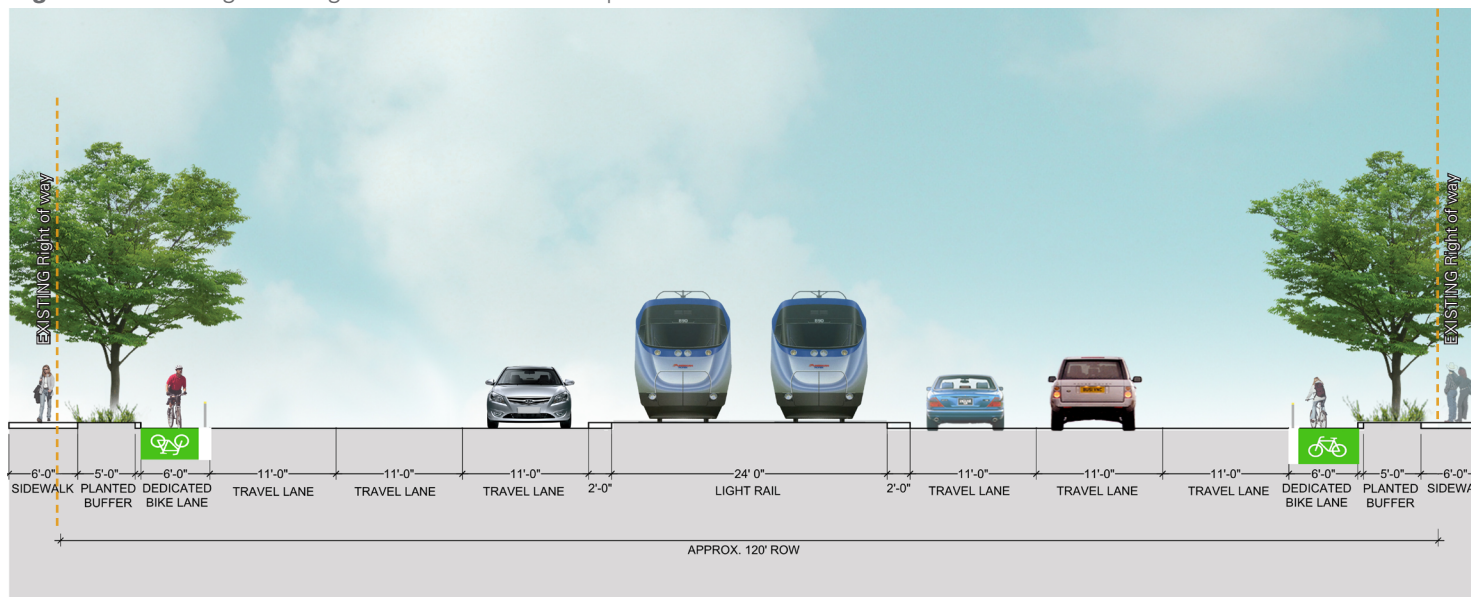


Figure 26: Proposed Thoroughfare Conditions With Dedicated Bike Lanes and Light Rail - Telephone Road

IMPROVEMENTS:

- New light rail transit options down center median.
- Add street trees along edge of the street.
- Add dedicated on-street bike lanes with a buffer between lanes and vehicle lanes.
- In certain conditions right of way acquisition will need to be considered in order to provide ideal sidewalk and planting buffer widths.

COLLECTOR STREETS

Collector Streets accumulate traffic from Local Streets for distribution to the Thoroughfare Streets. They typically provide access to commercial, mixed use and medium to high density residential areas. They are usually two to three lanes and carry cars at speeds from 25-35 mph. These streets are safer to navigate as pedestrians and should offer high quality pedestrian and bike infrastructure to encourage walking and cycling.

SIDEWALKS:

Similar to Thoroughfare Streets, sidewalks along Collector Streets should be set back from the curb and buffered from vehicle traffic with a planted buffer or pedestrian amenity zone.

When adjacent to retail, sidewalks should be a minimum of 12-feet with 6-feet devoted to active uses such as sidewalk cafes.

Smaller collectors are suitable for driveway access; however, joint access is still preferred to preserve sidewalk safety and walkability.

BIKE LANES:

Collector Streets are more suitable for striped on-street bike lanes, however efforts should be made to buffer lanes with a planting strip or bollards whenever possible.

PUBLIC TRANSIT:

Bus transit is the most appropriate form of alternative public transit along Collector Streets. Bus pull out areas can be incorporated when the

right of way allows. Stops should include bus shelters, benches, trash receptacles, lighting and signage with bus schedules. All stops should be ADA accessible.

MAJOR COLLECTOR STREETS:

- Dixie Drive (Major Collector)
- Bellfort Street
- Broadway Street
- Alameda Genoa Road west of Telephone Road

This plan suggests the reclassification of Bellfort Street from its current classification as Thoroughfare Street to a Collector Street due to its lower traffic volume and connection to many parks and key centers. Providing safe pedestrian and bike conditions along this street will encourage residents to walk and cycle to these destinations.

Broadway Street's classification should also be reconsidered due to its unique character as the District's prominent retail corridor and ongoing updates through the Broadway Beautification project, which is striving to improve its overall walkability.



A planted buffer zone should separate sidewalks from the curb.



Bus stops should incorporate good lighting, and shelters.



Bike lanes should be buffered or painted along Collector Streets.

COLLECTOR STREET WITH DEDICATED BIKE LANES - BELLFORT STREET

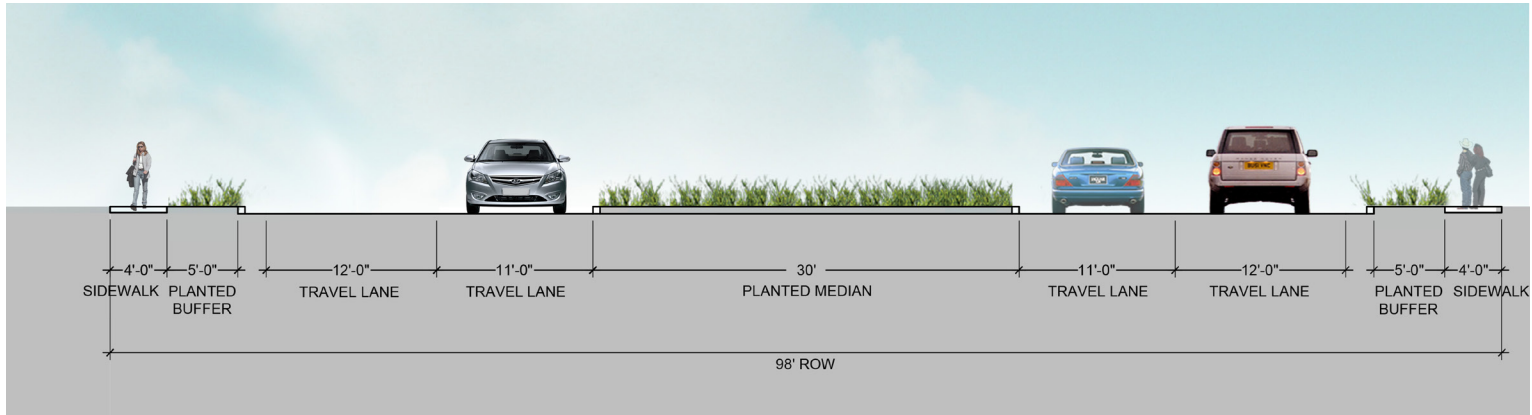


Figure 27: Existing Collector Conditions -Bellfort Street

IMPROVEMENTS:

- Add street trees to the center median and in vegetated buffers along the edge of the street.
- Increase sidewalk width to 6-feet on other side of street so two people can stroll side by side comfortably.
- Add dedicated on-street bike lanes with a buffer between lanes and vehicle lanes.

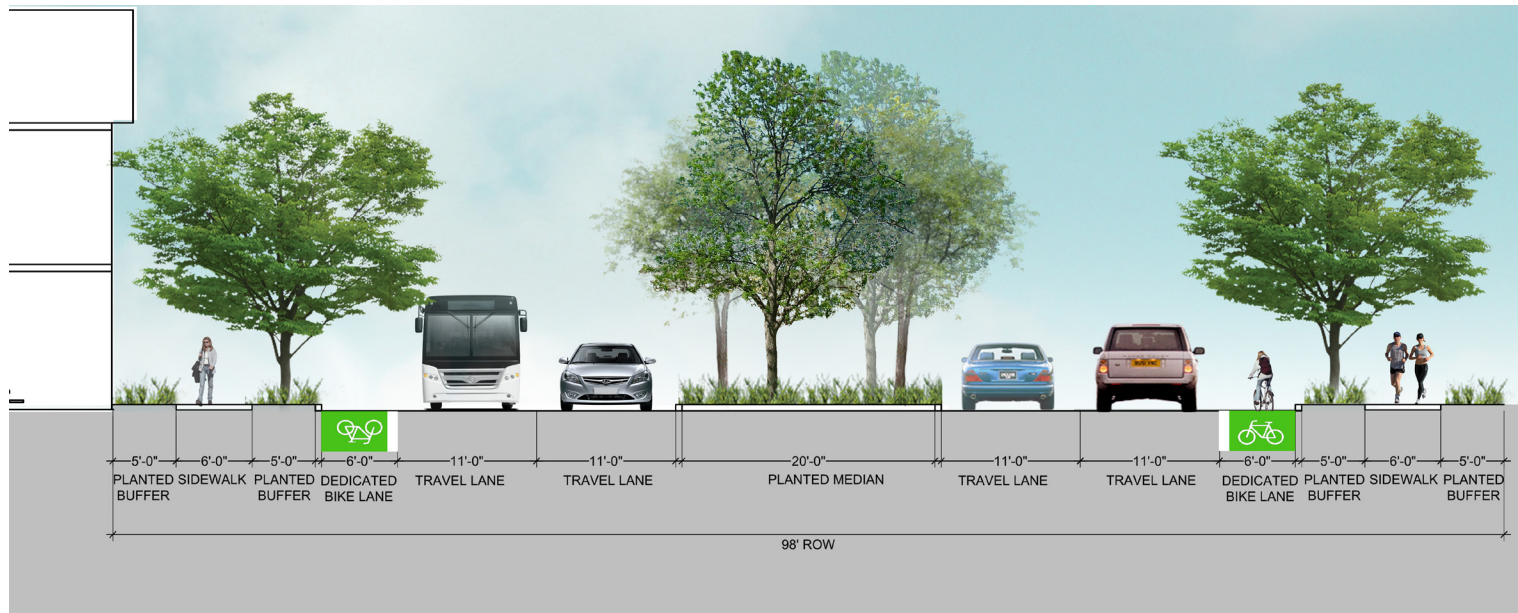


Figure 28: Proposed Collector Conditions With Dedicated Bike Path - Bellfort Street

COLLECTOR STREET WITH DEDICATED BIKE LANES - DIXIE DRIVE FROM MYKAWA ROAD TO TELEPHONE ROAD

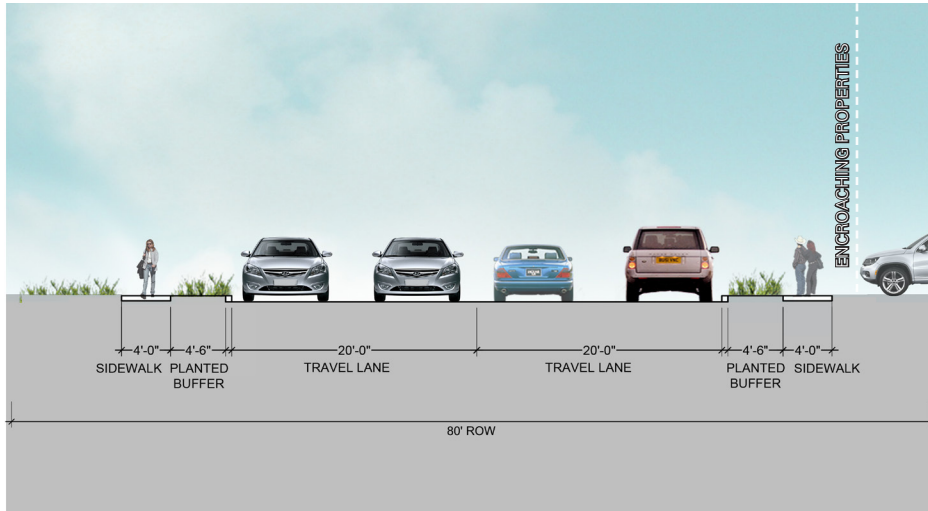


Figure 29: Existing Collector Conditions - Dixie Drive from Mykawa Road to Telephone Road

IMPROVEMENTS:

- Adjacent properties currently encroach on the right of way along this portion of Dixie Drive. Alternative A accommodates this encroachment by reducing the number of vehicle lanes from two in each direction to one in each direction with a center turn lane. Alternative B considers an alternative solution that requires acquiring the right of way back from adjacent properties.
- Both alternatives recommend the incorporation of dedicated on-street bike lanes.
- Street trees should be planted within a 5-foot vegetated buffer along both edges of the street to improve tree canopy coverage.

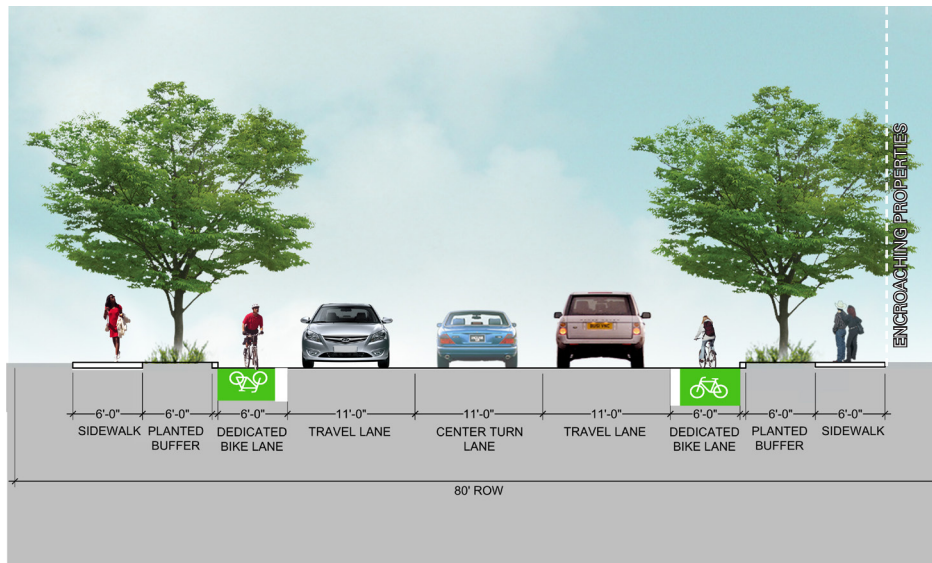


Figure 30: Dixie Drive from Mykawa Road to Telephone Road - Alternate A

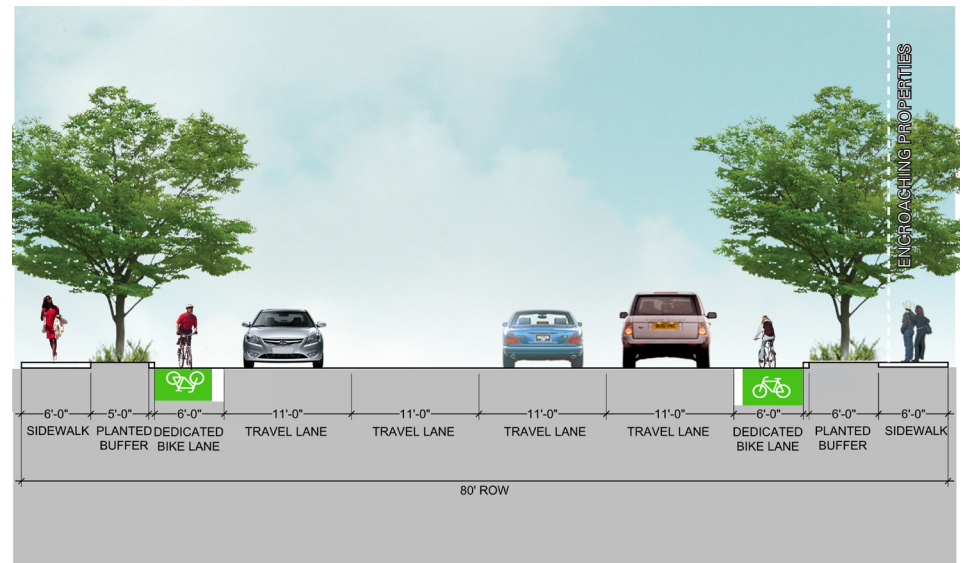


Figure 31: Dixie Drive from Mykawa Road to Telephone Road - Alternate B

LOCAL STREETS

All other streets within the District are considered Local Streets. Local Streets have a much smaller right of way of typically about 50 feet or less. These streets support a variety of uses, from small scale retail at neighborhood centers, to single family residential and industrial uses.

SIDEWALKS

When adjacent to retail and within identified centers, sidewalks should be a minimum of 6-feet wide and support a 6-foot active zone for active sidewalk uses and a 6-foot buffer between the sidewalk and curb.

In single family neighborhoods and industrial areas, identified priority pedestrian and bike streets should have a minimum 6-foot sidewalk where available right of way allows. All future improvements should take the neighborhood's character into account so that they fit community context.

BIKE LANES

On Local Streets with small rights of way and small amounts of vehicle traffic, bike circulation can be handled through shared use roads. The presence of bike routes should be indicated through striping and signage.

PUBLIC TRANSIT

Buses, vanpools, carpools, are the most appropriate forms of along Local Streets as opposed to fix route transit options such as light rail and rapid transit bus service. Bus stops, where appropriate, should include benches, planting, lighting and bus shelters. Each stop should be ADA accessible.



Shared use roads are appropriate for bike circulation along Local Streets.



Bus stops along Local Streets should have simple designs with benches, trash receptacles, and lighting.



Bike boulevard signage marks routes and directs cyclists to nearby destinations.



Sidewalk buffers should be included along Local Streets when the right of way width allows.

LOCAL STREET WITH SHARED ON-STREET BIKEWAYS - DIXIE DRIVE FROM TELEPHONE ROAD TO IH-45

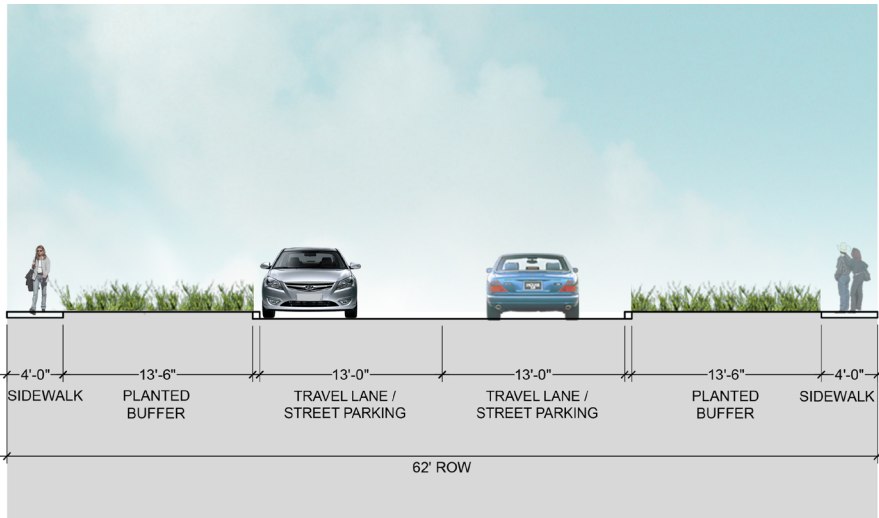


Figure 32: Existing Local Street Conditions - Dixie Drive from Telephone Road to IH-45

IMPROVEMENTS:

- Local streets support mostly residential uses and carry fewer cars at slower speeds, making them the ideal streets for shared on-street bike infrastructure. The City of Houston requires a minimum of 14-foot lanes to accommodate a shared bike and vehicle lane (sharrow). When the right of way allows for the preservation of parking and 14-foot lanes, sharrows should be incorporated. In the cases where the right of way does not provide enough space, streets should be marked as a bike boulevard with signs and pavement markings. These treatments heighten driver awareness of cyclists as well as cyclists' feelings of safety.
- Street trees should be planted along the street edge where

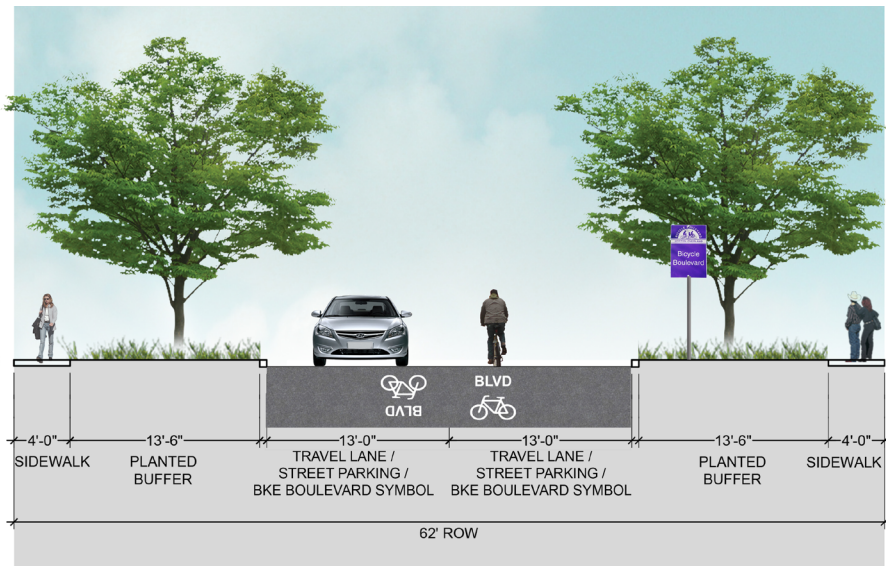


Figure 33: Proposed Local Street With Shared On-Street Bikeways - Dixie Drive from Telephone Rod to IH-45

OPEN SPACE VISION

A comprehensive open space system provides residents with better access to parks. Parks improve community health by providing spaces for physical activity and neighborhood gathering.

The Houston Parks Master Plan identified a need for updates to existing parks and a need for an additional 45 acres of Neighborhood Parks within the District. This Vision recommends three new locations for Neighborhood Parks at the intersections of Telephone Road and Bellfort Street, and a vacant parcel of land near Monroe Road and Meldrum Lane, and in between Lockheed and Travelair Streets. The addition of these parks would increase the amount of open space available to residents within the southern portion of the District.

The vision also recommends the construction of approximately 9 miles of new trails in addition to the 2.5 miles of planned trail projects along Sims Bayou. This would bring the total number of trails up to approximately 12.5 miles within the District boundaries.

As a method of increasing open space accessibility, the vision establishes a hierarchy of bayou and recreational trail gateways. The Houston Bike Plan¹ also recommends pedestrian bridge connections across Sims Bayou at Leonora and Northdale Streets. Detailed gateway elements are outlined in the following pages of the Open Space Vision Plan.

ASSOCIATED PROJECTS:

Bayou Entrances
Enhance Existing Parks
New Parks
Drainage Channel and Utility Right of Way Connections

ASSOCIATED PROGRAMS:

Tree Planting

GOALS ACHIEVED*:



LIVABILITY PRINCIPLES**:



*AS DEFINED ON PROJECT GOALS ON PAGE 5.

**AS DEFINED BY U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT (HUD).

ACHIEVED METRICS:

- 10 ACRES OF PARK SPACE ADDED
- 64% OF THE DISTRICT IS NOW WITHIN A HALF MILE WALK FROM A PARK [24% INCREASE]
- 37 MILES OF SIDEWALK ADDED OR UPDATED WITHIN PARK 1/2 MILE SERVICE AREA

¹ Houston Bike Plan, page 6-77.



Figure 34: Open Space Vision

PROPOSED GREENSPACE



Three new Neighborhood Parks are recommended within the District. Neighborhood Parks range from 1- 15 acres and serve about 3,000 to 10,000 people within a half mile radius. These parks typically include features such as open space, natural habitat, walking trails, multi-use courts, sports fields, and covered picnic shelters.

This plan recommends that park amenities be selected based on the needs outlined in the Houston Park's Master Plan. By the year 2040 there is a projected need for eight playgrounds, four picnic shelters, two softball fields and four soccer fields within Park Sector 7.



Houston's Park Sector 7 is in need of two softball fields and four soccer fields by the year 2040.



Houston's Park Sector 7 is in need of four picnic shelters by the year 2040.



Houston's Park Sector 7 is in need of eight playgrounds by the year 2040.

PROPOSED TRAIL

In addition to new park space, the Open Space Vision proposes the establishment of recreational trails along drainage and utility corridors, and to complement the work underway along Sims Bayou. These new trails provide linkages between Neighborhood Centers Inc, Sims Bayou and surrounding residential neighborhoods.

Trails should be a minimum of 10-feet wide. Potential flooding should be taken into account and designed for where trails run adjacent to drainage channels. Trail surfaces should be made from hard durable materials such as concrete. Flood tolerant plantings should be selected for durability and to create a trail design that is seamlessly integrated into the natural environment.



Trail design should seamlessly integrate trails into the natural environment.



Trails complete a comprehensive open space system by connecting District parks and open space.



Implementing trails along utility corridors can activate underutilized open space.

TRAIL GATEWAYS

REGIONAL TRAIL GATEWAY

Regional Trail Gateways create iconic and highly visible entrances into the recreational trail system. They occur in highly visible areas typically along Thoroughfare Streets and are coupled with other uses such as retail or parks that have a significant regional draw. This occurs at three locations within the District:

- Intersection of Sims Bayou with Mykawa Road
- Intersection of Sims Bayou with Telephone Road and Broadway street
- Intersection of Law Park and Sims Bayou.

Defining elements of these gateways include wayfinding and informational kiosks that display an overall map of the District's trail network. Other appropriate elements include a paved plaza space with trash receptacles, benches, bike racks and sculptural elements.



Artwork can be incorporated at Regional Trail Gateways to develop a unique sense of place and highlight the beauty of the District's open space.



Regional Trail Gateways should provide pedestrian amenities such as benches, trash cans, dog waste stations, pedestrian lighting and larger kiosks displaying an overall trail system map.

● COMMUNITY TRAIL GATEWAY

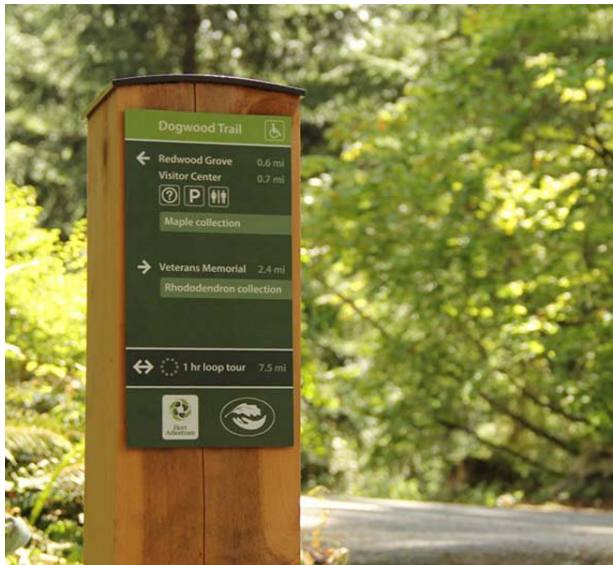
Community Trail Gateways occur in areas with lower visibility and are focused on providing access to the recreational trail system for the surrounding community. Locations include areas where Community or Neighborhood Parks are located along proposed trails and areas where trails intersect with major roads. Defining elements include wayfinding signage, lighting, benches, and bike racks.



Community Trail Gateways should also provide pedestrian amenities such as benches, lighting and trash and recycling receptacles. Signage will be smaller in scale than Regional Trail Gateways, but can still draw attention to trail features or provide trail maps.

● NEIGHBORHOOD TRAIL GATEWAY

Neighborhood Trail Gateways focus on improving local trail access for residents within walking distance of homes. These trail entrances typically occur where Local Streets dead end into Sims Bayou and proposed trails. Increasing the amount of gateways in close proximity to residential neighborhoods leads to more trail use. This increases the number of eyes along recreational trails and contributes to improved perceptions of safety and the positive transformation of underutilized spaces. Defining elements include smaller directional signage, trail markers, trash cans and benches.



Neighborhood Trail Gateways are smaller in scale than both Regional and Community Trail Gateways. These entrances are highlighted through simple treatments such as trail markers, bike route signs and simple landscaping treatments.

CULTURAL IDENTITY VISION

Drawing attention to significant historic and cultural features and establishing consistent treatments to the public realm along corridors can contribute in a unified identity for the district.

Historic and culturally significant features should be preserved and highlighted throughout the District. A comprehensive signage and wayfinding program will draw attention to these features while providing a draw for tourism. Culturally significant features within the District include but are not limited to the following:

- Glenbrook Valley's Mid-Century Modern Homes
- Broadway Corridor
- William P. Hobby Airport
- 1940 Air Terminal Museum
- Mt. Carmel Academy
- Garden Villas Elementary School
- Sims Bayou
- Robert C. Stuart Park
- Telephone Road

There should be continued discussions with the community and the Hobby Area Management District to identify additional points of significance.

ASSOCIATED PROJECTS:

Bayou Trail Art
Historic Building Preservation
Multipurpose Warehouse Spaces

ASSOCIATED PROGRAMS:

Cultural History Program

GOALS ACHIEVED*:



LIVABILITY PRINCIPLES**:



*AS DEFINED ON PROJECT GOALS ON PAGE 5.

**AS DEFINED BY U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT (HUD).

ACHIEVED METRICS:

- 9 HIGHLIGHTED POINTS OF HISTORICAL AND CULTURAL SIGNIFICANCE

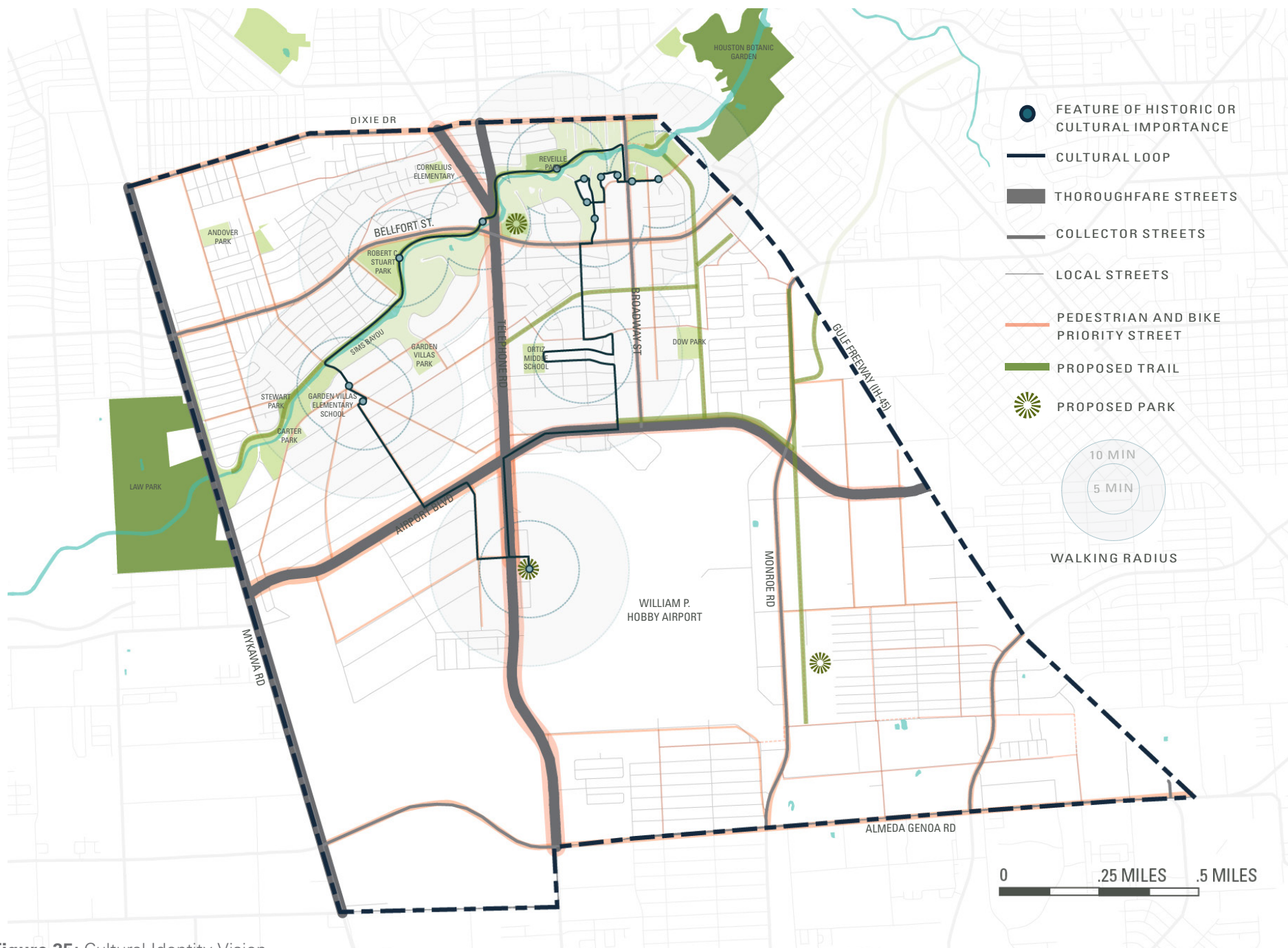


Figure 35: Cultural Identity Vision

IDENTITY ELEMENTS

HISTORICAL MARKERS

As part of a historic and cultural walking loop, metal markers can be installed into the pavement, or signs should be placed next to key cultural or historical sites. These markers should remain consistent to indicate they are part of the larger historical loop trail.

In addition, the history of the area can be further highlighted through the use of interpretive elements such as panels and signage. These can range from standard historic markers to custom pieces that are unique to each application. Larger interpretive elements are most appropriate within public plazas, parks and at public historic and cultural sites.



Interpretive signage can communicate the story of the District in creative ways.



Durable plaques can be installed into the pavement or signage installed at historic sites. These applications should stay consistent throughout the District in order to easily identify them as part of a historic and cultural loop.

DISTRICT IDENTITY

Common signage, ID markers, unique bus shelters, paving patterns, and consistent character of pedestrian amenities can be used to create a unified identity for the District. The Hobby Area Management District is currently designing and implementing many of these elements with first area of implementation along Broadway Street.

Signage toppers and custom signage branding can be applied to all street signs throughout the district. Special paving patterns and a consistent selection of pedestrian amenities are appropriate applications for Thoroughfare and Collector Streets such as:

- Mykawa Road
- Telephone Road
- Monroe Road
- Dixie Drive
- Bellfort Street
- Airport Boulevard
- Almeda Genoa Road

ID markers are most appropriate along major corridors and in areas with commercial use as a means of highlighting areas of significance. Within the District this would occur along Airport Boulevard between Telephone Road and IH-45, and along Broadway Street.



ID markers can be incorporated along other major corridors within the District to highlight key areas and centers.



Updated landscaping along center medians improve the aesthetic quality of District streets.

DISTRICT IDENTITY | STREETSACPE AMENITY FAMILIES



A consistent family of durable and high quality furnishings should be used throughout the District's main corridors. The above images show a vision for furnishings within the District.
Source: Hobby Area District/Clark Codon.

DISTRICT IDENTITY | STREETSACPE AMENITY FAMILIES



All identity elements work to create a unified family of furnishings, signage and branding The above images shows a vision for identity elements.
Source: Hobby Area District/Clark Codon.

DISTRICT WAYFINDING VISION

Signage and wayfinding plays an important role in improving the legibility of the District and establishing a district identity. With the presence of the William P. Hobby Airport, the District functions as a gateway into the Houston region. While there is signage leading travelers to and from the William P. Hobby Airport, there is a lack of district level gateways and wayfinding features that guide visitors to attractions within the community. This type of wayfinding can be achieved through a variety of treatments. The proposed District Wayfinding Vision focuses on the creation of gateways to indicate entrances to the District and internal wayfinding elements to guide visitors internally within the District.

Gateways can be expressed in a variety of ways and at a variety of scales. All gateways will have signage and wayfinding elements. Elements can be as simple as small markers, ID markers, landscaping and street signs, or as extensive as murals, artwork, or sculptures. The Hobby Area Management District is in the process of completing a gateway design that complements other elements of the streetscape enhancement program.

Appropriate treatments should be determined based on the amount of traffic entering the District at a specific gateway and the context of its adjacent land uses. As an example, gateways that provide direct access into central retail cores should be treated with eye-catching elements such as ID markers or artwork. In contrast, district gateways located within largely residential areas should

have more modest treatments such as road signs with custom toppers. The District should identify final treatments based on proposed location and available funding.

Regardless of the level of treatment, all gateway elements should share a common language of materials and themes branded to the District. Gateway levels include regional, primary and secondary.

Interior wayfinding focuses on directing visitors internally within the District. It occurs at the intersections of roads and includes directional signage guides visitors to key destinations.

ASSOCIATED PROJECTS:

Gateway Features at Key Entry Corridors

ASSOCIATED POLICIES:

Design Guidelines

GOALS ACHIEVED^{††}:



LIVABILITY PRINCIPLES^{**}:



[†]AS DEFINED ON PROJECT GOALS ON PAGE 5.

^{**}AS DEFINED BY U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT (HUD).

METRICS:

14 MEMORABLE

MORE THAN HALF OF DISTRICT VISITORS
AND RESIDENTS PASS BY A PRIMARY
GATEWAY

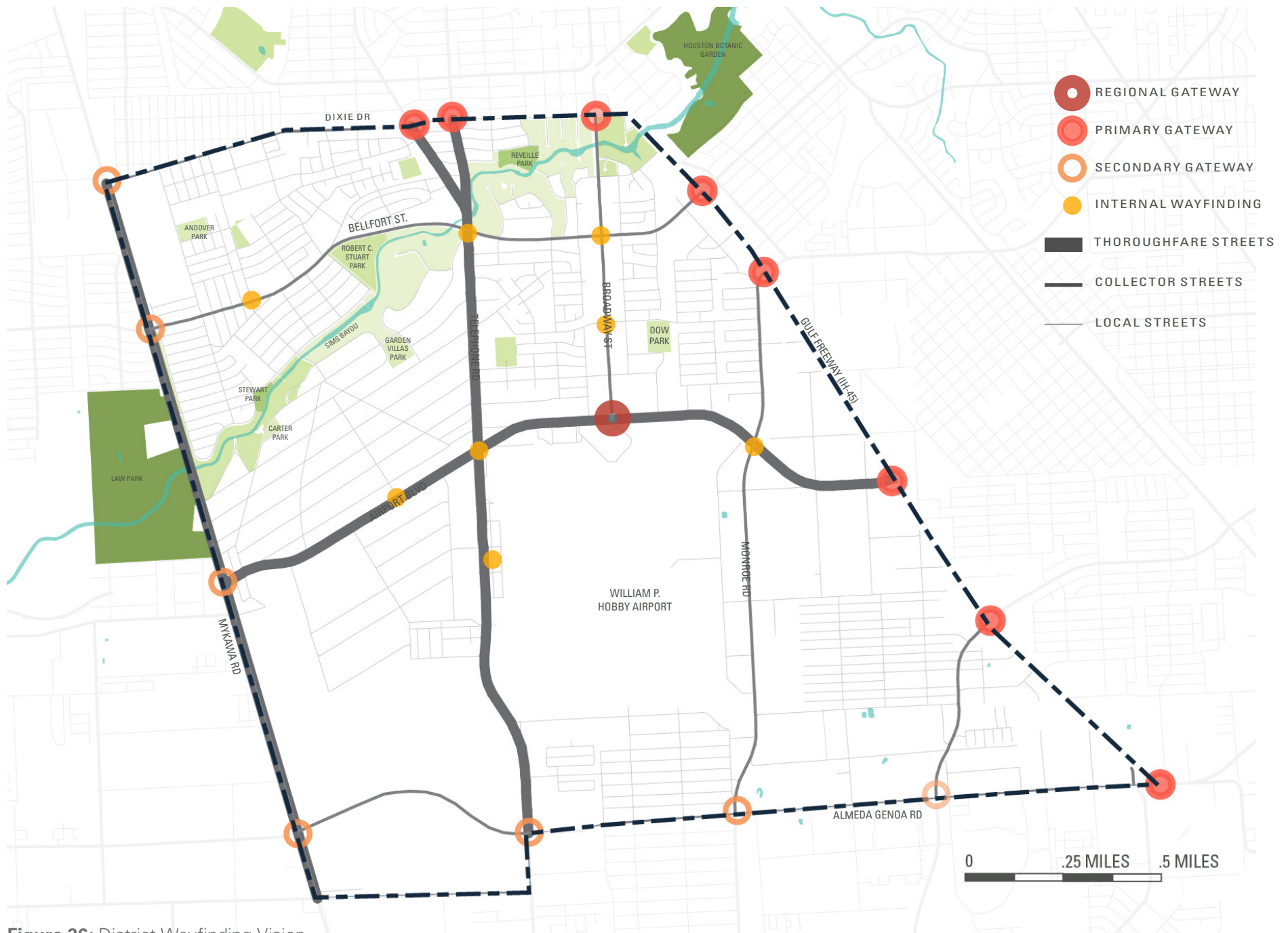


Figure 36: District Wayfinding Vision

DISTRICT GATEWAYS



REGIONAL GATEWAY

The District currently has one regional gateway located at the entrance to William P. Hobby Airport. Existing features include iconic artwork and streetscape improvements.



The existing Regional Gateway at the intersection of Airport Boulevard and Broadway Street creates an iconic gateway between the William P. Hobby Airport and the District through the use of public art, and updated landscaping treatments.



PRIMARY GATEWAY

Primary Gateways are located where Thoroughfare or Collector Streets intersect with District boundaries and IH-45. Features at primary gateways include streetscape improvements, iconic gateway signage, and artwork. These gateways are specifically located at the following intersections:

- Telephone Road and Dixie Drive
- Bellfort Street and IH-45
- Monroe Road and IH-45,
- Airport Boulevard and IH-45
- Clearwood Drive and IH-45
- Almeda Genoa Road and IH-45



Iconic signage and lighting can be used to highlight Primary Gateways into the District.

SECONDARY GATEWAY

Secondary gateways are located at intersections with less vehicle traffic and near residential or industrial land uses. Features might include landscaping, street signage toppers and directional signage to the District's centers and significant features. These gateways are specifically located the following intersections:

- Dixie Drive and Mykawa Road
- Bellfort Street and Mykawa Road
- Airport Boulevard and Mykawa Road
- Alameda Genoa Road and Mykawa Road
- Alameda Genoa Road and Telephone Road
- Alameda Genoa Road and Monroe Road
- Alameda Genoa Road and Clearwood Drive

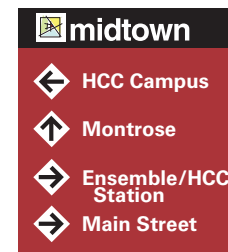
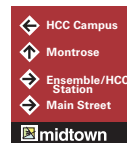
INTERNAL WAYFINDING

Internal wayfinding focuses on directing visitors internally within the District. It occurs at the intersections of roads and includes directional signage that points visitors in the direction of key destinations. Interior wayfinding occurs at the following intersections:

- Bellfort Street and Telephone Road
- Bellfort Street and Broadway Street
- Bellfort Street and Nunn Street
- Rockhill Street and Broadway Street
- Telephone Road and Airport Boulevard
- Monroe Road and Airport Boulevard
- Villa Drive and Airport Boulevard
- Neuhaus Avenue and Telephone Road



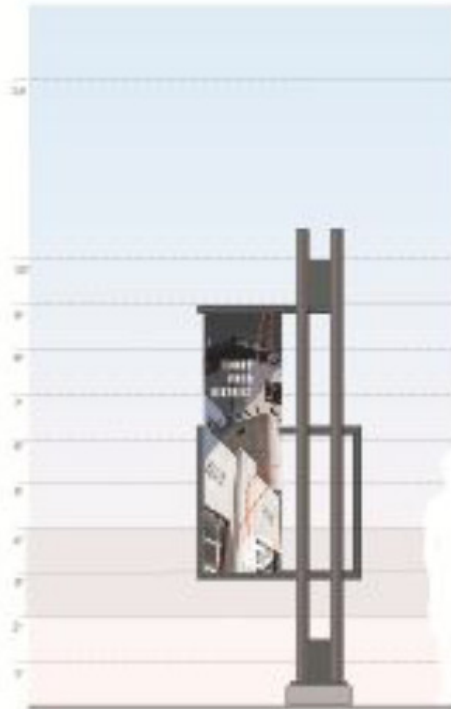
Improved landscaping and signage can highlight Secondary Gateways. Underpasses under IH-45 provide a unique opportunity as they already create a physical gateway experience. The application of public art and murals can elevate them into high quality gateways that represent the identity of the District.



Wayfinding signage should be placed at key intersections and along pedestrian corridors in order to help guide visitors to destinations within the District.



DISTRICT IDENTITY | ID MARKER PANELS



Panel 1



Panel 2



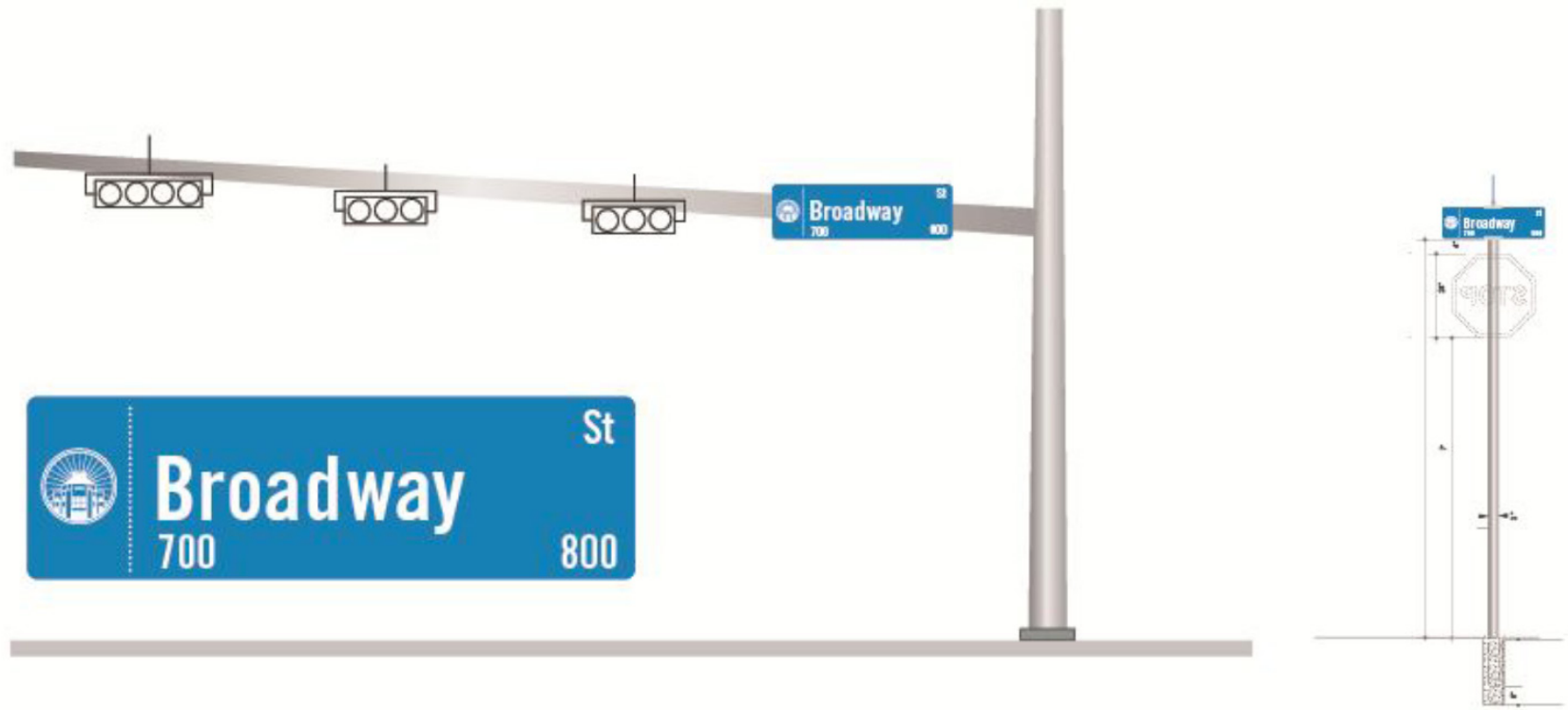
Panel 3



Panel 4

A family of gateway signage and ID markers communicate a consistent brand for an area. The above graphics a vision for ID markers and panels within the District.
Source: Hobby Area District/Clark Codon.

DISTRICT IDENTITY | STREET BLADES



Consistent street signs and street sign toppers create a cohesive identity and provide clear wayfinding. The above graphics show a vision for street blades within the District.
Source: Hobby Area District/Clark Codon.

CATALYST OPPORTUNITIES

The outlined catalyst opportunity areas provide illustrations of how the visions and recommended projects, policies and programs outlined in the next chapter come together to create real change within the Hobby Area District. They act as catalysts for change, by supporting and improving the quality of life for existing residents while spurring new investment and development.

Though specific to smaller-scaled sites, these projects are not intended to be prescriptive to a particular location. Rather, they serve as design strategies for public realm improvements and development best practices that could occur throughout the District. The eventual success of any project depends on partnering together to achieve planning and design ideas set forth in this study.

Potential catalyst locations were selected because they represent the greatest opportunities to:

- Serve existing District residents;
- Create destinations that can reinforce the Hobby Area's unique identity; and
- Improve self-sustainability while also spurring investment throughout the area.

In addition, catalysts were chosen for their:

- Proximity to transit service or visibility from a major corridor,
- Connectivity to adjacent neighborhoods, and
- Capacity for improvement or growth, including available land acreage for resident amenities.

The selected catalyst site locations are identified on Figure 22 Catalyst Vision Plan and are as follows:

1 BELLFORT STATION

2 INDUSTRIAL HUB

3 WALKABLE BROADWAY



Figure 37: Catalyst Vision

CATALYST OPPORTUNITY | BELLFORT STATION

This opportunity area bridges connections between Sims bayou trails, METRO services (including the strong possibility of light rail along Telephone Road connecting William P. Hobby Airport to the universities and downtown amenities), existing residential communities and parks and open space. It will spur a new livable center and community destinations along Telephone Road and Bellfort Street. This catalyst bolsters quality of life for existing residents by providing improved recreational access to Sims Bayou, affordable senior housing options, and better access to shops and services.

ASSOCIATED PROJECTS:

- Bayou Trail Art
- Senior Housing
- Safe pedestrian and bike crossings at intersections
- Sidewalk Connections
- Bayou Entrances
- Safe Bicycle Routes
- New Parks
- Bayou Facing Retail
- Gateway Features at Key Entry Corridors
- Bayou Trail Pedestrian Bridge

ASSOCIATED PROGRAMS:

- Tree Planting

ASSOCIATED POLICIES:

- Infill Incentives

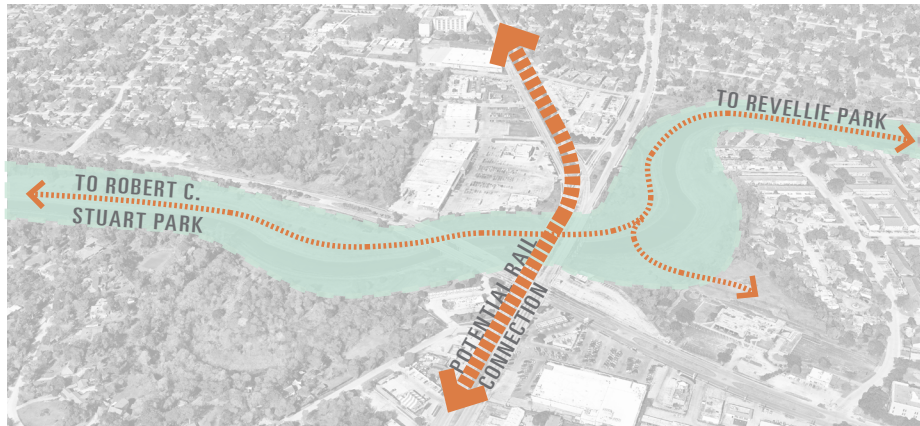


This catalyst creates a central gathering space, and entrance from onto Sims Bayou.

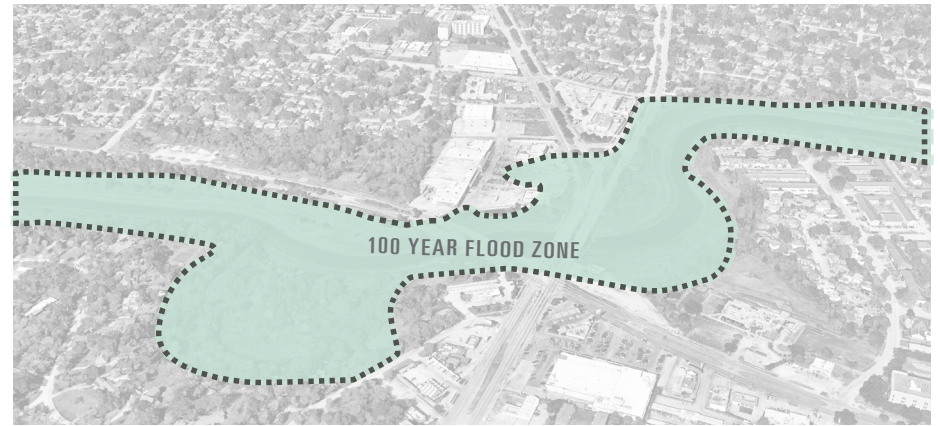


Recommendations include increasing the amount of recreational trails within the District and elevating the recreation potential of Sims Bayou.

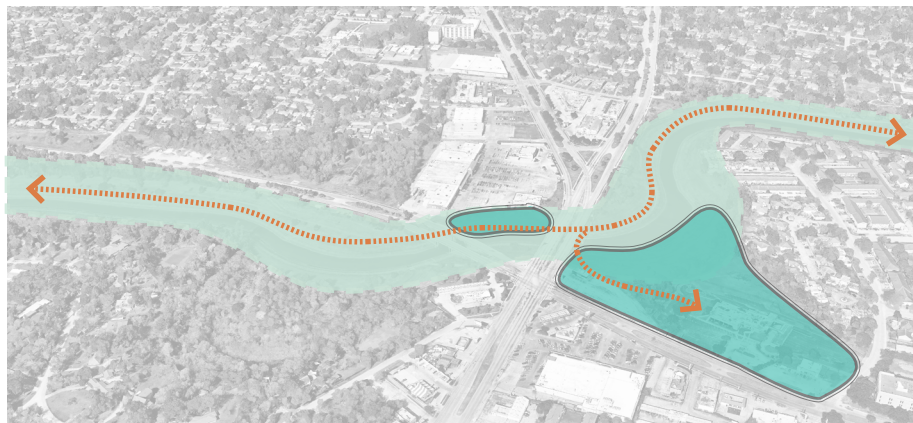
BELLFORT STATION DESIGN STRATEGIES



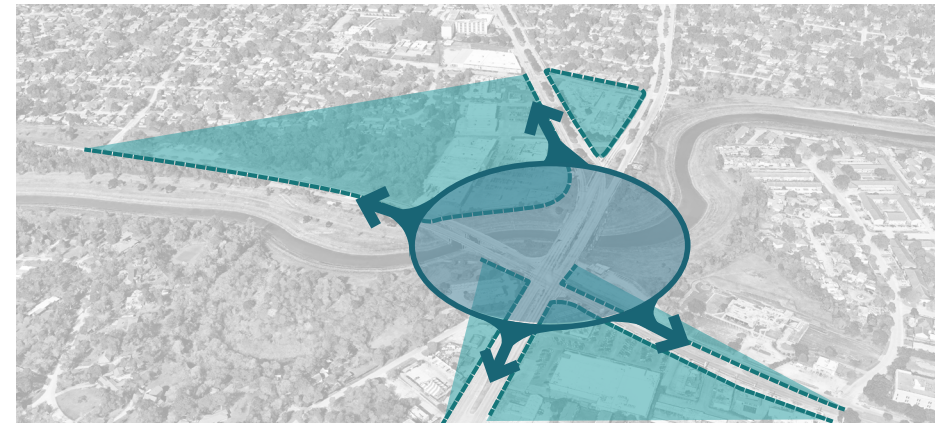
Capitalize on Sims Bayou as a community asset by creating a trail system that connects to neighborhoods, parks, community resources and future transit stops.



Use best practices for development near floodplains. New development should be located out of the 100 year flood zone.



Incorporate flexible community gathering spaces along Sims Bayou.



Develop a highly visible gateway between Sims Bayou and the District.

Use best urban design practices to design a vibrant and pedestrian focused public realm. These include the use of shared driveways, shared parking, fronting development onto the street, infill on vacant or underutilized land.



Note: Concept designs are for illustrative purposes only and have not been formally reviewed nor approved by the City. Should these concept designs mature, they will undergo a formalized plan, design and construction process with appropriate permitting.

Figure 38: Telephone Road Conceptual Plan

- 1 Senior housing/retirement community townhomes
- 2 Safe crossings to Sims Bayou with upgrades to sidewalks, planting, curbs and a new signaled crossing at Belfort and Lancaster Street
- 3 Trail along the north bank of Sims Bayou with public art, seating areas, trees and landscaping
- 4 Retail renovation facing on Sims Bayou
- 5 Flexible plaza space that creates a gateway onto the Sims Bayou greenway
- 6 Bridge across Sims Bayou with artistic landing plazas
- 7 Improved intersection with safe pedestrian crossings and new retail at corners
- 8 New neighborhood park with sports fields, trails to Sims Bayou and gathering spaces
- 9 Potential light rail along Telephone Road connecting William P. Hobby Airport to universities and downtown amenities



Figure 39: Telephone Road Bridge Park Area

CATALYST OPPORTUNITY | INDUSTRIAL HUB

The Industrial Hub is located within an existing street grid along Telephone Road at Neuhaus Lane. The area's current walkable size blocks, warehouse facilities, and the 1940 Air Terminal Museum provide the recipe for the development of a unique destination.

This catalyst provides important entrepreneurial and workforce development opportunities for current District residents. Recommended programs leverage job skills and educational training partners, such as Neighborhood Centers Inc, with re-imagined light industrial warehouse facilities. These spaces become a place for smaller-scaled industrial uses, such as metalworking, industrial design, product fabrication or distilleries.

In addition, the existing 1940 Air Terminal Museum located within the hub already provides a regional attraction. It could benefit from an area to stage buses and host outdoor events. The presence of new coffee shops and eateries nearby turns this entire hub into a destination that encourages visitors to linger and enjoy.

ASSOCIATED PROJECTS:

- Neighborhood goods and services
- Historic Building Preservation
- Multipurpose Warehouse Spaces
- Safe pedestrian and bike crossings at intersections
- Streetscape Improvements within Industrial Hub
- Sidewalk Connections
- 1940 Airport Terminal Museum Entry Plaza and Park
- New Parks

ASSOCIATED PROGRAMS:

- Mobile Vendors and Pop-Ups
- Weekend Street Fairs
- Cultural History Program

ASSOCIATED POLICIES:

- Shared Parking Incentives
- Design Guidelines
- Infill Incentives



Weekend street fairs bring the area to life.



A new park creates a grander entrance into the 1940 Air Terminal Museum.



Recommendations preserve warehouse spaces and encourage the presence of creative industries.

Source: Google Street View, 2016.

INDUSTRIAL HUB DESIGN STRATEGIES



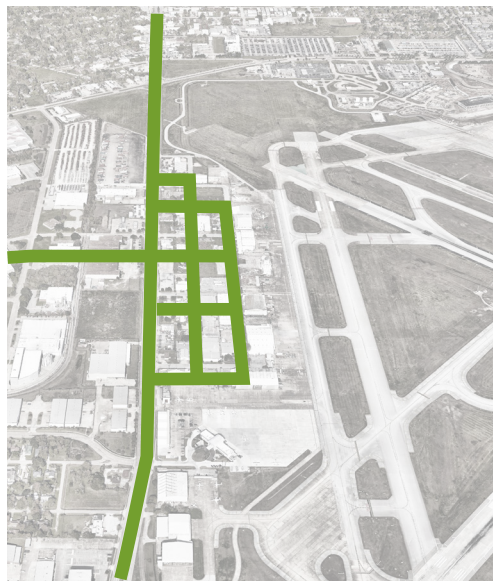
Create a center for employees in industrial areas to gather for lunch or breaks.

Tie pedestrian and bike connections into future light rail connections.



Highlight the area's history by creating a strong entrance and larger footprint for the 1940 Air Terminal Museum.

Create flexible space for creative industries.



Improve streetscapes and include stormwater management practices.



Provide a gathering space for neighborhoods through flexible open space and streets that could support Saturday markets.

- Retail
- Warehouse/Light Industrial

- ① Outdoor plaza park looks onto 1940 Airport Terminal Museum
- ② Retail space along Neuhaus Avenue welcomes visitors and creates opportunities for new jobs
- ③ Streetscape improvements along Telephone Road includes sidewalk repairs, planting, curb repairs, utility modifications, signage and crosswalks
- ④ Basic streetscape improvements such as landscaping, sidewalks and striping along smaller blocks



Figure 40: Industrial Hub Conceptual Plan

Note: Concept designs are for illustrative purposes only and have not been formally reviewed nor approved by the City. Should these concept designs mature, they will undergo a formalized plan, design and construction process with appropriate permitting.



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Figure 41: 1940 Air Terminal Museum Park Plaza Illustration

CATALYST OPPORTUNITY | WALKABLE BROADWAY

The size of blocks along Broadway Street are currently a half-mile long. This length is not conducive to a successful pedestrian environment. The average person would take approximately 10 minutes to walk the length of a single block. Street grids with shorter blocks or mid-block pedestrian connections provide more route choices and therefore a more interesting pedestrian experience.

This project suggests breaking up long blocks with new vehicular streets or pedestrian links that connect to the surrounding neighborhoods. New suggested connections include a new street between Morley Street and Airport Boulevard; the reconnection of Wimerdean Street between Morley and Rockhill Street; the reconnection of Glenvista Street between Rockhill Street and Belfort Street; and the reconnection of Glenview Drive between Belfort Street and Sims Bayou.

ASSOCIATED PROJECTS:

- Inviting Transit Stops
- Neighborhood goods and services
- Safe pedestrian and bike crossings at intersections
- Walkable Blocks
- Sidewalk Connections
- Gateway Features at Key Entry Corridors
- Drainage Channel and Utility Right of Way Connections

ASSOCIATED PROGRAMS:

- Mobile Vendors and Pop-Ups
- Weekend Street Fairs
- Cultural History Program
- Tree Planting

ASSOCIATED POLICIES:

- Shared Parking Incentives
- Design Guidelines
- Infill Incentives



Creative uses of the public realm keeps the pedestrian experience interesting.

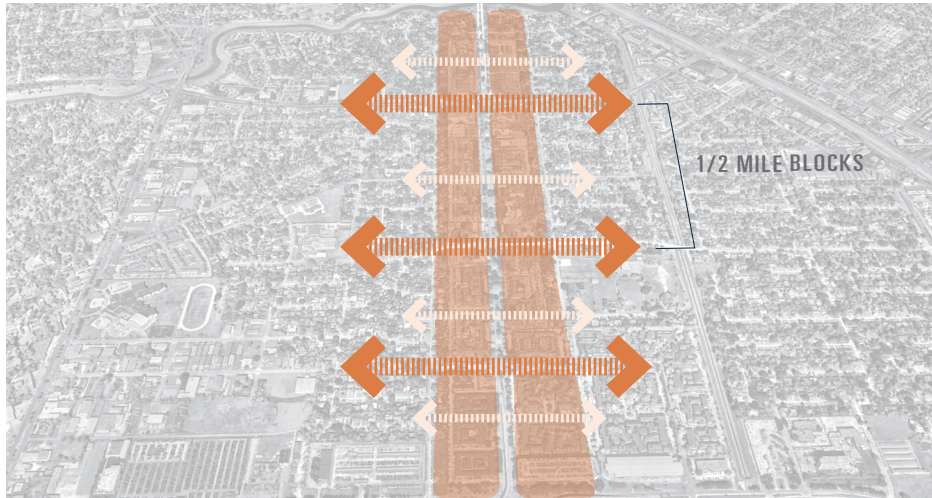


Buildings built up to the sidewalk allow sidewalk cafes to flourish.



Mid-block pedestrian cut-throughs create the experience of a finer grain grid.

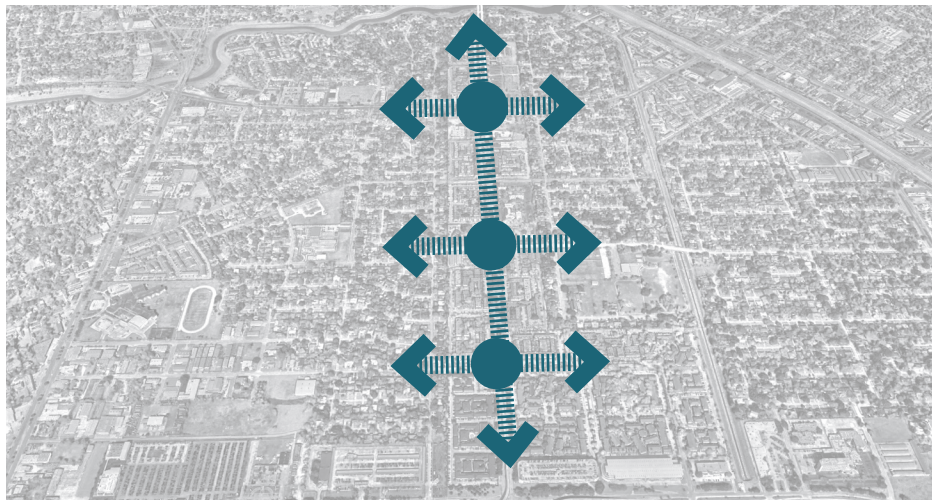
WALKABLE BROADWAY STREET DESIGN STRATEGIES



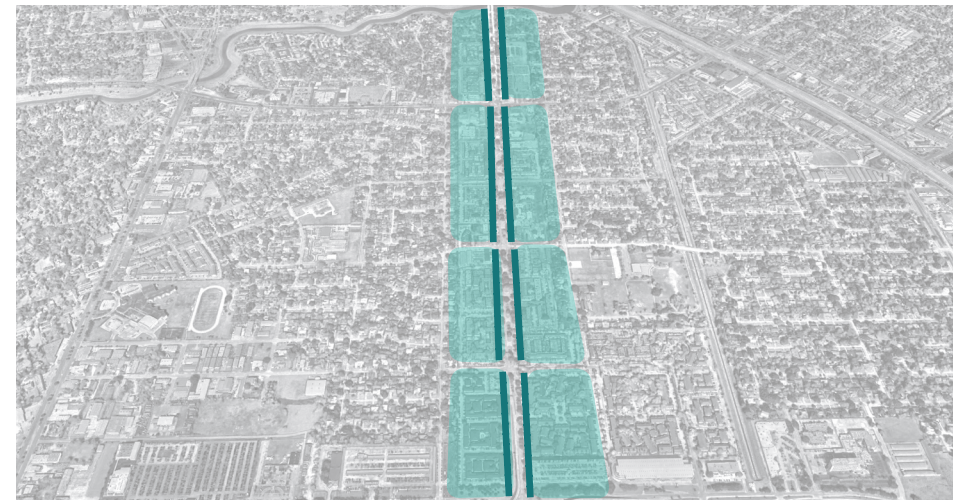
Break up large super blocks to create a more walkable environment while repairing the street grid.



Incorporate high quality landscaping and stormwater management techniques into the streetscape and surface parked lots so they become a part of the larger green space system



Create retail nodes at key corners.



Redevelop blocks so buildings are placed on the parcel edge and Leverages both Broadway and Rebuild Houston project (Monroe Road from IH-45 to Airport Boulevard) improvements.

BUILDING FRONTAGE AND PARKING STRATEGY

Too many driveways can cause unpleasant interactions between vehicles and pedestrians. New parking and service access should be primarily located off of side streets to maximize walkable street frontage. Vehicular access to parking garages should be placed on side streets away from heavy pedestrian traffic. Pedestrian access should be from public streets (as opposed to alleys) and should be favored toward primary pedestrian thoroughfares where possible. Mixed-use blocks should be limited to two curb cuts per block. Parking garages should be tucked into the middle of the block and wrapped by residential or retail uses on the ground floor.

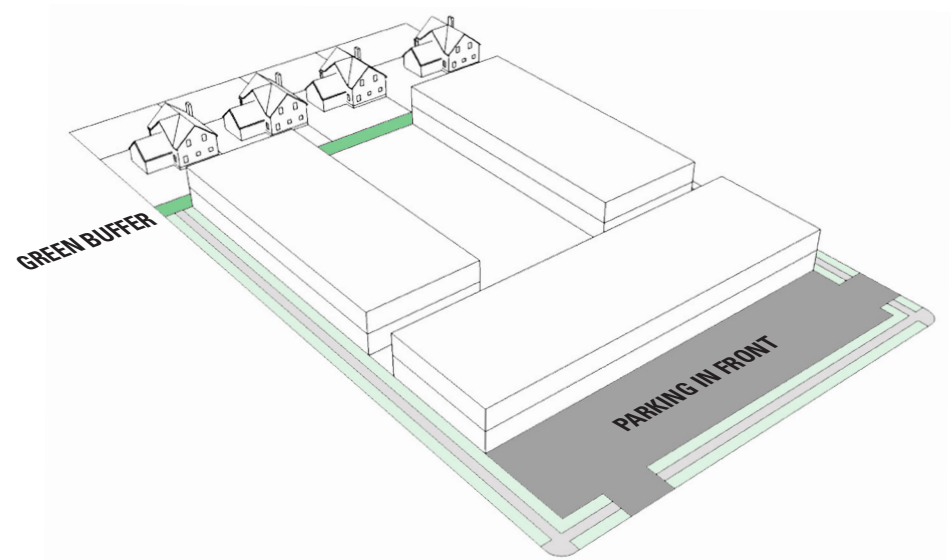


Figure 42: Existing Conditions along Broadway Street

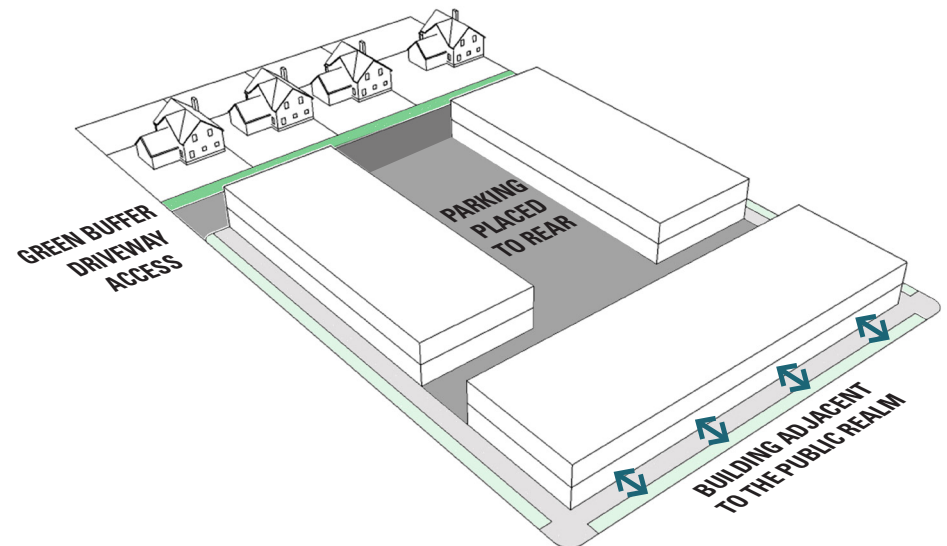


Figure 43: Recommended Strategies for Broadway Street

Additional Design Strategies for Community Safety and Walkability

ACCESS CONTROL: Design streets, sidewalks, building entrances and neighborhood gateways to indicate transitions from public to semi-private and private areas. Sidewalks, landscaping, and porches help distinguish between public and private areas.

SURVEILLANCE: Maximize the visibility of people, parking areas, vehicles and activities by placing windows, doors and walkways along vehicular routes.

MAINTENANCE: Proper upkeep (mowing grass, trimming trees and landscaping, picking up trash, repairing broken windows and lighting, and painting over graffiti) helps signal a place that is well cared for and that an owner, manager, or neighbor is watching out for the community.

Crime Prevention through Environmental Design (CPTED) strategies are available at the National Crime Prevention Council website (<http://www.ncpc.org>). Also visit the Hobby Area District Public Safety & Security webpage (<http://hadistrict.org/security-public-safety>) for information about ongoing safety awareness programs and partnerships in the community.



Figure 44: Walkable Blocks Concept Plan

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William P. Hobby Airport Improvements

Photographer: Hobby Area Management District

Roadmap for Implementation

This chapter provides a road map towards implementation of the vision identified by Hobby stakeholders during a year-long outreach process. In order to help local agencies and community activists invest in new ways to improve their community, this chapter divides strategies for change into three categories - instant implementation, mid- range and long- range visions. Funding and implementation strategies for each are discussed, but it is important to note that creating vibrant places does not have to begin with expensive infrastructure investments. Simple and creative placemaking efforts can spark interest and spur catalytic change throughout the District.

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IMPLEMENTATION STRATEGIES

PROJECTS, POLICIES AND PROGRAMS

Implementation strategies provide a road map for success. With an emphasis on the planning and regulatory framework, incentives and financial tools and capital improvements, they provide the necessary actions that will advance the long-term vision of the plan.

Each strategy includes a list of next steps, estimated costs, potential funding sources and partners. The recommendations will be useful in guiding programs, setting priorities for policy updates and identifying funding tools for project implementation. Over time, this part of the document should be revisited and updated to ensure that strategies remain relevant and current to evolving community needs.

PHASING OVERVIEW

Implementing the Hobby Livable Centers Study vision for a healthy and vibrant district will require a systematic and thoughtful phasing approach. Figures 50, 55 and 56 provide an overview of these recommendations and rank them by ease of implementation. The success of this effort will rely on the support and coordination between a variety of stakeholders. Before physical implementation can begin, initial efforts must focus on the development of partnerships and the securing of potential funding sources.

LEADERS

MANAGEMENT DISTRICT

Management districts are special districts created by the Texas legislature, empowered to promote, develop, encourage and maintain employment, commerce, transportation, tourism, art and recreation within their boundaries. The District oversees grants and finances operations by issuing bonds or other obligations, which are payable through taxes, assessments, impact fees and other means. It manages core public service areas of Environmental and Urban Design, Business Development, Transportation and Public Safety.

The Hobby Area Management District will carry forth the vision set in this Livable Centers study. It sets an annual action plan, raises and leverages funds and assigns tasks. Through regular meetings, the District and various committees will establish plans to further prioritize projects and work alongside partner agencies to ensure that the vision and momentum for livable centers in the District are carried forward into implementation.

TAX INCREMENT REINVESTMENT ZONE

In 2014, Houston's City Council approved an expansion of Tax Increment Reinvestment Zone No. 8 into a substantial area of the District. This expansion from the Gulfgate Mall area extends south to William P. Hobby Airport and southwest along Mykawa Road. Tax Increment Reinvestment Zones typically fund capital projects intended for public use and access. This can range from infrastructure and transportation facilities to amenities such as parks and public cultural venues. The recent expansion of Tax Increment Reinvestment Zone No. 8 is expected to help initiatives that connect trails along Sims Bayou, add green space, beautify Sims Bayou, improve major roadway corridors, assist with infrastructure and potentially impact improvements to the new location for the Houston Botanic Garden.

CITY OF HOUSTON

City departments can work with property owners and developers to issue project approvals, identify incentives, and lift restrictive development requirements inhibiting implementation of this plan. The Parks and Recreation Department, Houston Parks Board and Harris County Flood Control District can collaborate to acquire, upgrade and maintain parks to improve the public realm in the District, particularly in the southern part of the study area where access to parks is lacking. The Housing and Community Development Department can assist in funding for the capital improvements, economic development, social services and housing and other neighborhood revitalization activities in qualifying areas.



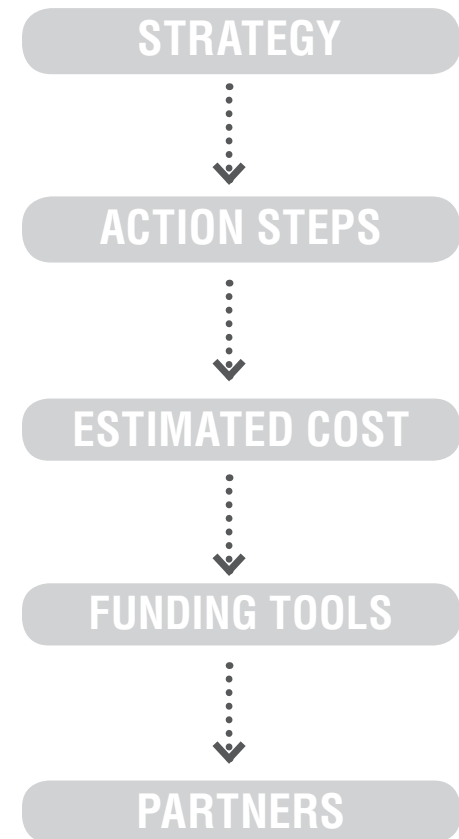
Projects are built, permanent, physical changes.



Programs are one-time events or ongoing actions that influence the study area but do not require permanent physical changes.



Policies are legal norms, rules or definitions that control and influence future changes.



PROJECTS

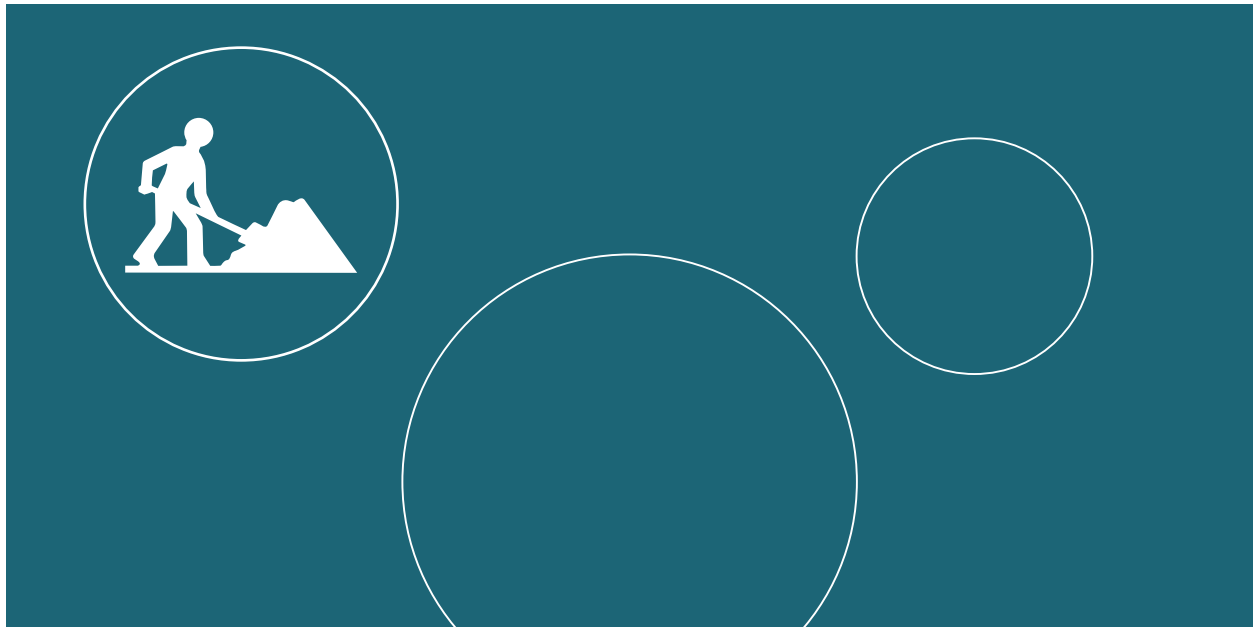
STRATEGY	PAGE
1. <u>Inviting Transit Stops</u>	94
2. <u>Neighborhood Goods and Services</u>	96
3. <u>Bayou Trail Art</u>	98
4. <u>Historic Building Preservation</u>	100
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11. <u>Bayou Entrances</u>	134
12. <u>1940 Airport Terminal Plaza Park</u>	138
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PROGRAMS

STRATEGY	PAGE
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POLICIES

STRATEGY	PAGE
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2. <u>Design Guidelines</u>	166
3. <u>Infill Incentive Programs</u>	174



PROJECTS

Projects are built, permanent, physical changes.

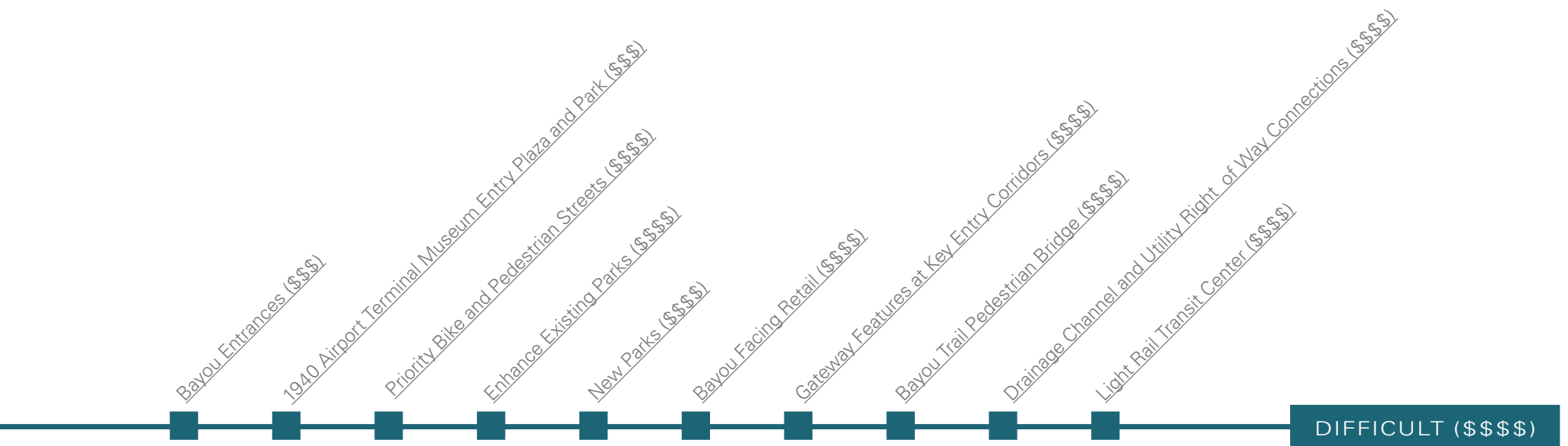
LEGEND:
 \$ 0 - 50,000 dollars
 \$\$ 50,000 - 250,000 dollars
 \$\$\$ 250,000 - 1,000,000 dollars
 \$\$\$\$ 1,000,000+ dollars



Figure 45: Ease of Implementation

The relative importance of each project, policy and program, as expressed by stakeholders through public feedback, must also be weighed against its ease and cost of implementation. Easy projects are those that are already underway or that are slated through existing planned improvements to be completed soon (0-10 years). Difficult projects are those that may be very important to the community, but require significant additional resources to implement. These projects can be addressed in the longer term (10+ years) as resources become available. The District may choose to pursue implementation of a few small or less challenging projects so that momentum increases. Then, as political will and resources align, advance relatively difficult or large projects.

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INVITING TRANSIT STOPS

Transit stops play a key role in connecting destinations within the District, and in connecting the District to the larger Houston region. Conveniently located, shaded and comfortable transit stops invite people to use public transportation as an alternative to the single-user automobile. METRO's System Reminagining Plan was recently adopted by the Board of Directors on February 11, 2015. The new plan brings more frequent service to the District. While transit connectivity is improving, many of the District's transit stops show signs of aging and do not offer safe access for all users due to poor condition of sidewalks and ramps. The Hobby Area Management District has completed design of enhanced bus shelters and is moving forward with implementation, beginning with improvements along Broadway Street. The following best practices ensure safe, inviting transit stops for all:

- Every transit stop is TAS and ADA accessible;
- Design transit stops as an important piece of civic architecture that reflects the style of the District;
- Provide shelters with seating at each transit stop;
- Use sustainable materials, such as solar technology, when possible;
- Provide shade trees near transit, if they meet horizontal/vertical clearance requirements;
- Create mid-block crossings and calm traffic where appropriate to increase pedestrian activity; and
- Ensure each stop provides informational signage, such as transit schedules, transit routes, district destinations map and emergency contact information.

ACTION STEPS

- Collaborate with the City of Houston and METRO
- Prioritize transit stops with the highest need of updates
- Hire team to design and engineer improvements
- Coordinate with utility providers and governmental entities
- Obtain permits for construction
- Complete construction documents
- Issue bid for improvements
- Select contractor
- Commence construction
- Complete construction
- Plan for operations and maintenance

FUNDING SOURCES

- Tax Increment Reinvestment Zone (TIRZ) Funding
- Hobby Area Management District Funding
- Grant Funding:
 - Safe Routes to Schools
 - New Freedom Grants
 - U.S. Department of Transportation Federal Highway Administration Congestion Mitigation and Air Quality Improvement Program [<http://www.fhwa.dot.gov/fastact/factsheets/cmaqfs.cfm>]

COMMUNITY PARTNERS

- Metropolitan Transit Authority of Harris County
- Tax Increment Reinvestment Zone #8 (Gulfgate TIRZ)
- Hobby Area Management District
- City of Houston
- Houston Parks Board

GOALS ACHIEVED*:



LIVABILITY PRINCIPLES**:



*AS DEFINED ON "PROJECT GOALS" ON PAGE 5.

**AS DEFINED BY U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT (HUD).



Design transit stops as an important piece of civic architecture that reflects the style of the District.

NEIGHBORHOOD GOODS AND SERVICES

The private development community plays a critical role in creating active neighborhood streets with storefronts and social spaces that spill onto sidewalks. Property owners looking to redevelop can build in ways that create a cohesive streetscape anchored by vibrant intersections. Vacant lots also provide infill opportunities for new goods and services.

Per market studies, retail space should be marketed to eating and drinking places, entertainment and music venues to name a few. [Community Development Strategies (CDS) Hobby Area Market Assessment, page 15, 2016]. Pioneering local businesses such as bars or restaurants investing in the Hobby Area Management District is already happening, and is likely to occur with incentives or additional middle income population in the area. Independent local businesses serving the area's moderate income population will generally prefer the existing lower-rent retail space in the area over more expensive newer space, which will attract regional and national chains that target such demographics. Increasing population growth will increase retail demand, along with the ability of local businesses to pay higher rents. [Community Development Strategies (CDS) Hobby Area Market Assessment, page 6, 2016.]

In some cases, an independent entrepreneur will have enough access to capital to allow for new construction or substantial renovation of existing buildings. For example, along the Broadway Corridor, retail uses should be prioritized at the intersections of Dixie Drive, Bellfort Street, Rockhill Street and Morley Street. This ensures their accessibility by transit, walkability to nearby neighborhoods and high visibility to ensure retail success. Their central location within a comfortable distance of residences will encourage more trips on bike or foot. It also allows people without cars an affordable means for obtaining goods and services.

ACTION STEPS

- Develop marketing materials that can assist with recruitment of employees, companies, and service providers considering moving to the Hobby District Area
- Continue to target economic development marketing that promotes existing local companies
- Encourage and market local businesses that are unique to the District
- Incorporate into annual strategic plan
- Create a façade improvement program

FUNDING SOURCES

- Tax Increment Reinvestment Zone (#8 Financing TIRZ) Funding
- Hobby Area Management District Funding
- Private funding/developers

COMMUNITY PARTNERS

- Tax Increment Reinvestment Zone #8 (Gulfgate TIRZ)
- Hobby Area Management District
- City of Houston (Planning and Development Department)
- City of Houston (Department of Finance)
- Landowners
- Local Businesses
- Greater Houston Partnership
- Elected officials





As growth occurs, neighborhood goods and services such as grocery stores, markets and retail should be located along commercial corridors.

BAYOU TRAIL ART

Public art contributes to the unique identity of a community. It can also facilitate a heightened awareness of public investment leading to an increased perception of safety and increased sense of pride. This project recommends the placement of public art along Sims Bayou. Art should be positioned at access points to highlight key gateways. It should also be placed along the bayou trails at points for pause and contemplation. Local artists should be commissioned to create art pieces that highlight the natural beauty of the District as well as the spirit of the Hobby area.

ACTION STEPS

- Identify potential location(s);
- Budget for funding
- Acquire necessary portions of the right of way
- Hire team to design and engineer improvements
- Coordinate with utility providers and governmental entities
- Obtain permits for construction
- Complete construction documents
- Issue bid for improvements
- Select contractor
- Commence construction
- Complete construction
- Plan for operations and maintenance
- Coordinate maintenance agreements

FUNDING SOURCES

- Tax Increment Reinvestment Zone (TIRZ) Funding
- Hobby Area Management District Funding
- Grant Funding:
 - Kresge Foundation Arts & Culture Place-Based Initiatives [<http://kresge.org/opportunities>]
 - Kresge Foundation Healthy Housing and Neighborhoods Initiative [<http://kresge.org/opportunities>]

COMMUNITY PARTNERS

- Tax Increment Reinvestment Zone (TIRZ) Funding
- Hobby Area Management District Funding
- Harris County Flood Control
- City of Houston (Parks and Recreation Department)
- City of Houston (Public Works and Engineering Department)
- Metropolitan Transportation Authority of Harris County
- Private Landowners

GOALS ACHIEVED*:



LIVABILITY PRINCIPLES**:



*AS DEFINED ON "PROJECT GOALS" ON PAGE 5.

**AS DEFINED BY U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT (HUD).



Place public art along Sims Bayou to highlight entrances and trails.

HISTORIC BUILDING PRESERVATION

Along with the desire to preserve places that signify home, an important element of the human experience is the desire to be on the move and to see new things. Hobby's rich heritage that began the jet setting aviation culture of Houston sets it apart from all other districts in the city. Its artistic, art-deco buildings and architecture serves as nostalgic reminders of past eras from which the culture and surrounding settlements of Houston evolved. The 1940 Air Terminal Museum, original 1927 building adjacent to the present William P. Hobby Airport and historic Glenbrook Valley neighborhood, are invaluable heritage sites that generate ecotourism and economic growth. These link the District to additional city-wide art and culture epicenters nearby, such as the Museum District and Theater District.

Walking is increasingly recognized as important travel option in cities and neighborhoods and a goal of the Livable Centers program. Attractive, safe, pedestrian-scaled, and lively building façades contribute directly to the use of the sidewalks and public spaces. Both transportation and historic preservation have contributed to livability and quality of life. By their very nature, preservation projects help engage citizens, private groups and local agencies in activities having educational and health enhancing benefits for all. The restoration of historic building façades can assure the full benefits of streetscape enhancement projects, including increased pedestrian access and economic reinvestment.

In 2010 The City of Houston amended the Historic Preservation Ordinance to provide methods to maintain historic landmarks, districts and buildings. The online Historic Preservation Manual (www.houstontx.gov/planning/HistoricPres/HistoricPreservationManual) offers information on planning projects, modifying or maintaining landmarks and historic districts, approving historic property enhancement through the Certificate of Appropriateness process, information on the area's historic districts and landmarks, and definitions of terms relating to historic preservation.

Existing preservation efforts within the District include the historic designation of the 1940 Municipal Air Terminal building which houses the 1940 Air Terminal Museum, and the Glenbrook Valley historic neighborhood. Landmark and Protected Landmark designations allow for both recognition and protection of individual historic structures; Historic District designations help neighborhoods by classifying a specific area of a community as historically and significantly important. Charged with administering the ordinance is the Houston Archaeological and Historical Commission (HAHC).

- Partner with the City of Houston's Historic Landmark Designation program to ensure commercial and residential buildings designated as a "Landmark" or a "Protected Landmark" are eligible for tax abatements [<http://www.houstontx.gov/planning/HistoricPres/hist-incentives-broch.pdf>] and discounts on permit fees.

The HAHC is responsible for reviewing and nominating all designations as well as Certificates of Appropriateness (COA), a process required for all projects that seek to alter the exterior appearance of a city designated historic property.

- For projects within Glenbrook Valley, building elements that are compatible with the historic architectural styles for the neighborhood can be found at [http://www.houstontx.gov/planning/HistoricPres/HistoricPreservationManual/historic_districts/glenbrook_features.html].

Additional program resources that can be shared to achieve goals for preservation are provided below.

- Preservation Houston's Historic Neighborhood Resources (HNR) program: For new projects, outside of a designated district, the committee can share resources through the Houston's Historic Neighborhood Resources program. HNR helps organizations and individual owners of historic properties navigate the landmark designation process. Assistance through the program includes help with City of Houston landmark, protected landmark and historic district applications, National Register nominations, set back and prevailing lot size petitions, design guidelines and Texas historical marker applications. HNR can also help owners understand how to best meet criteria for owner-designation [<http://www.preservationhouston.org/taa/guide/>].
- The City of Houston assists Property Owners of Historic Buildings through Historic Structures Tax Exemption. This grants a tax exemption to qualified property owners who improve designated historic properties. The exemption applies for five (5) years when granted by the City. If combined with other tax entities, the exemption period may apply for up to ten (10) years. The City of Houston also offers a Single Family Home Repair Program ("SFHRP") that improves curb appeal and may be used on the exterior rehabilitation of historic owner-occupied homes.
- Houston Habitat for Humanity and the Community Covenant CDC (Community Development Corporation) are additional programs that assist with refurbishing homes or structures.

ACTION STEPS

- Promote preservation in Glenbrook Valley (already designated), along Telephone Road (expressed by community as opportunity for future efforts), and within the Industrial Hub to promote the 1940 Airport Terminal Museum.
- Perform a feasibility assessment that inventories building conditions of homes and businesses in the District and determines near term preservation projects
- Establish a detailed schedule and coordinate key recommendations from feasibility assessment with ongoing capital improvement projects and beautification efforts underway.
- Set-aside TIRZ funding for projects. The Tax Increment Reinvestment Zone #8 (Gulfgate TIRZ) can apply the value of future tax revenues to the cost of current improvements that promote historic preservation within the TIRZ. Incremental tax revenues generated in the TIRZ can fund infrastructure, acquisition and historic preservation activities.
- Add links to the Historic Preservation Manual and Department of Planning and Development Historic Preservation page and the Historic Preservation Manual on the Hobby Area District Website.

FUNDING SOURCES

- Tax Increment Reinvestment Zone (TIRZ) Funding
- Hobby Area Management District Funding

COMMUNITY PARTNERS

- Tax Increment Reinvestment Zone #8 (Gulfgate TIRZ)
- Hobby Area Management District
- City of Houston (Planning and Development Department)
- City of Houston (Mayor's Office of Cultural Affairs)
- Houston's Historic Neighborhood Resources
- Preservation Houston

GOALS ACHIEVED*:



LIVABILITY PRINCIPLES**:



*SEE "PROJECT GOALS" ON PAGE 5.

**AS DEFINED BY U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT (HUD).

MULTIPURPOSE WAREHOUSE SPACES

Buildings contribute to the District's sense of place and offer unique spaces for stores, restaurants, offices, housing and other uses. Vacant storefronts are unattractive places for visitors and potential entrepreneurs.

This project recommends the rehabilitation and infill of multipurpose warehouse spaces within the Industrial Hub catalyst site. The reuse of existing warehouses provides a lower cost investment solution for businesses. In addition, the easy adaptation of warehouses makes these spaces ideal for entrepreneurial/maker spaces, job training, small businesses, artist studios, breweries and other creative/startup industries.

Flexible warehouse spaces, when paired with simple solutions for active streetscapes, can generate immediate excitement in the area. Simple solutions are adding potted trees, flowers and greenery along the street edge, placing accent lights on buildings to create an appealing nighttime ambiance, or installing furniture, such as benches or bike racks that improve appeal and walkability. All of these ingredients work together to encourage people to bike to the area for dining, recreation and shopping, thereby reducing the number of automobile trips and the need for additional parking.

ACTION STEPS

- Identify property owners with warehouse buildings
- Collaborate on the design of improvements

FUNDING SOURCES

- Tax Increment Reinvestment Zone (TIRZ) Funding
- Hobby Area Management District Funding
- Private Property Owner and Development Interest Funding
 - Gulf Coast Economic Development District (GCEDD) Business Loan Fund [<http://www.h-gac.com/community/gcedd/business-loan-fund.aspx>]. Helps finance new or expanding small businesses when traditional funding isn't available or isn't enough. Grant funding may be used for assets and buildings, inventory, supplies, fixtures, furniture, equipment and working capital.
- Grant Funding:
 - Community Enhancement Grants [<http://www.h-gac.com/community/enhancement-grants/>]. The grant program helps organizations enhance public spaces, such as gateways, parks, waterfronts and business districts. Projects in 2016 included historical murals, seating and beautification, building refurbishment, lighting and sidewalks.

COMMUNITY PARTNERS

- Tax Increment Reinvestment Zone #8 (Gulfgate TIRZ)
- Hobby Area Management District
- City of Houston (Planning and Development Department)
- City of Houston (Department of Finance)
- Property owners





The adaptive reuse of existing warehouses provides a lower cost investment solution for businesses.



Partner with property owners to improve landscaping, lighting and signage.

SENIOR HOUSING

The promise of aging in a community can be challenging to deliver. Complete streets, transit-oriented and neighborhood design concepts should be periodically reviewed from the perspective of aging residents. Older adults are experts in changing community needs, so effective planning for physical design and social supports must involve their participation on an ongoing basis. When their potential is maximized, people of all ages benefit.

The Hobby Livable Centers study's public feedback identified challenges around longer life expectancies increasing the demand for affordable rentals, especially for low-income households and older adults on fixed incomes. CDS estimated that in the next five years, an additional 131 renters that are age 55 or older will need new housing opportunities (Appendix E on page 221). This project explores how an unused parcel near Telephone Road and Bellfort Street can provide senior-friendly housing with connections to transit, recreational trails and supportive services such as groceries and banking. The intersection of Bellfort and Nunn Street could be an alternative location that is also close to transit.

The design of homes should be adaptable and allow different generations or types of households to live in a single home. Design for safety and visibility with large-button crosswalk controls, large font signage, wayfinding and zero-step entries into housing to ensure that design is accessible at a human-scale.

ACTION STEPS

- Actively engage seniors in ongoing neighborhood planning studies.
For older adults, outreach should consider meeting times, physical accessibility of locations, transportation options, accessibility of written communications and seek out those who may not have access to computers.
- Set-aside funding for affordable, senior housing within the Tax Increment Reinvestment Zone. Tax Increment Reinvestment Zones (TIRZ) and the TIRZ Affordable Housing Set-Aside dedicates tax increment revenues to infrastructure developments in City-designated TIRZs and provides set-aside revenues dedicated to affordable housing development throughout the city. [<http://www.houstontx.gov/ecodev/index.html>]
- Encourage participation in city-wide programs that preserve existing affordable housing and foster a range of affordable housing options for older adults.
- The maintenance of the existing housing stock is not only critical to older adults, but also to their neighborhoods. Keeping homes affordable reduces deferred maintenance and its cumulative effects on the quality of the home and neighborhood. Energy-efficiency improvements contribute to a high-performing housing stock and healthy neighborhoods.

In dense, built locations, preserving existing affordable rental housing offers cost advantages over new construction, especially if funding for new subsidized housing is limited. City of Houston Housing and Community Development provides several programs that promote affordability, safety, accessibility, and that foster sustainable maintenance and upkeep activities for homes and apartments.

The following pages include a “toolbox” of potential resources such as tax incentives and bonds that the District can leverage in addition to TIRZ set-aside dollars.

FUNDING SOURCES

ENTITLEMENT GRANTS

There are four HUD entitlement grants administered by HCDD that finance annual objectives associated with HUD activities, including the Community Development Block Grant (CDBG), the HOME Investment Partnerships (HOME) Program, the Emergency Solutions Grant (ESG) and Housing Opportunities for Persons with AIDS (HOPWA). Of note, ESG and HOPWA are primarily supportive service grants awarded through a competitive process to social service agencies. However, two of the grants, CDBG and HOME may be utilized as a form of gap financing for housing. HCDD’s Multifamily Housing Program activities are funded at various times throughout the year through a Request for Proposal (RFP) process.

- The Community Development Block Grant (CDBG) Program finances a variety of activities including housing, public facilities and improvements, public services, and economic development assistance activities. These activities support the City’s low- and moderate-income neighborhoods and residents.
- The HOME Investment Partnerships (HOME) Program promotes public/private partnerships as a vehicle for expanding the stock of affordable housing, both single and multifamily, for the homeowner and rental markets. HOME Program funds support homebuyer assistance and single and multifamily development/rehabilitation/repair activities.

HOUSTON HOUSING AUTHORITY

The Houston Housing Authority (HHA) receives federal funding to provide quality affordable housing options in Houston. The HHA is the local administrator of the federal Low-Rent Public Housing Program and the Housing Choice Voucher Program (HCV) (formerly Section 8), as well as other housing, homeownership, and self- sufficiency programs for low- and extremely low-income families, seniors, and persons with disabilities within the City of Houston.

TAX INCENTIVES & BOND PROGRAMS

In addition to federal entitlement grants, other sources of funds are available to the District for through Housing and Community Development incentives for new multifamily residential mixed-use developments. HCDD's programs work cooperatively with other tax-related incentives to facilitate affordable housing options and create jobs. Descriptions of each program follow.

- Local Tax, Bond, and Development Incentives

Chapter 380 of the State of Texas Local Government Code allows Texas cities to make loans or grants of city funds to developers or investors as well as provide certain city staff and services, at minimum or no charge, to help stimulate economic development. [<http://www.houstontx.gov/ecodev/380agreements.html>]

- Tax Abatement Ordinance

Provides abatement of property tax for up to 10 years for owners of businesses that make new capital investments and commitments to job creation. [http://www.houstontx.gov/ecodev/tax_abatements.html]

- Private Activity Bonds and Mortgage Revenue Bond Program

Through Houston Housing Finance Corporation, local bond financing of single family and multifamily developments is available to partners in the private sector. The primary purpose of these programs is to encourage the development of affordable housing using below-market financing and tax exempt incentives. [<http://houstonhfc.com/MFP.html>]

- Developer Participation Contract (70-30 DPCs)

Mainly for water and wastewater infrastructure construction in new residential subdivisions. The Department of Public Works and Engineering is responsible for reimbursements involving water and wastewater funds. If applied for, some developers may receive funds from the Department of Housing and Community Development for Storm Sewer infrastructure construction on affordable housing development. The cap on reimbursements for these type projects is \$1,000,000 and includes construction and engineering costs. [<http://documents.publicworks.houstontx.gov/>]

- New Market Tax Credits

Provides tax incentives for businesses that make commitments to investments and job creation. New Market Tax Credits are administered by Community Development Finance Institutions (CDFIs) or banks that have applied to administer NMTCs locally.

- State of Texas Housing Tax Credit Program

The Housing Tax Credit (HTC) Program was established by the Tax Reform Act of 1986. Section 42 of the Internal Revenue Code of 1986 is the federal law that governs the HTC program. The Texas Department of Housing and Community Affairs (TDHCA) is the state allocating agency, receiving approximately funding annually for distribution among 13 service regions. TDHCA administers the program through a competitive application cycle between January and July of each year. An application for State of Texas Housing Tax Credits does not guarantee support or award of funds by HCDD; however, proposals that meet the multifamily policy priorities may be considered and all are encouraged to submit an application. Additional information is available online: [<https://www.tdhca.state.tx.us/multifamily/index.htm>]

- Historic Preservation Tax Credit

The Federal Historic Preservation Tax Incentives program encourages private sector investment in the rehabilitation and re-use of historic buildings. A 20% income tax credit is available for the rehabilitation of historic, income-producing buildings that are determined by the Secretary of the Interior, through the National Park Service, to be “certified historic structures.” Additional information is available online: <http://www.nps.gov/tps/tax-incentives/before-you-apply.htm>

- US Department of Housing & Urban Development (HUD)

Section 202 – HUD provides capital advances to finance the construction, rehabilitation or acquisition with or without rehabilitation of structures that will serve as supportive housing for very low-income elderly persons, including the frail elderly, and provides rent subsidies for the projects to help make them affordable.http://portal.hud.gov/hudportal/HUD?src=/program_offices/housing/mfh/grants/section202ptl

Section 811 – Through the Section 811 Supportive Housing for Persons with Disabilities program, HUD provides funding to develop and subsidize rental housing with the availability of supportive services for very low-income adults with disabilities.http://portal.hud.gov/hudportal/HUD?src=/program_offices/housing/mfh/grants/section811ptl

STATE-FUNDED BOND PROGRAMS

- State of Texas Bond Program

As an issuer for the Texas Private Activity Bond program, the Texas Department of Housing and Community Affairs (TDHCA) issues tax-exempt and taxable multifamily mortgage revenue bonds to finance the acquisition, rehabilitation, or development of affordable rental housing units. Approximately \$447 million is available statewide. HCDD does not directly participate in selection or award of the State multifamily mortgage revenue bonds, but may provide gap financing to proposals through its HOME Investment Partnerships Program, Community Development Block Grant, or local revenue programs. TDHCA administers the program as a “first-come, first-served” program throughout the year. As with other housing programs, affordability periods, rent limits, and income limits will apply to recipients receiving State bond funds. Additional information is available online: <http://www.tdhca.state.tx.us/multifamily/bond/index.htm>

- Tax-Exempt Bonds, TSAHC

The Texas State Affordable Housing Corporation (TSAHC) is a 501(c)(3) nonprofit organization that was created by the Texas Legislature in 1994 to serve as a self-sustaining, statewide affordable housing provider. TSAHC’s multifamily tax-exempt bond issuance program was established in 2001 and has since provided more than \$600 million in financing to help build or preserve affordable housing in Texas. As one of only two authorized statewide issuers of housing bonds, TSAHC receives 10% of the statewide volume cap for multifamily private activity bonds and has unlimited authority to issue 501c3 bonds for rental housing projects. Developers may submit proposals at any time: <http://www.tsahc.org/developers/tax-exempt-bonds>

COMMUNITY PARTNERS

- Tax Increment Reinvestment Zone #8 (Gulfgate TIRZ)
- Hobby Area Management District
- Metropolitan Transportation Authority of Harris County
- City of Houston (Planning and Development Department)
- City of Houston (Housing and Community Development)
- Private Landowners
- Housing Authorities
- AARP
- Houston/HC Continuum of Care
- Coordinated Housing Solutions
- Greater Houston Builders Association (GHBA)
- Local Initiatives Support Corporation (LISC) of Greater Houston <http://www.lisc.org/houston/>
- Texas State Affordable Housing Corporation <http://www.tsahc.org/developers/loan-products>
- Texas Association of Affordable Housing Providers <http://taahp.org/>
- Texas Association of Local Housing Finance Agencies <http://talhfa.org/>

GOALS ACHIEVED*:



LIVABILITY PRINCIPLES**:



*SEE “PROJECT GOALS” ON PAGE 5.

**AS DEFINED BY U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT (HUD).

SENIOR HOUSING - OPINION OF PROBABLE COSTS

ITEM	UNIT	QUANTITY	UNIT COST	TOTAL	NOTES
Architecture					
Multi Family	sf	70,000	\$85	\$5,950,000	
Townhomes	sf	80,000	\$85	\$6,800,000	
Furnishings					
Trash Receptacles	each	6	\$2,000	\$12,000	
Bike Racks	each	5	\$650	\$3,250	
Benches	each	30	\$3,500	\$105,000	
Bollard Lighting	each	60	\$1,500	\$90,000	Spaced at 15' intervals around green space
Street/Parking Lighting	each	60	\$7,000	\$420,000	Assumes lighting spaced at 60' intervals
Landscaping					
Lawn	sf	19,000	\$2	\$38,000	Lawn with irrigation
Shrubs	each	5,000	\$25	\$125,000	40,000 sf, 5 gal at 36" spacing
Groundcover/Perennials	each	19,500	\$15	\$292,500	38,000 sf including sidewalk and parking lot planters, 3 gal at 18" spacing
Tree Type 1	each	260	\$1,600	\$416,000	6"-8" caliper shade tree for streets and plazas
Tree Type 2	each	10	\$600	\$6,000	2"-4" caliper ornamental tree
Soils - Lawn	cy	350	\$45	\$15,750	6" depth - turf
Soils-Groundcover	cy	2,600	\$45	\$117,000	18" depth - shrubs, perennial, groundcover
Irrigation	ls	1	\$500,000	\$500,000	Lump Sum Assumption
Hardscape					
Paving Type 3 - Sidewalk	sf	390,000	\$8	\$3,120,000	10' wide concrete x 3900 feet
Paving Type 4 - Parking Lot	sf	40,000	\$4	\$140,000	
ROW	ft	3,800	\$22	\$81,700	
CONSTRUCTION COSTS					
Construction Cost Subtotal				\$18,232,200	
20% Contingency				\$3,646,440	
8% General Conditions				\$1,750,291	
3% Escalation				\$656,359	
5% Addition Construction Cost (Bonding, Permitting, Insurance)				\$1,093,932	
TOTAL CONSTRUCTION COSTS				\$25,379,222	
SOFT COSTS					
11% Design and Engineering Fee Budget*				\$2,406,650	
5% Construction Management Budget*				\$1,093,932	
3% Site Survey Budget*				\$656,359	
TOTAL SOFT COSTS				\$4,156,942	
TOTAL PROJECT COSTS**				\$29,536,164	

*Percentage based on construction cost subtotal and 20 percent construction cost contingency.

**Opinion of potential cost(s). Not to be used for formal construction or exact budgeting.

SAFE PEDESTRIAN AND BIKE CROSSINGS AT INTERSECTIONS

Safe pedestrian and bike crossings should be a district wide priority. Signalized crossings should be considered at midblock crossings or areas with heavy vehicle traffic. An example of the cost of landscaping improvements at the Bellfort Street and Telephone Road intersection is included and also explored in the Walkable Blocks project. This provides a model that could be applied throughout the District to other intersections.

ACTION STEPS

- Budget for funding
- Acquire necessary land
- Implement Crime Prevention through Environmental Design (CPTED) best practices
- Coordinate with utility providers and governmental entities
- Obtain permits for construction
- Complete construction documents
- Issue bid for improvements
- Select contractor
- Commence construction
- Complete construction
- Plan for operations and maintenance
- Coordinate maintenance agreements

FUNDING SOURCES

- Tax Increment Reinvestment Zone (TIRZ) Funding
- Hobby Area Management District Funding
- Grants

COMMUNITY PARTNERS

- Tax Increment Reinvestment Zone #8 (Gulfgate TIRZ)
- Hobby Area Management District
- City of Houston (Planning and Development Department)
- City of Houston (Public Works and Engineering Department)
- Texas Department of Transportation
- Metropolitan Transportation Authority of Harris County
- Property Owners

GOALS ACHIEVED*:



LIVABILITY PRINCIPLES**:



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**AS DEFINED BY U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT (HUD).



Bulb out at intersections reduce crossing distance



Flashing beacons draw attention to crossing pedestrian traffic



Pavers make sidewalks stand out to drivers

WALKABLE BROADWAY

The size of blocks along Broadway Street are currently a half mile long. This length is not conducive to a successful pedestrian environment. The average person would take approximately 10 minutes to walk the length of a single block. Street grids with shorter blocks or midblock pedestrian connections provide more route choices and therefore a more interesting pedestrian experience. This project suggests better connecting long blocks along Broadway Street with new vehicular streets or pedestrian links that connect to the surrounding neighborhoods. New suggested connections include a new street between Morley Street and Airport Boulevard; the reconnection of Wimerdean Street between Morley and Rockhill Street; the reconnection of Glenvista Street between Rockhill Street and Bellfort Street; and the reconnection of Glenview Drive between Bellfort Street and Sims Bayou.

ACTION STEPS

- Continue discussions with residents to determine additional locations needing connectivity
- Coordinate design/engineering efforts with ongoing beautification along Broadway Street
- Budget for funding
- Hire team to design and engineer improvements
- Coordinate with utility providers and governmental entities
- Obtain permits for construction
- Complete construction documents
- Issue bid for improvements
- Select contractor
- Commence construction
- Complete construction
- Plan for operations and maintenance
- Coordinate maintenance agreements

FUNDING SOURCES

- Tax Increment Reinvestment Zone (TIRZ) Funding
- Hobby Area Management District Funding
- Grant Funding:
 - USDOT Federal Highway Administration Congestion Mitigation and Air Quality Improvement Program [<http://www.fhwa.dot.gov/fastact/factsheets/cmaqfs.cfm>]
 - Surface Transportation Block Grant Program
 - Community Development Block Grant Program
 - Houston-Galveston Area Council Downtown Public Spaces Improvements Program

COMMUNITY PARTNERS

- Tax Increment Reinvestment Zone #8 (Gulfgate TIRZ)
- Hobby Area Management District
- City of Houston Planning Department
- Metropolitan Transit Authority of Harris County (METRO)
- Property owners

GOALS ACHIEVED*:



LIVABILITY PRINCIPLES**:



*SEE "PROJECT GOALS" ON PAGE 5.

**AS DEFINED BY U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT (HUD).

WALKABLE BROADWAY - OPINION OF PROBABLE COSTS

ITEM	UNIT	QUANTITY	UNIT COST	TOTAL	NOTES
Engineering					
Demolition	cy	3,000	11	33,000	Removal of small roadway areas and clearing of space as area redevelops
New ROW	ft	3,000	22	66,000	
Water service	allow	1	\$20,000	\$20,000	Service point for irrigation system
Striping	allow	1	\$75,000	\$75,000	Newly painted stripes and reflectors
Utility modifications	allow	1	\$250,000	\$250,000	Moving wires, private utility boxes, meter lids
Furnishings					
Furniture	allow	1	\$35,000	\$35,000	Limited benches, trash cans and bike racks
Pedestrian Lighting	ea	50	\$3,000.00	\$150,000.00	Assumes trail lighting spaced at 60' intervals
Street/Parking Lighting	ea	50	\$7,000.00	\$350,000.00	Assumes lighting spaced at 60' intervals
Signage and crosswalks	allow	1	\$75,000	\$75,000	Limited pedestrian signage and crossing signal upgrades
Hardscape					
Concrete sidewalk	sf	30,000	\$8	\$240,000	Includes excavation activity, 10' avg. width
Landscaping					
Landscape area	sf	18,000	\$8	\$144,000	Soils and general plant materials
Tree Type 1	each	100	\$1,600	\$160,000	Shade trees- 25' on center
Irrigation	sf	18,000	\$2	\$27,000	
CONSTRUCTION COSTS					
Construction Cost Subtotal				\$1,625,000.00	
20% Contingency				\$325,000.00	
8% Additional Construction Cost (General Conditions)				\$156,000.00	
3% Additional Construction Cost (Escalation)				\$58,500.00	
5% Addition Construction Cost (Bonding, Permitting, Insurance)				\$97,500.00	
TOTAL CONSTRUCTION COSTS				\$2,262,000.00	
SOFT COSTS					
11% Soft Cost (Design and Engineering Fee budget) *				\$214,500.00	
5% Soft Cost (Construction Management budget)*				\$97,500.00	
3% Soft Cost (site survey budget)*				\$58,500.00	
TOTAL SOFT COSTS				\$370,500.00	
TOTAL PROJECT COSTS				\$2,632,500.00	

*Percentage based on construction cost subtotal and 20 percent construction cost contingency.

**Opinion of potential cost(s). Not to be used for formal construction or exact budgeting.

STREETSCAPE IMPROVEMENTS WITHIN THE INDUSTRIAL HUB

A newly energized industrial hub requires the update of supporting infrastructure to ensure its ease of accessibility and safety for visitors. Streetscape improvements should take place along Convair Street, Larson Street, Lockheed Street, Neuhaus Avenue, Neims Street and Major Street and include the addition of street trees, striped on-street parking, construction of sidewalks and partnerships with property owners to improve landscaping. Improvements should also consider pedestrian and bike connections to existing and planned transit connections along Telephone Road or that connect to the William P. Hobby Airport.

ACTION STEPS

- Budget for funding
- Acquire necessary portions of the right of way (if necessary)
- Hire team to design and engineer improvements
- Coordinate with utility providers and governmental entities
- Obtain permits for construction
- Complete construction documents
- Issue bid for improvements
- Select contractor
- Commence construction
- Complete construction
- Plan for operations and maintenance
- Coordinate maintenance agreements

FUNDING SOURCES

- Tax Increment Reinvestment Zone (#8 (Gulfgate TIRZ) Funding
- Hobby Area Management District Funding
- Special Revenue Funds
- Private Property Owner and Development Interest Funding
- Grant Funding
 - New Freedom Grants

COMMUNITY PARTNERS

- Tax Increment Reinvestment Zone #8 (Gulfgate TIRZ)
- Hobby Area Management District
- Metropolitan Transportation Authority of Harris County
- Private Landowners
- City of Houston (Planning and Development Department)
- City of Houston (Public Works and Engineering Department)
- City of Houston (Parking Management)
- CenterPoint Energy

GOALS ACHIEVED*:



LIVABILITY PRINCIPLES**:



*SEE "PROJECT GOALS" ON PAGE 5.

**AS DEFINED BY U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT (HUD).

STREETSCAPE IMPROVEMENTS WITHIN THE INDUSTRIAL HUB - OPINION OF PROBABLE COSTS

ITEM	UNIT	QUANTITY	UNIT COST	TOTAL	NOTES
Engineering					
Curb modifications	allow	1	\$100,000	\$100,000	Limited changes to curb lines or replacements
Water service	allow	1	\$20,000	\$20,000	Service point for irrigation system
Striping	allow	1	\$75,000	\$75,000	Newly painted stripes and reflectors
Utility modifications	allow	1	\$250,000	\$250,000	Moving wires, private utility boxes, meter lids
Paving demo	cy	5,800	\$11	\$60,900	Removal of small roadway areas and existing sidewalks
Furnishings					
Furniture	allow	1	\$35,000	\$35,000	Limited benches, trash cans and bike racks
Pedestrian Lighting	ex	275	\$3,000.00	\$825,000.00	Assumes trail lighting spaced at 60' intervals
Street/Parking Lighting	ea	275	\$7,000.00	\$1,925,000.00	Assumes lighting spaced at 60' intervals
Signage and crosswalks	allow	1	\$75,000	\$75,000	Limited pedestrian signage and crossing signal upgrades
Hardscape					
Concrete sidewalk	sf	130,000	\$8	\$1,040,000	Includes excavation activity, 10' avg. width
Landscaping					
Landscape area	sf	71,000	\$8	\$568,000	Soils and general plant materials
Tree Type 1	each	380	\$1,600	\$608,000	Shade trees- 25' on center
Tree Type 2	each	98	\$600	\$58,800	Utility friendly trees- 25' on center
Irrigation	sf	71,000	\$2	\$106,500	

CONSTRUCTION COSTS	
Construction Cost Subtotal	\$5,747,200.00
20% Contingency	\$1,149,440.00
8% Additional Construction Cost (General Conditions)	\$551,731.20
3% Additional Construction Cost (Escalation)	\$206,899.20
5% Addition Construction Cost (Bonding, Permitting, Insurance)	\$344,832.00
TOTAL CONSTRUCTION COSTS	\$8,000,102.40
SOFT COSTS	
11% Soft Cost (Design and Engineering Fee budget) *	\$758,630.40
5% Soft Cost (Construction Management budget)*	\$344,832.00
3% Soft Cost (site survey budget)*	\$206,899.20
TOTAL SOFT COSTS	\$1,310,361.60
TOTAL PROJECT COSTS	\$9,310,464.00

*Percentage based on construction cost subtotal and 20 percent construction cost contingency.

**Opinion of potential cost(s). Not to be used for formal construction or exact budgeting.

PEDESTRIAN AND BIKE PRIORITY STREETS

Providing safe and accessible infrastructure for both pedestrians and cyclists is key in creating a livable center. New bike infrastructure and improvements to sidewalks should be prioritized along corridors that connect Hobby residents and visitors from one recreational, cultural, job or residential destination to another. The streets identified in Figure 18: Connectivity Vision on page 37 should receive priority urban design and investment in order to create safe connections from existing and future amenities. Please note that proposed facilities take the Houston Bike Plan into consideration. The process to incorporate additional suggestions for each facility type is pending development and will be considered by the City of Houston Bikeways Program in the coming years.

Filling in gaps where sidewalks are missing and replacing sidewalks in poor condition should be first priority. Updates should also consider the following design principles:

1. Connect livable centers to each other;
2. Improve pedestrian amenities such as increased shade, seating and continuous sidewalks;
3. Incorporate artistic elements into the streetscape;
4. Provide directional signage to parking, cultural and entertainment destinations;
5. Incorporate information kiosks and ID markers to promote arts and cultural events;
6. Provide unique lighting elements to enhance the street experience during evening hours; and
7. Support local residents and workers by incorporating custom designed urban infrastructure such as light poles, benches, tree grates, bicycle racks and utility screens.

Bike lane improvements should be considered strategically in conjunction with street reconstruction efforts. Priority should be given to projects within the Houston Bike Plan, on streets that provide connections between neighborhoods and key nodes and where improvements fit within the current right of way.

FUNDING SOURCES

- Tax Increment Reinvestment Zone (TIRZ) Funding
- Hobby Area Management District Funding
- General Obligation bonds
- General Fund
- Special Revenue Funds
- Grant Funding
 - Safe Routes to Schools
 - New Freedom Grants

COMMUNITY PARTNERS

- Tax Increment Reinvestment Zone #8 (Gulfgate TIRZ)
- Hobby Area Management District
- City of Houston (Planning and Development Department)
- City of Houston (Parks and Recreation Department)
- City of Houston (Public Works and Engineering Department)
- Houston Flood Control District
- Metropolitan Transportation Authority of Harris County

GOALS ACHIEVED*:



LIVABILITY PRINCIPLES**:



*SEE "PROJECT GOALS" ON PAGE 5.

**AS DEFINED BY U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT (HUD).

PRIORITY STREETS OPINION OF PROBABLE COSTS - OFF STREET TRAIL

AIRPORT BLVD.	ITEM	UNIT COST	UNIT	QUANTITY	ITEM COST	DESCRIPTION
(Linnet Ln - Telephone Rd.)						
	Concrete Sidewalks (5")	\$65.00	SY	12,833	\$834,166.67	Adding in Shared-Use path
	Grading	\$10.00	CY	1,711	\$17,111.11	Cost of Excavation/Embankment
	Subtotal				\$851,277.78	

AIRPORT BLVD.	ITEM	UNIT COST	UNIT	QUANTITY	ITEM COST	DESCRIPTION
(Telephone Rd. - Hansen Rd.)						
	Concrete Sidewalks (5")	\$65.00	SY	11,722	\$761,944.44	Adding in Shared-Use path
	Grading	\$10.00	CY	1,563	\$15,629.63	Cost of Excavation/Embankment
	Subtotal				\$777,574.07	

AIRPORT BLVD.	ITEM	UNIT COST	UNIT	QUANTITY	ITEM COST	DESCRIPTION
(Hansen Rd. - Mosley Rd.)						
	Concrete Sidewalks (5")	\$65.00	SY	1,611	\$104,722.22	Adding in Shared-Use path
	Grading	\$10.00	CY	215	\$2,148.15	Cost of Excavation/Embankment
	Subtotal				\$106,870.37	

BERRY CREEK C106-01-00	ITEM	UNIT COST	UNIT	QUANTITY	ITEM COST	DESCRIPTION
	Concrete Sidewalks (5")	\$65.00	SY	8,100	\$526,500.00	Adding in Shared-Use path
	Grading	\$10.00	CY	1,080	\$10,800.00	Cost of Excavation/Embankment
	Subtotal				\$537,300.00	

HCPCD DITCH C165-00-00	ITEM	UNIT COST	UNIT	QUANTITY	ITEM COST	DESCRIPTION
Airport Blvd. - Sims Bayou						
	Concrete Sidewalks (5")	\$65.00	SY	8,556	\$556,111.11	Adding in Shared-Use path
	Grading	\$10.00	CY	1,141	\$11,407.41	Cost of Excavation/Embankment
	Subtotal				\$567,518.52	

JET PILOT ST. - MELDRUM LN. CONNECTION	ITEM	UNIT COST	UNIT	QUANTITY	ITEM COST	DESCRIPTION
Jet Pilot St. - Meldrum Ln.						
	Concrete Sidewalks (5")	\$65.00	SY	761	\$49,472.22	Adding in Shared-Use path
	Grading	\$10.00	CY	101	\$1,014.81	Cost of Excavation/Embankment
	Subtotal				\$50,487.04	

HCFC DITCH C106-01-05	ITEM	UNIT COST	UNIT	QUANTITY	ITEM COST	DESCRIPTION
Eastern portion of Meldrum Ln. - Dexter Blvd.						
	Concrete Sidewalks (5")	\$65.00	SY	1,900	\$123,500.00	Adding in Shared-Use path
	Grading	\$10.00	CY	253	\$2,533.33	Cost of Excavation/Embankment
	Subtotal				\$126,033.33	

MELDRUM LN./ C-0111 DRAINAGE CORRIDOR (WESTERN PORTION)	ITEM	UNIT COST	UNIT	QUANTITY	ITEM COST	DESCRIPTION
Eastern portion of Meldrum Ln. - Dexter Blvd.						
	Concrete Sidewalks (5")	\$65.00	SY	2,517	\$163,583.33	Adding in Shared-Use path
	Grading	\$10.00	CY	336	\$3,355.56	Cost of Excavation/Embankment
	Subtotal				\$166,938.89	

MINNESOTA ST. CONNECTION	ITEM	UNIT COST	UNIT	QUANTITY	ITEM COST	DESCRIPTION
Meldrum Ln. - southern portion of Minnesota St.						
	Concrete Sidewalks (5")	\$65.00	SY	878	\$57,055.56	Adding in Shared-Use path
	Grading	\$10.00	CY	117	\$1,170.37	Cost of Excavation/Embankment
	Subtotal				\$58,225.93	

RADIO RD. CONNECTION	ITEM	UNIT COST	UNIT	QUANTITY	ITEM COST	DESCRIPTION
Radio Rd. - Radio Rd.						
	Concrete Sidewalks (5")	\$65.00	SY	144	\$9,388.89	Adding in Shared-Use path
	Grading	\$10.00	CY	19	\$192.59	Cost of Excavation/Embankment
	Subtotal				\$9,581.48	

PRIORITY STREETS OPINION OF PROBABLE COSTS - DEDICATED BIKE LANE

BELFORT ST.	ITEM	UNIT COST	UNIT	QUANTITY	ITEM COST	DESCRIPTION
Mykawa Rd. - IH-45						
	HMA Type D	\$80.00	TON	8,217	\$657,333.33	Asphalt surface course
	HMA Type B	\$100.00	TON	8,217	\$821,666.67	Asphalt base course
	CEMENT TREAT (SUBGRADE) (8")	\$3.00	SY	18,889	\$56,666.67	Cement treat the subgrade
	CEMENT	\$155.00	TON	374	\$57,970.00	Payment for cost of cement
	CONC CURB (TY II)	\$10.00	LF	34,000	\$340,000.00	Concrete curb
	REMOVING CONC (CURB)	\$5.00	LF	34,000	\$170,000.00	Removing old curb for widening
	Grading	\$10.00	CY	2,519	\$25,185.19	Cost of Excavation/Embankment
	4" White Solid Stripe	\$0.50	LF	34,000	\$17,000.00	Striping on left of bike lane for asphalt roads
	4" White Break Stripe	\$0.50	LF	8,500	\$4,250.00	Striping in between lanes for asphalt roads
	Pavement Surface Prep for 4"	\$0.05	LF	42,500	\$2,125.00	Surface preparation for striping for asphalt roads
	Bike Symbol Striping	\$215.00	EA	14	\$3,010.00	Bike symbol for asphalt roads
	Pavement Surface Prep for Bike Symbol	\$17.00	EA	14	\$238.00	Surface preparation for bike symbols for asphalt roads
	Subtotal				\$2,155,444.85	

CLEARWOOD ST.	ITEM	UNIT COST	UNIT	QUANTITY	ITEM COST	DESCRIPTION
Alemda Genoa Rd. - IH-45						
	CONC PAV (JOINT REINF) (10")	\$65.00	SY	4,729	\$307,377.78	Joint reinforced concrete pavement
	CEMENT TREAT (SUBGRADE) (8")	\$3.00	SY	4,729	\$14,186.67	Cement treat the subgrade
	CEMENT	\$155.00	TON	94	\$14,512.96	Payment for cost of cement
	CONC CURB (TY II)	\$10.00	LF	10,640	\$106,400.00	Concrete curb
	REMOVING CONC (CURB)	\$5.00	LF	10,640	\$53,200.00	Removing old curb for widening
	Grading	\$10.00	CY	788	\$7,881.48	Cost of Excavation/Embankment
	4" White Solid Stripe	\$0.10	LF	10,640	\$1,064.00	Striping on left of bike lane for concrete roads
	4" White Break Stripe	\$0.10	LF	2,660	\$266.00	Striping in between lanes for concrete roads
	Bike Symbol Striping	\$215.00	EA	2	\$430.00	Bike symbol for concrete roads
	Subtotal (before contingency)				\$505,318.89	
	Contingency for storm sewers (50%)				\$252,659.44	
	Subtotal (after contingency)				\$757,978.33	

DIXIE DR. - ALTERNATE A	ITEM	UNIT COST	UNIT	QUANTITY	ITEM COST	DESCRIPTION
Mykawa Rd. - Telephone Rd.						
	HMA Type D	\$80.00	TON	2,163	\$173,033.33	Asphalt surface course
	HMA Type B	\$100.00	TON	2,163	\$216,291.67	Asphalt base course
	CEMENT TREAT (SUBGRADE) (8")	\$3.00	SY	4,972	\$14,916.67	Cement treat the subgrade
	CEMENT	\$155.00	TON	98	\$15,259.75	Payment for cost of cement
	CONC CURB & GUTTER (TY II)	\$20.00	LF	17,900	\$358,000.00	Concrete curb and gutter
	REMOVING CONC (CURB)	\$5.00	LF	17,900	\$89,500.00	Removing old curb for widening
	Grading	\$10.00	CY	1,326	\$13,259.26	Cost of Excavation/Embankment
	4" White Solid Stripe	\$0.50	LF	17,900	\$8,950.00	Striping on left of bike lane for asphalt roads
	4" Yellow Solid Stripe	\$0.40	LF	17,900	\$7,160.00	Striping for two-way left turn lane for asphalt roads
	4" Yellow Break Stripe	\$0.40	LF	4,475	\$1,790.00	Striping for two-way left turn lane for asphalt roads
	Pavement Surface Prep for 4"	\$0.05	LF	40,275	\$2,013.75	Surface preparation for striping for asphalt roads
	Bike Symbol Striping	\$215.00	EA	2	\$430.00	Bike symbol for asphalt roads
	Pavement Surface Prep for Bike Symbol	\$17.00	EA	2	\$34.00	Surface preparation for bike symbols for asphalt roads
	Raised Pavement Markers	\$2.50	EA	224	\$560.00	Reflectorized traffic buttons
	TWLT Lane Arrows	\$70.00	EA	4	\$280.00	Arrows in the two-way left turn lane
	Subtotal (before contingency)				\$901,478.43	
	Contingency for storm sewers (50%)				\$450,739.21	
	Subtotal (after contingency)				\$1,352,217.64	

DIXIE DR. - ALTERNATE B	ITEM	UNIT COST	UNIT	QUANTITY	ITEM COST	DESCRIPTION
Mykawa Rd. - Telephone Rd.						
	HMA Type D	\$80.00	TON	4,326	\$346,066.67	Asphalt surface course
	HMA Type B	\$100.00	TON	4,326	\$432,583.33	Asphalt base course
	CEMENT TREAT (SUBGRADE) (8")	\$3.00	SY	9,944	\$29,833.33	Cement treat the subgrade
	CEMENT	\$155.00	TON	197	\$30,519.50	Payment for cost of cement
	CONC CURB & GUTTER (TY II)	\$20.00	LF	17,900	\$358,000.00	Concrete curb and gutter
	REMOVING CONC (CURB)	\$5.00	LF	17,900	\$89,500.00	Removing old curb for widening
	Grading	\$10.00	CY	1,326	\$13,259.26	Cost of Excavation/Embankment
	4" White Break Stripe	\$0.50	LF	4,475	\$2,237.50	Striping on left of bike lane for asphalt roads

	4" Double Yellow Stripe	\$1.00	LF	17,900	\$17,900.00	Striping for middle of road for asphalt roads
	Pavement Surface Prep for 4"	\$0.05	LF	22,375	\$1,118.75	Surface preparation for striping for asphalt roads
	Raised Pavement Markers	\$2.50	EA	448	\$1,120.00	Reflectorized traffic buttons
	Subtotal				\$1,322,138.34	
	Contingency for storm sewers (50%)				\$661,069.17	
	Subtotal (after contingency)				\$1,983,207.51	

HANSEN RD.	ITEM	UNIT COST	UNIT	QUANTITY	ITEM COST	DESCRIPTION
Scranton St. - Airport Blvd.						
	4" White Solid Stripe	\$0.50	LF	6,400	\$3,200.00	Striping on left of bike lane for asphalt roads
	4" Double Yellow Stripe	\$1.00	LF	6,400	\$6,400.00	Striping for middle of road for asphalt roads
	Pavement Surface Prep for 4"	\$0.05	LF	12,800	\$640.00	Surface preparation for striping for asphalt roads
	Bike Symbol Striping	\$215.00	EA	4	\$860.00	Bike symbol for asphalt roads
	Pavement Surface Prep for Bike Symbol	\$17.00	EA	4	\$68.00	Surface preparation for bike symbols for asphalt roads
	Raised Pavement Markers	\$2.50	EA	160	\$400.00	Reflectorized traffic buttons
	24" Stop Bar Striping	\$5.00	LF	34	\$170.00	Striping for stop bar for asphalt roads
	Pavement Surface Prep for 24"	\$0.50	LF	34	\$17.00	Surface preparation for 24" string for asphalt roads
	Subtotal				\$11,755.00	

HANSEN RD.	ITEM	UNIT COST	UNIT	QUANTITY	ITEM COST	DESCRIPTION
Airport Blvd. - Canniff St.						
	4" White Solid Stripe	\$0.50	LF	6,460	\$3,230.00	Striping on left of bike lane for asphalt roads
	4" Yellow Solid Stripe	\$1.00	LF	6,460	\$6,460.00	Striping for middle of road for asphalt roads
	Pavement Surface Prep for 4"	\$0.05	LF	12,920	\$646.00	Surface preparation for striping for asphalt roads
	Bike Symbol Striping	\$215.00	EA	4	\$860.00	Bike symbol for asphalt roads
	Pavement Surface Prep for Bike Symbol	\$17.00	EA	4	\$68.00	Surface preparation for bike symbols for asphalt roads
	Raised Pavement Markers	\$2.50	EA	324	\$810.00	Reflectorized traffic buttons
	24" White Stop Bar Striping	\$5.00	LF	68	\$340.00	Striping for stop bar for asphalt roads
	Pavement Surface Prep for 24"	\$0.50	LF	68	\$34.00	Surface preparation for 24" string for asphalt roads
	Subtotal				\$12,448.00	

KOMPAN DR. - NORTH	ITEM	UNIT COST	UNIT	QUANTITY	ITEM COST	DESCRIPTION
Airport Blvd. - Santa Fe Dr.						
	HMA Type D	\$80.00	TON	3,319	\$265,524.00	Asphalt surface course
	HMA Type B	\$100.00	TON	3,319	\$331,905.00	Asphalt base course
	CEMENT TREAT (SUBGRADE) (8")	\$3.00	SY	7,630	\$22,890.00	Cement treat the subgrade
	CEMENT	\$155.00	TON	151	\$23,416.47	Payment for cost of cement
	CONC CURB (TY II)	\$10.00	LF	9,810	\$98,100.00	Concrete curb
	REMOVING CONC (CURB)	\$5.00	LF	9,810	\$49,050.00	Removing old curb for widening
	Grading	\$10.00	CY	727	\$7,266.67	Cost of Excavation/Embankment
	4" White Solid Stripe	\$0.50	LF	19,620	\$9,810.00	Striping on left of bike lane and edges of road for asphalt roads
	4" Yellow Solid Stripe	\$1.00	LF	9,810	\$9,810.00	Striping for middle of road for asphalt roads
	Pavement Surface Prep for 4"	\$0.05	LF	29,430	\$1,471.50	Surface preparation for striping for asphalt roads
	Bike Symbol Striping	\$215.00	EA	2	\$430.00	Bike symbol for asphalt roads
	Pavement Surface Prep for Bike Symbol	\$17.00	EA	2	\$34.00	Surface preparation for bike symbols for asphalt roads
	Raised Pavement Markers	\$2.50	EA	124	\$310.00	Reflectorized traffic buttons
	Subtotal				\$820,017.64	
Kompan Dr. - South	Item	Unit Cost	Unit	Quantity	Item Cost	Description
Airport Blvd. - Neuhaus Ave.						
	4" White Solid Stripe	\$0.10	LF	6,420	\$642.00	Striping on left of bike lane for concrete roads
	4" Yellow Solid Stripe	\$0.10	LF	4,280	\$428.00	Striping for two-way left turn lane for concrete roads
	4" Yellow Break Stripe	\$0.10	LF	1,070	\$107.00	Striping for two-way left turn lane for concrete roads
	Bike Symbol Striping	\$215.00	EA	2	\$430.00	Bike symbol for concrete roads
	Raised Pavement Markers	\$2.50	EA	108	\$270.00	Reflectorized traffic buttons
	24" White Stop Bar Striping	\$5.00	LF	25	\$125.00	Striping for stop bar for concrete roads
	TWLT Lane Arrows	\$70.00	EA	4	\$280.00	Arrows in the two-way left turn lane
	Subtotal				\$2,282.00	

LA PASEO ST.	ITEM	UNIT COST	UNIT	QUANTITY	ITEM COST	DESCRIPTION
Nunn St - Plainview St.						
	4" White Solid Stripe	\$0.50	LF	1,280	\$640.00	Striping on left of bike lane for asphalt roads
	4" Yellow Solid Stripe	\$1.00	LF	1,280	\$1,280.00	Striping for middle of road for asphalt roads
	Pavement Surface Prep for 4"	\$0.05	LF	2,560	\$128.00	Surface preparation for striping for asphalt roads
	Bike Symbol Striping	\$215.00	EA	2	\$430.00	Bike symbol for asphalt roads
	Pavement Surface Prep for Bike Symbol	\$17.00	EA	2	\$34.00	Surface preparation for bike symbols for asphalt roads
	Raised Pavement Markers	\$2.50	EA	32	\$80.00	Reflectorized traffic buttons
	24" White Stop Bar Striping	\$5.00	LF	20	\$100.00	Striping for stop bar for asphalt roads
	Pavement Surface Prep for 24"	\$0.50	LF	20	\$10.00	Surface preparation for 24" string for asphalt roads
	Subtotal				\$2,702.00	

MOSLEY RD.	ITEM	UNIT COST	UNIT	QUANTITY	ITEM COST	DESCRIPTION
Scranton St. - Gulf Freeway (IH 45)						
	4" White Solid Stripe	\$0.50	LF	8,820	\$4,410.00	Striping on left of bike lane for asphalt roads
	4" Yellow Solid Stripe	\$1.00	LF	8,820	\$8,820.00	Striping for middle of road for asphalt roads
	Pavement Surface Prep for 4"	\$0.05	LF	17,640	\$882.00	Surface preparation for striping for asphalt roads
	Bike Symbol Striping	\$215.00	EA	5	\$1,075.00	Bike symbol for asphalt roads
	Pavement Surface Prep for Bike Symbol	\$17.00	EA	5	\$85.00	Surface preparation for bike symbols for asphalt roads
	Raised Pavement Markers	\$2.50	EA	222	\$555.00	Reflectorized traffic buttons
	24" White Stop Bar Striping	\$5.00	LF	64	\$320.00	Striping for stop bar for asphalt roads
	Pavement Surface Prep for 24"	\$0.50	LF	64	\$32.00	Surface preparation for 24" string for asphalt roads
	Subtotal				\$16,179.00	

MONROE RD.	ITEM	UNIT COST	UNIT	QUANTITY	ITEM COST	DESCRIPTION
Alemda Genoa Rd. - IH-45						
	CONC PAV (JOINT REINF) (10")	\$65.00	SY	20,973	\$1,363,266.67	Joint reinforced concrete pavement
	CEMENT TREAT (SUBGRADE) (8")	\$3.00	SY	20,973	\$62,920.00	Cement treat the subgrade
	CEMENT	\$155.00	TON	415	\$64,367.16	Payment for cost of cement
	CONC CURB (TY II)	\$10.00	LF	62,920	\$629,200.00	Concrete curb

	REMOVING CONC (CURB)	\$5.00	LF	62,920	\$314,600.00	Removing old curb for widening
	Grading	\$10.00	CY	2,330	\$23,303.70	Cost of Excavation/Embankment
	4" White Solid Stripe	\$0.10	LF	31,460	\$3,146.00	Striping on left of bike lane for concrete roads
	4" White Break Stripe	\$0.10	LF	7,865	\$786.50	Striping for in between lanes for concrete roads
	Bike Symbol Striping	\$215.00	EA	4	\$860.00	Bike symbol for concrete roads
	Subtotal (before contingency)				\$2,462,450.03	
	Contingency for storm sewers (10%)				\$246,245.00	
	Subtotal (after contingency)				\$2,708,695.03	

NEUHAUS AVE.	ITEM	UNIT COST	UNIT	QUANTITY	ITEM COST	DESCRIPTION
S. Kompan Dr. - Travelair St.						
	4" White Solid Stripe	\$0.10	LF	18,330	\$1,833.00	Striping on left of bike lane for concrete roads
	4" Yellow Solid Stripe	\$0.10	LF	12,220	\$1,222.00	Striping for two-way left turn lane for concrete roads
	Bike Symbol Striping	\$215.00	EA	7	\$1,505.00	Bike symbol for concrete roads
	Raised Pavement Markers	\$2.50	EA	306	\$763.75	Reflectorized traffic buttons
	24" White Stop Bar Striping	\$5.00	LF	132	\$660.00	Striping for stop bar for concrete roads
	Subtotal				\$5,983.75	

NUNN ST.	ITEM	UNIT COST	UNIT	QUANTITY	ITEM COST	DESCRIPTION
Dixie Dr. - Roxbury Rd.						
	4" White Solid Stripe	\$0.10	LF	5,720	\$572.00	Striping on left of bike lane for concrete roads
	4" Yellow Solid Stripe	\$0.10	LF	5,720	\$572.00	Striping for middle of road for concrete roads
	Bike Symbol Striping	\$215.00	EA	7	\$1,505.00	Bike symbol for concrete roads
	Raised Pavement Markers	\$2.50	EA	144	\$360.00	Reflectorized traffic buttons
	24" White Stop Bar Striping	\$5.00	LF	132	\$660.00	Striping for stop bar for concrete roads
	Subtotal				\$3,669.00	

SCRANTON ST.	ITEM	UNIT COST	UNIT	QUANTITY	ITEM COST	DESCRIPTION
Hansen Rd. - Mosley Rd.						
	4" White Solid Stripe	\$0.50	LF	2,880	\$1,440.00	Striping on left of bike lane for asphalt roads
	4" Yellow Solid Stripe	\$1.00	LF	2,880	\$2,880.00	Striping for middle of road for asphalt roads
	Pavement Surface Prep for 4"	\$0.05	LF	5,760	\$288.00	Surface preparation for striping for asphalt roads
	Bike Symbol Striping	\$215.00	EA	2	\$430.00	Bike symbol for asphalt roads

	Pavement Surface Prep for Bike Symbol	\$17.00	EA	2	\$34.00	Surface preparation for bike symbols for asphalt roads
	Raised Pavement Markers	\$2.50	EA	72	\$180.00	Reflectorized traffic buttons
	Subtotal				\$5,252.00	

TELEPHONE RD.	ITEM	UNIT COST	UNIT	QUANTITY	ITEM COST	DESCRIPTION
Almeda Genoa Rd. - Dixie Dr.						
	CONC PAV (JOINT REINF) (10")	\$65.00	SY	28,040	\$1,822,600.00	Joint reinforced concrete pavement
	CEMENT TREAT (SUBGRADE) (8")	\$3.00	SY	28,040	\$84,120.00	Cement treat the subgrade
	CEMENT	\$155.00	TON	555	\$86,054.76	Payment for cost of cement
	CONC CURB (TY II)	\$10.00	LF	84,120	\$841,200.00	Concrete curb
	REMOVING CONC (CURB)	\$5.00	LF	84,120	\$420,600.00	Removing old curb for widening
	Grading	\$10.00	CY	3,116	\$31,155.56	Cost of Excavation/Embankment
	4" White Solid Stripe	\$0.10	LF	42,060	\$4,206.00	Striping on left of bike lane for concrete roads
	4" White Break Stripe	\$0.10	LF	21,030	\$2,103.00	Striping for in between lanes for concrete roads
	Bike Symbol Striping	\$215.00	EA	14	\$3,010.00	Bike symbol for concrete roads
	Subtotal				\$3,295,049.32	
	Contingency for storm sewers (50%)				\$1,647,524.66	
	Subtotal (after contingency)				\$4,942,573.97	

TEWANTIN DR.	ITEM	UNIT COST	UNIT	QUANTITY	ITEM COST	DESCRIPTION
Major St. - Airport Blvd.						
	CONC PAV (JOINT REINF) (10")	\$65.00	SY	5,720	\$371,800.00	Joint reinforced concrete pavement
	CEMENT TREAT (SUBGRADE) (8")	\$3.00	SY	5,720	\$17,160.00	Cement treat the subgrade
	CEMENT	\$155.00	TON	113	\$17,554.68	Payment for cost of cement
	CONC CURB (TY II)	\$10.00	LF	8,580	\$85,800.00	Concrete curb
	REMOVING CONC (CURB)	\$5.00	LF	8,580	\$42,900.00	Removing old curb for widening
	Grading	\$10.00	CY	636	\$6,355.56	Cost of Excavation/Embankment
	4" White Solid Stripe	\$0.10	LF	8,580	\$858.00	Striping on left of bike lane for concrete roads
	4" White Break Stripe	\$0.10	LF	2,145	\$214.50	Striping for in between lanes for concrete roads
	Bike Symbol Striping	\$215.00	EA	2	\$430.00	Bike symbol for concrete roads
	4" Yellow Solid Stripe	\$0.10	LF	8,580	\$858.00	Striping for middle of road for concrete roads
	Raised Pavement Markers	\$2.50	EA	216	\$540.00	Reflectorized traffic buttons
	Subtotal				\$541,570.24	

TRAVENOR LN.	ITEM	UNIT COST	UNIT	QUANTITY	ITEM COST	DESCRIPTION
Yearling Branch Dr. - Minnesota Rd.						
	4" White Solid Stripe	\$0.10	LF	3,180	\$318.00	Striping on left of bike lane for concrete roads
	4" Yellow Solid Stripe	\$0.10	LF	3,180	\$318.00	Striping for middle of road for concrete roads
	Bike Symbol Striping	\$215.00	EA	2	\$430.00	Bike symbol for concrete roads
	Raised Pavement Markers	\$2.50	EA	80	\$200.00	Reflectorized traffic buttons
	24" White Stop Bar Striping	\$5.00	LF	20	\$100.00	Striping for stop bar for concrete roads
	Subtotal				\$1,366.00	

WESTOVER ST.	ITEM	UNIT COST	UNIT	QUANTITY	ITEM COST	DESCRIPTION
Bellfort St. - Telephone Rd.						
	HMA Type D	\$80.00	TON	2,656	\$212,473.33	Asphalt surface course
	HMA Type B	\$100.00	TON	2,656	\$265,591.67	Asphalt base course
	CEMENT TREAT (SUBGRADE) (8")	\$3.00	SY	6,106	\$18,316.67	Cement treat the subgrade
	CEMENT	\$155.00	TON	121	\$18,737.95	Payment for cost of cement
	Grading	\$10.00	CY	581	\$5,814.81	Cost of Excavation/Embankment
	4" White Solid Stripe	\$0.50	LF	15,700	\$7,850.00	Striping on left of bike lane and edge of road for asphalt roads
	4" Yellow Solid Stripe	\$1.00	LF	7,850	\$7,850.00	Striping for middle of road for asphalt roads
	Pavement Surface Prep for 4"	\$0.05	LF	23,550	\$1,177.50	Surface preparation for striping for asphalt roads
	Bike Symbol Striping	\$215.00	EA	2	\$430.00	Bike symbol for asphalt roads
	Pavement Surface Prep for Bike Symbol	\$17.00	EA	2	\$34.00	Surface preparation for bike symbols for asphalt roads
	Raised Pavement Markers	\$2.50	EA	196	\$490.63	Reflectorized traffic buttons
	Subtotal				\$538,766.56	

PRIORITY STREETS OPINION OF PROBABLE COSTS - SHARED ON STREET LANE

ASHBURN ST.	ITEM	UNIT COST	UNIT	QUANTITY	ITEM COST	DESCRIPTION
Kopman Dr. - Prentiss Dr.						
	4" White Solid Stripe	\$0.50	LF	1,780	\$890.00	Striping on edges of asphalt roads
	4" Yellow Solid Stripe	\$1.00	LF	1,780	\$1,780.00	Striping for middle of road for asphalt roads
	Pavement Surface Prep for 4"	\$0.05	LF	3,560	\$178.00	Surface preparation for striping for asphalt roads
	Raised Pavement Markers	\$2.50	EA	46	\$115.00	Reflectorized traffic buttons
	Subtotal				\$2,963.00	

BRANIFF AVE	ITEM	UNIT COST	UNIT	QUANTITY	ITEM COST	DESCRIPTION
Telephone Rd. - first horizontal curve						
	4" White Solid Stripe	\$0.50	LF	11,080	\$5,540.00	Striping on edges of asphalt roads
	4" Yellow Solid Stripe	\$1.00	LF	1,385	\$1,385.00	Striping for middle of road for asphalt roads (breaks)
	Pavement Surface Prep for 4"	\$0.05	LF	12,465	\$623.25	Surface preparation for striping for asphalt roads
	Raised Pavement Markers	\$2.50	EA	140	\$350.00	Reflectorized traffic buttons
	Subtotal				\$7,898.25	

BROADWAY ST.	ITEM	UNIT COST	UNIT	QUANTITY	ITEM COST	DESCRIPTION
Airport Blvd. - IH-45						
	4" White Solid Stripe	\$0.10	LF	4,850	\$485.00	Lane striping for concrete roads (breaks)
	Raised Pavement Markers	\$2.50	EA	486	\$1,215.00	Reflectorized traffic buttons
	Subtotal				\$1,700.00	

CUB LANE	ITEM	UNIT COST	UNIT	QUANTITY	ITEM COST	DESCRIPTION
Monroe Road - Jet Pilot Ave						
	4" White Solid Stripe	\$0.50	LF	3,780	\$1,890.00	Striping on edges for asphalt roads
	4" Yellow Solid Stripe	\$1.00	LF	3,780	\$3,780.00	Striping for middle of road for asphalt roads (breaks)
	Pavement Surface Prep for 4"	\$0.05	LF	7,560	\$378.00	Surface preparation for striping for asphalt roads
	Raised Pavement Markers	\$2.50	EA	96	\$240.00	Reflectorized traffic buttons
	Subtotal				\$6,288.00	

DIXIE DR.	ITEM	UNIT COST	UNIT	QUANTITY	ITEM COST	DESCRIPTION
Telephone Rd. - IH-45						

	4" White Solid Stripe	\$0.50	LF	5,950	\$2,975.00	Striping on edges of asphalt roads
	4" Yellow Solid Stripe	\$1.00	LF	5,950	\$5,950.00	Striping for middle of road for asphalt roads (breaks)
	Pavement Surface Prep for 4"	\$0.05	LF	11,900	\$595.00	Surface preparation for striping for asphalt roads
	Raised Pavement Markers	\$2.50	EA	148	\$370.00	Reflectorized traffic buttons
	Subtotal				\$9,890.00	

EASTHAVEN BLVD.	ITEM	UNIT COST	UNIT	QUANTITY	ITEM COST	DESCRIPTION
Scranton St. - Meldrum St.						
	4" White Solid Stripe	\$0.50	LF	6,500	\$3,250.00	Striping on edges for asphalt roads
	4" Yellow Solid Stripe	\$1.00	LF	6,500	\$6,500.00	Striping for middle of road for asphalt roads
	Pavement Surface Prep for 4"	\$0.05	LF	13,000	\$650.00	Surface preparation for striping for asphalt roads
	Raised Pavement Markers	\$2.50	EA	164	\$410.00	Reflectorized traffic buttons
	Subtotal				\$10,810.00	

DROUET ST.	ITEM	UNIT COST	UNIT	QUANTITY	ITEM COST	DESCRIPTION
Telephone Rd. - Hollygrove Dr.						
	4" Yellow Solid Stripe	\$1.00	LF	1,800	\$1,800.00	Striping for middle of road for asphalt roads (breaks)
	Pavement Surface Prep for 4"	\$0.05	LF	1,800	\$90.00	Surface preparation for striping for asphalt roads
	Raised Pavement Markers	\$2.50	EA	46	\$115.00	Reflectorized traffic buttons
	Subtotal				\$2,005.00	

FAUNA ST	ITEM	UNIT COST	UNIT	QUANTITY	ITEM COST	DESCRIPTION
Prentiss Dr. - Airport Blvd.						
	4" White Solid Stripe	\$0.50	LF	3,900	\$1,950.00	Striping on edges of asphalt roads
	4" Yellow Solid Stripe	\$1.00	LF	3,900	\$3,900.00	Striping for middle of road for asphalt roads
	Pavement Surface Prep for 4"	\$0.05	LF	7,800	\$390.00	Surface preparation for striping for asphalt roads
	Raised Pavement Markers	\$2.50	EA	98	\$245.00	Reflectorized traffic buttons
	Subtotal				\$6,485.00	

GLEN VALLEY DR.	ITEM	UNIT COST	UNIT	QUANTITY	ITEM COST	DESCRIPTION
Morley St. - Glen Dell Ct.						
	4" Yellow Solid Stripe	\$0.10	LF	12,220	\$1,222.00	Striping for middle of road for concrete roads
	Raised Pavement Markers	\$2.50	EA	306	\$765.00	Reflectorized traffic buttons
	Subtotal				\$1,987.00	

GLENVISTA ST.	ITEM	UNIT COST	UNIT	QUANTITY	ITEM COST	DESCRIPTION
Stone St. - Monroe Blvd.						
	4" Yellow Solid Stripe	\$0.10	LF	1,080	\$108.00	Striping for middle of road for concrete roads
	Raised Pavement Markers	\$2.50	EA	28	\$70.00	Reflectorized traffic buttons
	Subtotal				\$178.00	

LA PASEO ST.	ITEM	UNIT COST	UNIT	QUANTITY	ITEM COST	DESCRIPTION
Plainview St. - Telephone Rd.						
	4" Yellow Solid Stripe	\$1.00	LF	10,500	\$10,500.00	Striping for middle of road for asphalt roads
	Pavement Surface Prep for 4"	\$0.05	LF	10,500	\$525.00	Surface preparation for striping for asphalt roads
	Raised Pavement Markers	\$2.50	EA	264	\$660.00	Reflectorized traffic buttons
	Subtotal				\$11,685.00	

MELDRUM LN. (EASTERN PORTION)	ITEM	UNIT COST	UNIT	QUANTITY	ITEM COST	DESCRIPTION
Monroe Rd. - first curve						
	4" White Solid Stripe	\$0.50	LF	4,220	\$2,110.00	Striping on edges of asphalt roads
	4" Yellow Solid Stripe	\$1.00	LF	4,220	\$4,220.00	Striping for middle of road for asphalt roads
	Pavement Surface Prep for 4"	\$0.05	LF	8,440	\$422.00	Surface preparation for striping for asphalt roads
	Raised Pavement Markers	\$2.50	EA	106	\$265.00	Reflectorized traffic buttons
	Subtotal				\$7,017.00	

MELDRUM LN. (WESTERN PORTION)	ITEM	UNIT COST	UNIT	QUANTITY	ITEM COST	DESCRIPTION
Dexter Blvd. - Clearwood St.						
	4" White Solid Stripe	\$0.50	LF	4,000	\$2,000.00	Striping on edges of asphalt roads
	4" Yellow Solid Stripe	\$1.00	LF	4,000	\$4,000.00	Striping for middle of road for asphalt roads
	Pavement Surface Prep for 4"	\$0.05	LF	8,000	\$400.00	Surface preparation for striping for asphalt roads
	Raised Pavement Markers	\$2.50	EA	100	\$250.00	Reflectorized traffic buttons
	Subtotal				\$6,650.00	

MINNESOTA ST.	ITEM	UNIT COST	UNIT	QUANTITY	ITEM COST	DESCRIPTION
Southern portion of Minnesota from north of Tavenor Ln. - Almeda Genoa Rd.						
	4" White Solid Stripe	\$0.50	LF	3,540	\$1,770.00	Striping on edges of asphalt roads
	4" Yellow Solid Stripe	\$1.00	LF	3,540	\$3,540.00	Striping for middle of road for asphalt roads

	Pavement Surface Prep for 4"	\$0.05	LF	7,080	\$354.00	Surface preparation for striping for asphalt roads
	Raised Pavement Markers	\$2.50	EA	90	\$225.00	Reflectorized traffic buttons
	Subtotal				\$5,889.00	

NORTHDALE ST.	ITEM	UNIT COST	UNIT	QUANTITY	ITEM COST	DESCRIPTION
Dixie Dr. - Southbrook Drive						
	4" White Solid Stripe	\$0.50	LF	15,280	\$7,640.00	Striping on edges of asphalt roads
	4" Yellow Solid Stripe	\$1.00	LF	15,280	\$15,280.00	Striping for middle of road for asphalt roads
	Pavement Surface Prep for 4"	\$0.05	LF	30,560	\$1,528.00	Surface preparation for striping for asphalt roads
	Raised Pavement Markers	\$2.50	EA	382	\$955.00	Reflectorized traffic buttons
	Subtotal				\$25,403.00	

NUNN ST.	ITEM	UNIT COST	UNIT	QUANTITY	ITEM COST	DESCRIPTION
Roxbury Rd. - Westover St.						
	4" Yellow Solid Stripe	\$1.00	LF	3,760	\$3,760.00	Striping for middle of road for asphalt roads
	Pavement Surface Prep for 4"	\$0.05	LF	3,760	\$188.00	Surface preparation for striping for asphalt roads
	Raised Pavement Markers	\$2.50	EA	94	\$235.00	Reflectorized traffic buttons
	Subtotal				\$4,183.00	

ROCKHILL ST.	ITEM	UNIT COST	UNIT	QUANTITY	ITEM COST	DESCRIPTION
Hollygrove Dr. - Ruthby St.						
	4" Yellow Solid Stripe	\$0.10	LF	9,380	\$938.00	Striping for middle of road for concrete roads
	Raised Pavement Markers	\$2.50	EA	236	\$590.00	Reflectorized traffic buttons
	Subtotal				\$1,528.00	

SANTA ELNA ST.	ITEM	UNIT COST	UNIT	QUANTITY	ITEM COST	DESCRIPTION
Dover St. - IH-45						
	4" Yellow Solid Stripe	\$1.00	LF	5,060	\$5,060.00	Striping for middle of road for asphalt roads
	Pavement Surface Prep for 4"	\$0.05	LF	5,060	\$253.00	Surface preparation for striping for asphalt roads
	Raised Pavement Markers	\$2.50	EA	128	\$320.00	Reflectorized traffic buttons
	Subtotal				\$5,633.00	

SANTA FE DR.	ITEM	UNIT COST	UNIT	QUANTITY	ITEM COST	DESCRIPTION
Airport Blvd. - Telephone Rd.						
	4" White Solid Stripe	\$0.50	LF	24,740	\$12,370.00	Striping on edges of asphalt roads
	4" Yellow Solid Stripe	\$1.00	LF	24,740	\$24,740.00	Striping for middle of road for asphalt roads
	Pavement Surface Prep for 4"	\$0.05	LF	49,480	\$2,474.00	Surface preparation for striping for asphalt roads
	Raised Pavement Markers	\$2.50	EA	620	\$1,550.00	Reflectorized traffic buttons
	Subtotal				\$41,134.00	
SCRANTON ST.	ITEM	UNIT COST	UNIT	QUANTITY	ITEM COST	DESCRIPTION
Monroe Rd. - Hansen Rd						
	4" Yellow Solid Stripe	\$1.00	LF	4,200	\$4,200.00	Striping for middle of road for asphalt roads
	Pavement Surface Prep for 4"	\$0.05	LF	4,200	\$210.00	Surface preparation for striping for asphalt roads
	Raised Pavement Markers	\$2.50	EA	106	\$265.00	Reflectorized traffic buttons
	Subtotal				\$4,675.00	
SCRANTON ST.	ITEM	UNIT COST	UNIT	QUANTITY	ITEM COST	DESCRIPTION
Mosely Rd. - Easthaven Blvd.						
	4" Yellow Solid Stripe	\$1.00	LF	2,910	\$2,910.00	Striping for middle of road for asphalt roads
	Pavement Surface Prep for 4"	\$0.05	LF	2,910	\$145.50	Surface preparation for striping for asphalt roads
	Raised Pavement Markers	\$2.50	EA	74	\$185.00	Reflectorized traffic buttons
	Subtotal				\$3,240.50	
STONE RD.	ITEM	UNIT COST	UNIT	QUANTITY	ITEM COST	DESCRIPTION
Bellfrot St. - Mattby St.						
	4" Yellow Solid Stripe	\$0.10	LF	2,100	\$210.00	Striping for middle of road for concrete roads
	Raised Pavement Markers	\$2.50	EA	54	\$135.00	Reflectorized traffic buttons
	Subtotal				\$345.00	
STONE RD.	ITEM	UNIT COST	UNIT	QUANTITY	ITEM COST	DESCRIPTION
Mattby St. - Glenvista St.						
	4" Yellow Solid Stripe	\$0.10	LF	2,780	\$278.00	Striping for middle of road for concrete roads
	Raised Pavement Markers	\$2.50	EA	70	\$175.00	Reflectorized traffic buttons
	Subtotal				\$453.00	

TRAVENOR LN.	ITEM	UNIT COST	UNIT	QUANTITY	ITEM COST	DESCRIPTION
Monroe Rd. -Yearling Branch Dr.						
	4" White Solid Stripe	\$0.50	LF	13,870	\$6,935.00	Striping on edges of asphalt roads
	4" Yellow Solid Stripe	\$1.00	LF	13,870	\$13,870.00	Striping for middle of road for asphalt roads
	Pavement Surface Prep for 4"	\$0.05	LF	27,740	\$1,387.00	Surface preparation for striping for asphalt roads
	Raised Pavement Markers	\$2.50	EA	348	\$870.00	Reflectorized traffic buttons
	Subtotal				\$23,062.00	

	TOTAL				\$19,295,127.68	
	Contingency (20%)				\$3,859,025.54	
	GRAND TOTAL				\$23,154,153.21	

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BAYOU ENTRANCES

Increasing access points along the Sims Bayou trail system improves connections between this recreational resource and the surrounding neighborhoods (See Figure 36: Open Space Vision on page 55). Visible public access points should be located at the intersection of Bellfort Street and Telephone Road and Bellfort Street and Broadway. Neighborhood access points should be inserted in between major entrances at the termination of stub streets and cul-de-sacs to promote “eyes on the bayou”. More trail entrances increase accessibility to this valuable recreational amenity and improve safety by eliminating long sections of trail that are physically or visually isolated from public roadways. Bayou entrances should incorporate clear wayfinding signage and iconic landscaping which highlights entrances from the street. Entrance treatments should stay consistent throughout the Hobby Area to develop a cohesive identity.

ACTION STEPS

- Coordinate with City of Houston to achieve recommendations of the Houston Bike Plan
- Identify potential location(s)
- Budget for funding
- Acquire necessary land for access
- Hire team to design and engineer improvements
- Coordinate with utility providers and governmental entities
- Obtain permits for construction
- Complete construction documents
- Issue bid for improvements
- Select contractor
- Commence construction
- Complete construction
- Plan for operations and maintenance
- Coordinate maintenance agreements

FUNDING SOURCES

- Tax Increment Reinvestment Zone (TIRZ) Funding
- Hobby Area Management District Funding
- Grant Funding
 - Texas Parks and Wildlife Department National Recreational Trails Fund [<http://tpwd.texas.gov/business/grants/recreation-grants/recreational-trails-grants>]. Funds can be spent on motorized or non-motorized recreational trail projects, construction of new recreational trails, to improve existing trails, to develop trailheads or trailside facilities and to acquire trail corridors.
 - Community Trees Grant Program [<http://www.h-gac.com/community/enhancement-grants/community-trees-grants.aspx>] provides matching funds to purchase trees for community-based plantings in parks, public gathering places and community gateways.

COMMUNITY PARTNERS

- Tax Increment Reinvestment Zone #8 (Gulfgate TIRZ)
- Hobby Area Management District
- City of Houston

GOALS ACHIEVED*:



LIVABILITY PRINCIPLES**:



*SEE "PROJECT GOALS" ON PAGE 5.

**AS DEFINED BY U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT (HUD).

BAYOU NEIGHBORHOOD GATEWAYS - OPINION OF PROBABLE COSTS

ITEM	UNIT	QUANTITY	UNIT COST	TOTAL	NOTES
Landscape					
Trail Signage	ls	1	\$1,800	\$1,800	Pole mounted metal sign
Trail Stub	sf	500	\$10	\$5,000	Connection to existing trail; assumes 100' long trail stub of 5' wide concrete path; 4.5" thick with 12" stone base; standard broom finish
Revegetation	sf	1,000	\$1	\$1,000	Reseeding using 5' wide strip on either side of trail stub with hydroseed
Temporary Irrigation	sf	1,000	\$1	\$1,000	Temporary irrigation during establishment period for revegetation area

CONSTRUCTION COSTS				
Construction Cost Subtotal				\$8,800
20% Contingency				\$1,760
8% General Conditions				\$845
3% Escalation				\$317
5% Addition Construction Cost (Bonding, Permitting, Insurance)				\$528
TOTAL CONSTRUCTION COSTS				\$12,250
SOFT COSTS				
11% Design and Engineering Fee Budget*				\$1,162
5% Construction Management Budget*				\$528
3% Site Survey Budget*				\$317
TOTAL SOFT COSTS				\$2,006
TOTAL COST PER NEIGHBORHOOD GATEWAY				\$14,256
NUMBER OF BAYOU NEIGHBORHOOD GATEWAYS				10
TOTAL PROJECT COSTS**				\$142,560

*Percentage based on construction cost subtotal and 20 percent construction cost contingency.

**Opinion of potential cost(s). Not to be used for formal construction or exact budgeting.

BAYOU COMMUNITY GATEWAYS - OPINION OF PROBABLE COSTS

ITEM	UNIT	QUANTITY	UNIT COST	TOTAL	NOTES
Landscape					
Map and Informational Signage	ls	1	\$5,000	\$5,000	Pedestal mounted sign with trail map and informational signage
Trail Stub	sf	500	\$10	\$5,000	Connection to existing trail; assumes up to 100' long trail stub of 5' wide concrete path; 4.5" thick with 12" stone base; standard broom finish
Revegetation	sf	1,000	\$1	\$1,000	Reseeding using 5' wide strip on either side of trail stub with hydroseed
Temporary Irrigation	ls	1	\$1,500	\$1,500	Temporary irrigation during establishment period for revegetation area

CONSTRUCTION COSTS	
Construction Cost Subtotal	\$12,500
20% Contingency	\$2,500
8% General Conditions	\$1,200
3% Escalation	\$450
5% Addition Construction Cost (Bonding, Permitting, Insurance)	\$750
TOTAL CONSTRUCTION COSTS	\$17,400
SOFT COSTS	
11% Design and Engineering Fee Budget*	\$1,650
5% Construction Management Budget*	\$750
3% Site Survey Budget*	\$450
TOTAL SOFT COSTS	\$2,850
TOTAL COST PER COMMUNITY GATEWAY	\$20,250
Number of Community Gateways	3
TOTAL PROJECT COSTS**	\$60,750

*Percentage based on construction cost subtotal and 20 percent construction cost contingency.

**Opinion of potential cost(s). Not to be used for formal construction or exact budgeting.

BAYOU REGIONAL GATEWAYS - OPINION OF PROBABLE COSTS

ITEM	UNIT	QUANTITY	UNIT COST	TOTAL	NOTES
Landscape					
Map and Informational Signage	ls	1	\$5,000	\$5,000	Pedestal mounted sign with tail map and informational signage
Trail Stub	sf	500	\$10	\$5,000	Connection to existing trail; assumes up to 100' long trail stub of 5' wide concrete path; 4.5" thick with 12" stone base; standard broom finish
Bike Rack	each	12	\$650	\$7,800	Single "U" shaped bike rack; Bola by Landscape Forms
Bench	each	2	\$2,200	\$4,400	Neolivino by Landscape Forms
Revegetation	sf	1,000	\$1	\$1,000	Reseeding using 5' wide strip on either side of trail stub with hydroseed
Temporary Irrigation	ls	1	\$1,500	\$1,500	Temporary irrigation during establishment period for revegetation area

CONSTRUCTION COSTS				
Construction Cost Subtotal				\$24,700
20% Contingency				\$4,940
8% General Conditions				\$2,371
3% Escalation				\$889
5% Addition Construction Cost (Bonding, Permitting, Insurance)				\$1,482
TOTAL CONSTRUCTION COSTS				\$34,382
SOFT COSTS				
11% Design and Engineering Fee Budget*				\$3,260
5% Construction Management Budget*				\$1,482
3% Site Survey Budget*				\$889
TOTAL SOFT COSTS				\$5,632
TOTAL COST PER REGIONAL GATEWAY				\$40,014
Number of Regional Gateways				3
TOTAL PROJECT COSTS**				\$120,042

*Percentage based on construction cost subtotal and 20 percent construction cost contingency.

1940 AIRPORT TERMINAL MUSEUM PLAZA PARK

The iconic 1940 Air Terminal Museum has expressed interest in a public space to direct groups of visitors. A new plaza and landscape could celebrate the building's grandeur while providing a high quality outdoor space for both nearby residents and visitors to congregate for staging purposes, casual picnic lunches and community events.

ACTION STEPS

- Coordinate with the City of Houston, property owners and the Airport Terminal Museum
- Budget for funding
- Hire team to design and engineer improvements
- Coordinate with utility providers and governmental entities
- Obtain permits for construction
- Complete construction documents
- Issue bid for improvements
- Select contractor
- Commence construction
- Complete construction
- Plan for operations and maintenance
- Coordinate maintenance agreements

FUNDING SOURCES

- Tax Increment Reinvestment Zone (TIRZ) Funding
- Hobby Area Management District Funding
- Grant Funding
- Private Funding

COMMUNITY PARTNERS

- Tax Increment Reinvestment Zone #8 (Gulfgate TIRZ)
- Hobby Area Management District
- City of Houston (Planning and Development Department)
- City of Houston (Public Works and Engineering Department)
- City of Houston (Parking Management)
- Private Landowners

GOALS ACHIEVED*:



LIVABILITY PRINCIPLES**:



*SEE "PROJECT GOALS" ON PAGE 5.

**AS DEFINED BY U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT (HUD).

1940 AIRPORT TERMINAL MUSEUM ENTRY PLAZA AND PARK - OPINION OF PROBABLE COSTS

ITEM	UNIT	QUANTITY	UNIT COST	TOTAL	NOTES
Furnishings					
Trash Receptacles	each	6	\$1,000	\$6,000	Steel trash receptacles
Bike Racks	each	12	\$650	\$7,800	Single "U" shaped bike rack; Bola by Landscape Forms
Benches	each	8	\$2,200	\$17,600	Neolivino by Landscape Forms
Bollard Lighting	each	15	\$2,700	\$40,050	Trail lighting spaced at 30' intervals; based on Designplan Lighting
Pole Light	each	7	\$6,600	\$48,950	Lighting spaced at 60' intervals; based on Selux pole light
Landscape					
Sod	sf	11,925	\$1	\$11,925	Lawn
Groundcover/Perennials	each	2,027	\$20	\$40,545	3,975 sf, 3 gal at 18" spacing
Shade Tree	each	16	\$2,020	\$32,320	6"-8" caliper shade tree for streets and plazas
Ornamental Tree	each	4	\$1,750	\$7,000	2"-4" caliper ornamental tree
Soils-Groundcover	cy	294	\$48	\$13,986	24" depth - shrubs, perennial, groundcover
Soils - Lawn	cy	221	\$23	\$4,969	6" depth - turf
Irrigation	sf	15,900	\$1	\$18,285	Lump sum assumption
Hardscape					
Decorative pavers	sf	6,100	\$18	\$109,800	

CONSTRUCTION COSTS	
Construction Cost Subtotal	\$359,230
20% Contingency	\$71,846
8% General Conditions	\$34,486
3% Escalation	\$12,932
5% Addition Construction Cost (Bonding, Permitting, Insurance)	\$21,554
Total Construction Costs	\$500,048
SOFT COSTS	
11% Design and Engineering Fee Budget*	\$47,418
5% Construction Management Budget*	\$21,554
3% Site Survey Budget*	\$12,932
Total Soft Costs	\$81,904
TOTAL PROJECT COSTS**	\$581,952

*Percentage based on construction cost subtotal and 20 percent construction cost contingency.

**Opinion of potential cost(s). Not to be used for formal construction or exact budgeting.

ENHANCE EXISTING PARKS AND OPEN SPACES

Since it has the highest need, Andover Park is the primary focus for improvements in the City of Houston 2015 Parks Master Plan for Sector 7. Coordinate with the City of Houston Parks and Recreation Department to engage neighborhoods in a focused dialogue about renovation needs at this location. New trees can be planted as enhancements to parks and public spaces occur. A great example is the recent Broadway Boulevard Beautification Project which added 400 live oak trees to the District.

Recent studies regarding healthy communities confirm that residents benefit from homes close to parks, open space and greenery. Parks increase learning and physical activity, which decreases obesity, chronic illnesses and crime [van Dillen, S. M., de Vries, S., Groenewegen, P. P., & Spreeuwenberg, P. (2012). Greenspace in urban neighborhoods and residents' health: adding quality to quantity. *Journal of Epidemiology and Community Health*, 66(6), e8. doi: 10.1136/jech.2009.104695.].

Together, these actions will enhance existing parks to better serve the community and address gaps through new park amenities.

ACTION STEPS

- Coordinate with the City of Houston Parks and Recreation Department
- Raise awareness of the existing SPARK Parks at Ortiz Middle School, Garden Villas Elementary School and Cornelius Elementary School.
- Tailor parks to the residents needs
- Budget for funding
- Design improvements
- Obtain permits for construction
- Issue bid for improvements
- Select contractor
- Complete construction
- Plan for operations and maintenance
- Coordinate maintenance agreements

FUNDING SOURCES

- City of Houston
- Tax Increment Reinvestment Zone (TIRZ) Funding
- Hobby Area Management District Funding
- Grant Funding:
 - U.S. Department of Agriculture Farm to School Program [<http://www.fns.usda.gov/fy17-farm-school-grant>]
 - City of Houston Department of Neighborhoods Neighborhood Matching Grant Program [<http://www.houstontx.gov/neighborhoods/matchinggrants.html>]

COMMUNITY PARTNERS

- Tax Increment Reinvestment Zone #8 (Gulfgate TIRZ)
- Hobby Area Management District
- City of Houston (Planning and Development Department)
- City of Houston (Parks and Recreation Department)
- Neighborhood Centers

GOALS ACHIEVED*:



LIVABILITY PRINCIPLES**:



*SEE "PROJECT GOALS" ON PAGE 5.

**AS DEFINED BY U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT (HUD).

ANDOVER PARK UPDATES - OPINION OF PROBABLE COSTS

ITEM	UNIT	QUANTITY	UNIT COST	TOTAL	NOTES
Landscape					
160'x300' Soccer field	sf	48,000	\$3	\$144,000	
Baseball Field	sf	30,000	\$3	\$90,000	
Trash Receptacles	each	3	\$2,000	\$6,000	
Bike Racks	each	2	\$650	\$1,300	
Pedestrian Trail Lighting	ex	8	\$4,000	\$32,000	Trail lighting spaced at 60' intervals
Lawn	sf	15,000	\$2	\$30,000	Lawn with irrigation (does not include soccer field)
Tree Type 1	each	40	\$1,600	\$64,000	6"-8" caliper shade tree for streets and plazas
Tree Type 2	each	20	\$600	\$12,000	2"-4" caliper ornamental tree
Soils - Lawn	cy	2,400	\$45	\$108,000	6" depth - turf
Irrigation	ls	1	\$500,000	\$500,000	Lump sum
Paving Type 1 - Shared Use Trail	sf	4,970	\$8	\$39,760	12' wide concrete

CONSTRUCTION COSTS	
Construction Cost Subtotal	\$1,027,060
20% Contingency	\$205,412
8% General Conditions	\$98,598
3% Escalation	\$36,974
5% Addition Construction Cost (Bonding, Permitting, Insurance)	\$61,624
Total Construction Costs	\$1,429,668
SOFT COSTS	
11% Design and Engineering Fee Budget*	\$135,572
5% Construction Management Budget*	\$61,624
3% Site Survey Budget*	\$36,974
Total Soft Costs	\$234,170
TOTAL PROJECT COSTS**	\$1,663,837

*Percentage based on construction cost subtotal and 20 percent construction cost contingency.

**Opinion of potential cost(s). Not to be used for formal construction or exact budgeting.

NEW PARKS

This project recommends the construction of new parks within the District. As indicated by the Houston Park Master Plan, Park Sector 7, an additional 45 acres of new park land is needed. The southern portion of the district lacks access to parks today (Figure 8: Park Service Area on page 16) and should be a priority location for 45 acres of new parkland. Today, most park land is located within the northern half of the District, north of Airport Boulevard. Several neighborhoods to the south of Airport Boulevard do not have a park within a five- to ten minute walking distance (Figure 8: Park Service Area on page 16). Working with the City of Houston and neighborhood stakeholders, priority locations should be selected for the design and construction of new neighborhood parks, with a specific focus on the southern portion of the district.

Parklets, frequently created on a single vacant lot or small, irregular pieces of land, are a flexible tool for helping to meet the need for additional park acreage. Where more land is available, neighborhood parks ranging up to 20 acres in size, can help serve as a recreational and social spaces. Park projects are also a great way to address stormwater runoff, reduce flooding, and increase biodiversity and wildlife habitat while simultaneously providing increased access to recreation and to nature.

ACTION STEPS

- Conduct an inventory of underutilized and undeveloped sites within the District
- Prioritize park project locations
- Hire team to design and engineer improvements
- Identify potential location(s);
- Budget for funding needed
- Coordinate with utility providers and governmental entities
- Obtain permits for construction
- Complete construction documents
- Issue bid for improvements
- Select contractor
- Commence construction
- Complete construction
- Plan for operations and maintenance
- Coordinate maintenance agreements

FUNDING SOURCES

- Tax Increment Reinvestment Zone (TIRZ) Funding
- Hobby Area Management District Funding
- General Obligation bonds
- General Fund
- Special Revenue Funds
- Grant Funding:
 - National Park Service Land and Water Conservation Fund (LWCF) provides matching grants for the acquisition and development of public outdoor recreation areas and facilities. [<https://www.nps.gov/subjects/lwcf/stateside.htm>]
 - NRPA's Great Urban Parks Campaign provides annual grants for improving communities through local parks. [<http://www.nrpa.org/our-work/partnerships/initiatives/greeninfrastructure/>]

COMMUNITY PARTNERS

- Tax Increment Reinvestment Zone #8 (Gulfgate TIRZ)
- Hobby Area Management District
- City of Houston (Planning and Development Department)
- City of Houston (Parks and Recreation Department)
- City of Houston (Public Works and Engineering Department)
- Houston Flood Control District

GOALS ACHIEVED*:



LIVABILITY PRINCIPLES**:



*SEE "PROJECT GOALS" ON PAGE 5.

**AS DEFINED BY U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT (HUD).

BELLFORT STREET COMMUNITY CENTER - OPINION OF PROBABLE COSTS

Item	Unit	Quantity	Unit Cost	Total	Notes
Landscape					
Pavilion renovation	sf	2,375	\$125	\$296,875	Includes open air conversion with restrooms
Furniture	allowance	1	\$10,000	\$10,000	Limited benches, trash cans and bike racks
Concrete sidewalk	sf	2,550	\$8	\$20,400	Includes excavation activity, 5' average sidewalk width
Plaza area	sf	4,850	\$8	\$36,375	Crushed granite plaza area
Amenities	allowance	1	\$25,000	\$25,000	Play equipment or other active recreation equipment
Lighting	allowance	1	\$40,000	\$40,000	
Engineering					
Water and power service	allowance	1	\$-	\$-	Assumes project is able to use existing services
Demo	allowance	1	\$16,000	\$16,000	Miscellaneous paving and materials removal
Drainage	allowance	1	\$20,000	\$20,000	New water quality and stormwater features
Parking lot striping	allowance	1	\$26,500	\$26,500	New striped layout in parking area, seal coat included

CONSTRUCTION COSTS	
Construction Cost Subtotal	\$491,150
20% Contingency	\$98,230
8% General Conditions	\$47,150
3% Escalation	\$17,681
5% Addition Construction Cost (Bonding, Permitting, Insurance)	\$29,469
TOTAL CONSTRUCTION COSTS	\$683,681
SOFT COSTS	
11% Design and Engineering Fee Budget*	\$64,832
5% Construction Management Budget*	\$29,469
3% Site Survey Budget*	\$17,681
TOTAL SOFT COSTS	\$111,982
TOTAL PROJECT COSTS**	\$795,663

*Percentage based on construction cost subtotal and 20 percent construction cost contingency.

**Opinion of potential cost(s). Not to be used for formal construction or exact budgeting.

BAYOU FACING RETAIL

A retail plaza will provide a destination center and catalyst for activity along the Sims Bayou trail system. Transparent facades will allow restaurants and retail to interact with flexible plaza spaces and trails along the bayou's banks. Commercial development would house space for restaurants and retail establishments, drawing visitors to the area. This effort could incorporate new retail, renovated retail, a new plaza connected by sidewalks, landscaping and utility work.

ACTION STEPS

- Identify potential location(s)
- Identify property owners
- Budget for funding
- Hire team to design and engineer improvements
- Obtain permits for construction
- Complete construction documents
- Issue bid for improvements
- Select contractor
- Commence construction
- Complete construction
- Plan for operations and maintenance

FUNDING SOURCES

- Private Developers
- Tax Increment Reinvestment Zone (#8 (Gulfgate TIRZ) Funding
- Hobby Area Management District Funding
- Economic Development funds

COMMUNITY PARTNERS

- Tax Increment Reinvestment Zone #8 (Gulfgate TIRZ)
- Hobby Area Management District
- City of Houston (Planning and Development Department)
- City of Houston (Public Works and Engineering Department)
- City of Houston (Parking Management Department)
- Harris County Flood Control District

GOALS ACHIEVED*:



LIVABILITY PRINCIPLES**:



*SEE "PROJECT GOALS" ON PAGE 5.

**AS DEFINED BY U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT (HUD).

BELFORT STREET RETAIL RENOVATION - OPINION OF PROBABLE COSTS

Item	Unit	Quantity	Unit Cost	Total	Notes
New retail	sf	6,000	\$100	\$600,000	New shell building, no T.I.
Reno retail	sf	9,300	\$55	\$511,500	Renovated shell, no T.I.
Site demo	cy	621	\$11	\$6,521	Removal of paving/parking lot
Paving	sf	1,000	\$12	\$12,000	New paving/parking lot
Plaza/sidewalks	sf	18,075	\$13	\$225,938	New hardscape areas
Landscaping	allow	1	\$30,000	\$30,000	New trees and plantings
Restripe	allow	1	\$8,500	\$8,500	New striping of parking area and lanes
Utility work	allow	1	\$50,000	\$50,000	New service points and upgrades

CONSTRUCTION COSTS	
Construction Cost Subtotal	\$1,444,458
20% Contingency	\$288,892
8% General Conditions	\$138,668
3% Escalation	\$52,000
5% Addition Construction Cost (Bonding, Permitting, Insurance)	\$86,667
TOTAL CONSTRUCTION COSTS	\$2,010,686
SOFT COSTS	
11% Design and Engineering Fee Budget*	\$190,668
5% Construction Management Budget*	\$86,667
3% Site Survey Budget*	\$52,000
TOTAL SOFT COSTS	\$329,336
TOTAL PROJECT COSTS**	\$2,340,022

*Percentage based on construction cost subtotal and 20 percent construction cost contingency.

**Opinion of potential cost(s). Not to be used for formal construction or exact budgeting.

GATEWAY FEATURES AT KEY ENTRY CORRIDORS

This project provides ceremonial entrances at Telephone Road and Dixie Drive, IH-45 and Broadway Street, IH-45 and Airport Boulevard, and Mykawa Road and Bellfort Street. Gateways inform visitors that they have arrived at an important place. Design elements could include gateway signage, district identity signage, artistic elements, rocks, water features or native planting.

ACTION STEPS

- Budget for funding
- Acquire necessary portions of the right of way
- Hire team to design and engineer improvements
- Coordinate with utility providers and governmental entities
- Obtain permits for construction
- Complete construction documents
- Issue bid for improvements
- Select contractor
- Commence construction
- Complete construction
- Plan for operations and maintenance
- Coordinate maintenance agreements

FUNDING SOURCES

- Tax Increment Reinvestment Zone (TIRZ) Funding
- Hobby Area Management District Funding

COMMUNITY PARTNERS

- Tax Increment Reinvestment Zone #8 (Gulfgate TIRZ)
- Hobby Area Management District
- City of Houston
- Texas Department of Transportation
- Scenic Houston

GOALS ACHIEVED*:



LIVABILITY PRINCIPLES**:



*SEE "PROJECT GOALS" ON PAGE 5.

**AS DEFINED BY U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT (HUD).

PRIMARY GATEWAYS - OPINION OF PROBABLE COSTS

ITEM	UNIT	QUANTITY	UNIT COST	TOTAL	NOTES
Gateway Features					
Artwork/Sculptural Signage Allowance	ls	1	\$200,000	\$200,000	Artwork or sculptural signage that signifies the entrance into the Hobby Area District. Cost varies based on project budget
Signage	ea	2	\$1,500	\$3,000	Vehicle and pedestrian wayfinding signage directing visitors to key destinations
Hobby Sign Toppers	ls	2	\$1,000	\$2,000	Assumes sign toppers for major streets
Landscape					
Revegetation	sf	8,000	\$1	\$8,000	Revegetation along central medians at gateway locations
Soils-Groundcover	cy	600	\$48	\$28,500	24" depth - shrubs, perennial, groundcover
Temporary Irrigation	ls	1	\$1,500	\$1,500	Temporary irrigation during establishment period for revegetation area

CONSTRUCTION COSTS				
Construction Cost Subtotal				\$243,000
20% Contingency				\$48,600
8% General Conditions				\$23,328
3% Escalation				\$8,748
5% Addition Construction Cost (Bonding, Permitting, Insurance)				\$14,580
TOTAL CONSTRUCTION COSTS				\$338,256
SOFT COSTS				
11% Design and Engineering Fee Budget*				\$32,076
5% Construction Management Budget*				\$14,580
3% Site Survey Budget*				\$8,748
TOTAL SOFT COSTS				\$55,404
TOTAL COSTS PER PRIMARY GATEWAY				\$393,660
NUMBER OF PRIMARY GATEWAYS				8
TOTAL PROJECT COSTS**				3,149,280

*Percentage based on construction cost subtotal and 20 percent construction cost contingency.

**Opinion of potential cost(s). Not to be used for formal construction or exact budgeting.

SECONDARY GATEWAYS - OPINION OF PROBABLE COSTS

ITEM	UNIT	QUANTITY	UNIT COST	TOTAL	NOTES
Gateway Features					
Signage	ea	2	\$1,500	\$3,000	Vehicle and pedestrian wayfinding signage directing visitors to key destinations
Hobby Sign Toppers	ls	4	\$1,000	\$4,000	Assumes sign toppers for major streets
Landscape					
Revegetation	sf	16,000	\$1	\$16,000	Revegetation along central medians at gateway locations
Soils-Groundcover	cy	600	\$48	\$28,500	24" depth - shrubs, perennial, groundcover
Temporary Irrigation	ls	1	\$1,500	\$1,500	Temporary irrigation during establishment period for revegetation area

CONSTRUCTION COSTS				
Construction Cost Subtotal				\$53,000
20% Contingency				\$10,600
8% General Conditions				\$5,088
3% Escalation				\$1,908
5% Addition Construction Cost (Bonding, Permitting, Insurance)				\$3,180
TOTAL CONSTRUCTION COSTS				\$73,776
SOFT COSTS				
11% Design and Engineering Fee Budget*				\$6,996
5% Construction Management Budget*				\$3,180
3% Site Survey Budget*				\$1,908
TOTAL SOFT COSTS				\$12,084
TOTAL COSTS PER SECONDARY GATEWAY				\$85,860
NUMBER OF SECONDARY GATEWAYS				7
TOTAL PROJECT COSTS**				\$601,020

*Percentage based on construction cost subtotal and 20 percent construction cost contingency.

**Opinion of potential cost(s). Not to be used for formal construction or exact budgeting.

INTERNAL WAYFINDING - OPINION OF PROBABLE COSTS

ITEM	UNIT	QUANTITY	UNIT COST	TOTAL	NOTES
Gateway Features					
Signage	ea	4	\$1,500	\$6,000	Vehicle and pedestrian wayfinding signage directing visitors to key destinations
Hobby Sign Toppers	ls	4	\$1,000	\$4,000	Assumes sign toppers for major streets
Landscape					
Revegetation	sf	16,000	\$1	\$16,000	Revegetation along central medians at gateway locations
Soils-Groundcover	cy	600	\$48	\$28,500	24" depth - shrubs, perennial, groundcover
Temporary Irrigation	ls	1	\$1,500	\$1,500	Temporary irrigation during establishment period for revegetation area

CONSTRUCTION COSTS				
Construction Cost Subtotal				\$56,000
20% Contingency				\$11,200
8% General Conditions				\$5,376
3% Escalation				\$2,016
5% Addition Construction Cost (Bonding, Permitting, Insurance)				\$3,360
TOTAL CONSTRUCTION COSTS				\$77,952
SOFT COSTS				
11% Design and Engineering Fee Budget*				\$7,392
5% Construction Management Budget*				\$3,360
3% Site Survey Budget*				\$2,016
TOTAL SOFT COSTS				\$12,768
TOTAL COSTS PER SECONDARY GATEWAY				\$90,720
NUMBER OF SECONDARY GATEWAYS				7
TOTAL PROJECT COSTS**				\$635,040

*Percentage based on construction cost subtotal and 20 percent construction cost contingency.

**Opinion of potential cost(s). Not to be used for formal construction or exact budgeting.

BAYOU TRAIL PEDESTRIAN BRIDGE

Currently there are only three bayou crossings in the three-mile distance between Mykawa Road and IH-45. Each of these crossings offers a 6-foot-wide sidewalk positioned directly adjacent to vehicular traffic; therefore, there is a need for a safe and comfortable crossing across Sims Bayou. This project proposes such a crossing at Telephone Road which would provide a central link between the north and south sides of the Sims Bayou trail system and connect neighborhoods to transit, trails, schools, shopping and parks. Additional pedestrian bridges should be explored at other locations where roads intersect the bayou such as Broadway Street and Mykawa Road.

ACTION STEPS

- Budget for funding
- Acquire necessary portions of the right of way
- Hire team to design and engineer improvements
- Coordinate with utility providers and governmental entities
- Obtain permits for construction
- Complete construction documents
- Issue bid for improvements
- Select contractor
- Commence construction
- Complete construction
- Plan for operations and maintenance
- Coordinate maintenance agreements

FUNDING SOURCES

- Tax Increment Reinvestment Zone (TIRZ) Funding
- Hobby Area Management District Funding
- Surface Transportation Block Grant Program
- Community Development Block Grant Program
- Private Property Owner and Development Interest Funding

COMMUNITY PARTNERS

- Tax Increment Reinvestment Zone #8 (Gulfgate TIRZ)
- Hobby Area Management District
- City of Houston (Planning and Development Department)
- City of Houston (Parks and Recreation Department)
- City of Houston (Public Works and Engineering Department)
- Harris County Flood Control District

GOALS ACHIEVED*:



LIVABILITY PRINCIPLES**:



*SEE "PROJECT GOALS" ON PAGE 5.

**AS DEFINED BY U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT (HUD).

BAYOU TRAIL PEDESTRIAN BRIDGE - OPINION OF PROBABLE COSTS

ITEM	UNIT	QUANTITY	UNIT COST	TOTAL	NOTES
Engineering					
Pedestrian bridge	lf	235	\$2,000	\$470,000	Install prefab bridge and abutments, Excel Bridge Manufacturing
Mass grading	allow	1	\$25,000	\$25,000	
Electrical service	allow	1	\$10,000	\$10,000	Assumed new meter drop down from overhead pole
Landscaping					
Revegetation	sf	39,800	\$5	\$199,000	Limited plantings and hydroseed
Fine grading	allow	1	\$16,000	\$16,000	
Lighting	allow	1	\$28,000	\$28,000	Pole and area lighting around bridge and walkways
Tree Type 1	each	30	\$1,600	\$48,000	6"-8" caliper shade tree for streets and plazas
Tree Type 2	each	10	\$600	\$6,000	2"-4" caliper ornamental tree
Irrigation	sf	39,800	\$2	\$59,700	Basic potable - can be combined with com center if desired
Hardscape/sidewalk	sf	9,350	\$8	\$74,800	Concrete paving
Site amenities	allow	1	\$80,000	\$80,000	Limited furniture and seating, park node elements

CONSTRUCTION COSTS				
Construction Cost Subtotal				\$1,016,500
20% Contingency				\$203,300
8% General Conditions				\$97,584
3% Escalation				\$36,594
5% Addition Construction Cost (Bonding, Permitting, Insurance)				\$60,990
TOTAL CONSTRUCTION COSTS				\$1,414,968
SOFT COSTS				
11% Design and Engineering Fee Budget*				\$134,178
5% Construction Management Budget*				\$60,990
3% Site Survey Budget*				\$36,594
TOTAL SOFT COSTS				\$231,762
TOTAL PROJECT COSTS**				\$1,646,730

*Percentage based on construction cost subtotal and 20 percent construction cost contingency.

**Opinion of potential cost(s). Not to be used for formal construction or exact budgeting.

DRAINAGE CHANNEL AND UTILITY RIGHT OF WAY TRAIL CONNECTIONS

Two drainage corridors run north-south between Airport Boulevard and the Hobby Area's bayou system. Future studies in collaboration with Harris County Flood Control District should examine the feasibility of transforming these channels into natural community assets that better mitigate flooding challenges. Many residents voiced that these channels are currently undesirable spaces. However, transformation of these drainage corridors could provide a linear parkway system with direct access into Sims Bayou. This would put over 800 single family homes within a 5-minute walk of recreational trails with direct bayou access.

A central utility right of way runs east-west through the Broadway Street corridor and ends in the western most drainage channel. The transformation of this right of way into a trail could extend designated pedestrian and bike access from Lewis Elementary School within walking distance of an extensive trail system. Recommended programming for these spaces include gardens, trails and directional signage.

ACTION STEPS

- Budget for a future study in collaboration with Harris County Flood Control District
- Apply for grant funding
- Acquire necessary right of way
- Coordinate maintenance agreements

FUNDING SOURCES

- Tax Increment Reinvestment Zone (TIRZ) Funding
- Hobby Area Management District Funding
- Grants
 - Safe Routes to Schools
 - Texas Parks and Wildlife Recreational Trails Grants [<https://tpwd.texas.gov/business/grants/recreation-grants/recreational-trails-grants>]
 - Transportation Alternatives Program (TAP) Moving Ahead for Progress (MAP) Funding

COMMUNITY PARTNERS

- Tax Increment Reinvestment Zone #8 (Gulfgate TIRZ)
- Hobby Area Management District
- Harris County Flood Control District
- City of Houston

GOALS ACHIEVED*:



LIVABILITY PRINCIPLES**:



*SEE "PROJECT GOALS" ON PAGE 5.

**AS DEFINED BY U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT (HUD).

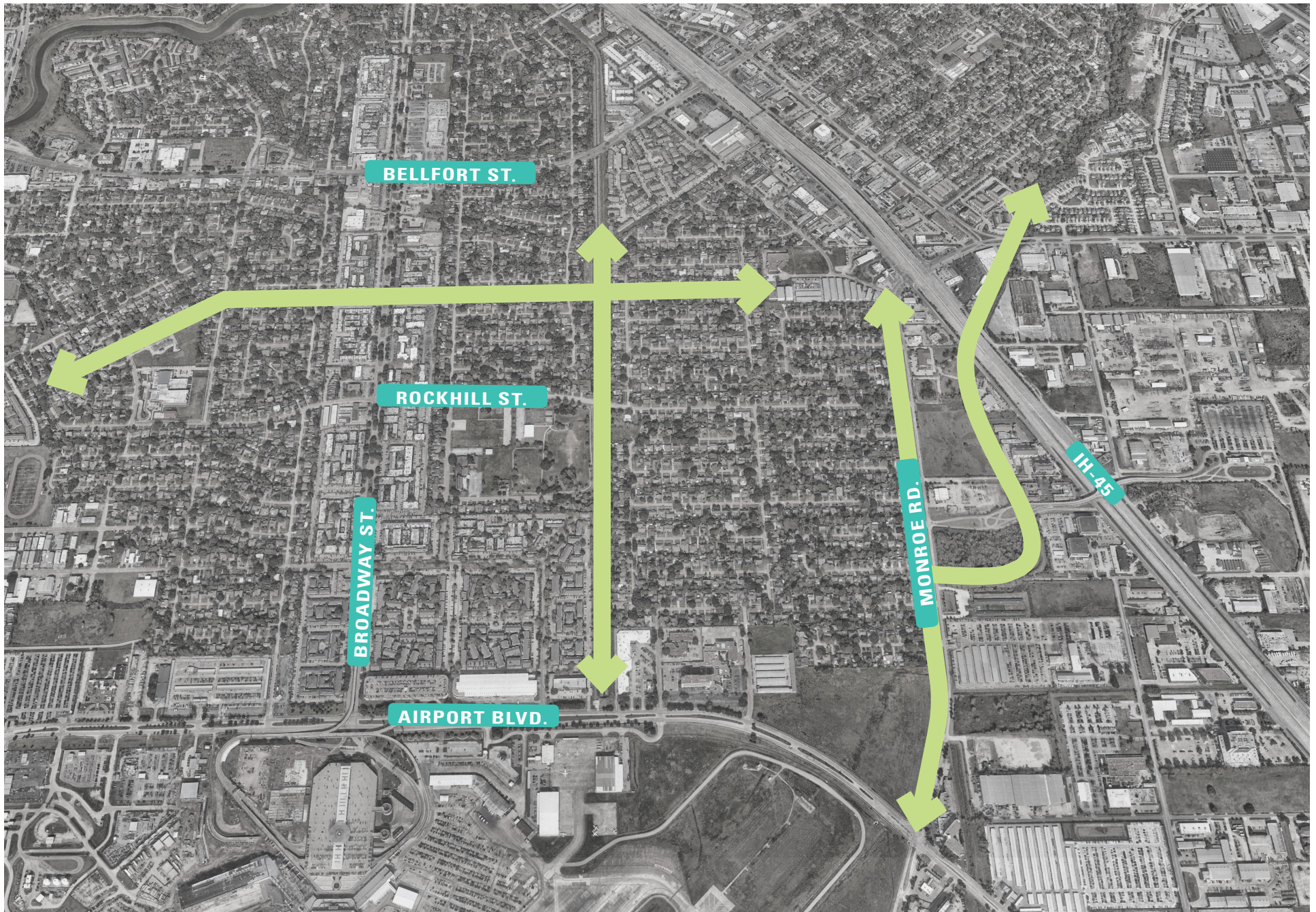


Figure 46: Proposed Drainage Channel and Utility Right of Way Trail Connections

Note: Concept designs are for illustrative purposes only and have not been formally reviewed nor approved by the City. Should these concept designs mature, they will undergo a formalized plan, design and construction process with appropriate permitting.

LIGHT RAIL TRANSIT NEAR WILLIAM P. HOBBY AIRPORT

There are currently five bus routes serving the area, all of which connect the William P. Hobby Airport to Houston. If a visitor was to travel from the airport to Downtown Houston by public transportation today it would take them approximately an hour with multiple bus transfers to arrive at their downtown destination. In comparison, a taxi would take approximately 20 minutes. The current model increases reliance on cars and decreases the ease of accessibility for individuals without access to a vehicle.

This project recommends linking together transit options such as future MetroRail service, bus service and non-auto forms of transportation such as pedestrians, bicycles and visitors arriving at the William P. Hobby Airport. This elevates the status of William P. Hobby Airport as a gateway into Houston and also improves mobility for residents within the District.

ACTION STEPS

- Continue regional rail studies with the City of Houston, Metropolitan Transit Authority of Harris County, Houston-Galveston Area Council and Texas Department of Transportation
- Identify potential location(s)
- Hire team to design and engineer improvements
- Coordinate with utility providers and governmental entities
- Obtain permits for construction
- Complete construction documents
- Issue bid for improvements
- Select contractor
- Commence construction
- Complete construction
- Plan for operations and maintenance
- Coordinate maintenance agreements

FUNDING SOURCES

- Tax Increment Reinvestment Zone (TIRZ) Funding#8 Financing - used to generate funds for any major capital projects
- Hobby Area Management District Funding
- General Fund
- General Obligation bonds
- Special Revenue Funds
- Grants

COMMUNITY PARTNERS

- Tax Increment Reinvestment Zone #8 (Gulfgate TIRZ)
- Hobby Area Management District
- Houston-Galveston Area Council
- City of Houston
- Metropolitan Transit Authority of Harris County
- Utility providers
- Adjacent property owners
- Adjacent Tax Increment Reinvestment
- William P. Hobby Airport
- Scenic Houston

GOALS ACHIEVED*:



LIVABILITY PRINCIPLES**:



*SEE "PROJECT GOALS" ON PAGE 5.

**AS DEFINED BY U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT (HUD).

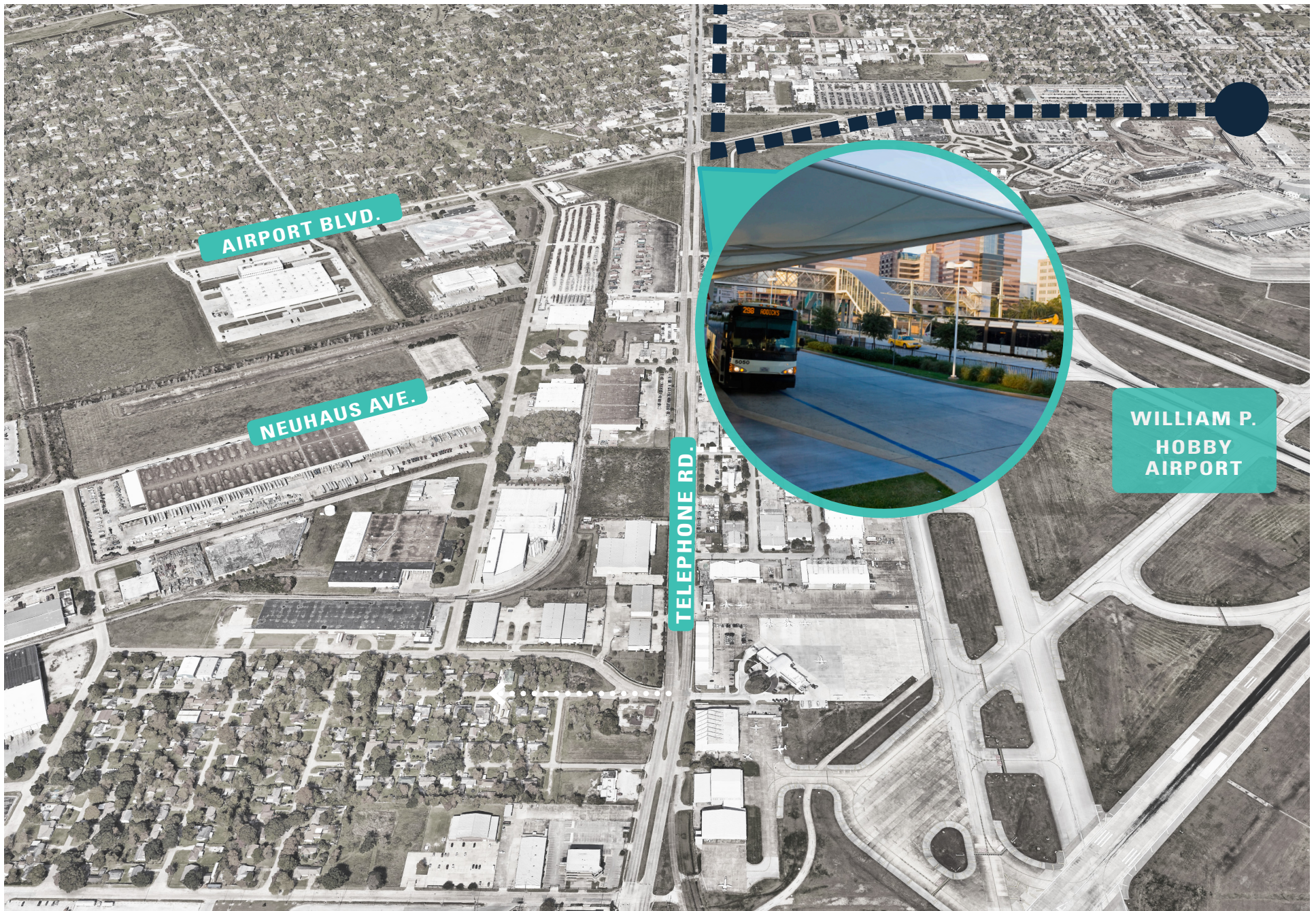
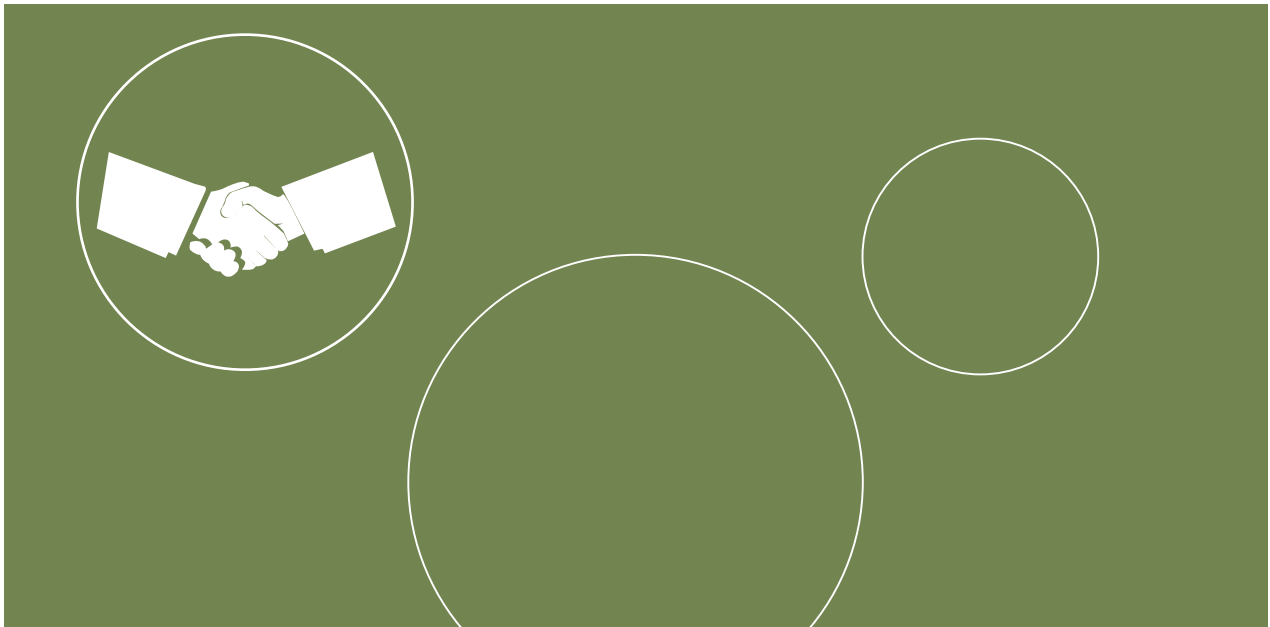


Figure 47: Light Rail Transit Center Near William P. Hobby Airport

Note: Concept designs are for illustrative purposes only and have not been formally reviewed nor approved by the City. Should these concept designs mature, they will undergo a formalized plan, design and construction process with appropriate permitting.



PROGRAMS

Programs are one-time events or ongoing actions that influence the study area but do not require permanent physical changes.

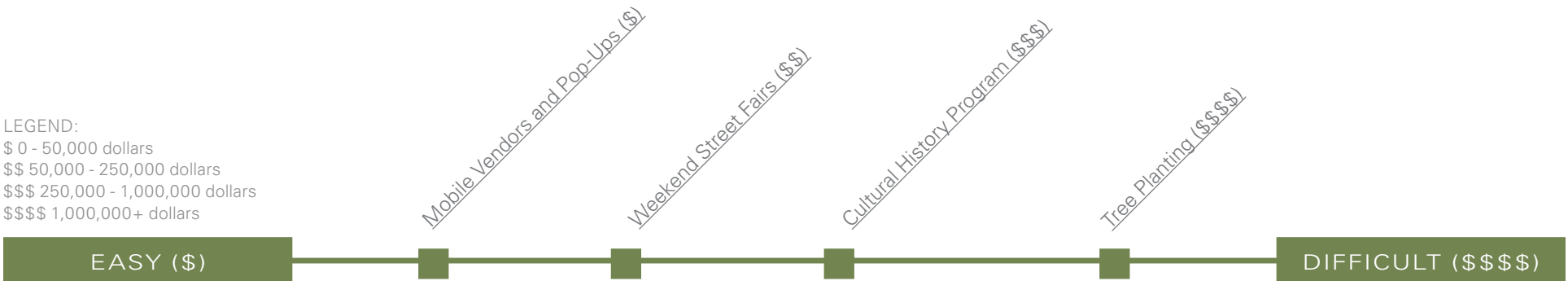


Figure 48: Ease of Implementation

The relative importance of each project, policy and program, as expressed by stakeholders through public feedback, must also be weighed against its ease and cost of implementation. Easy projects are those that are already underway or that are slated through existing planned improvements to be completed soon (0-10 years). Difficult projects are those that may be very important to the community, but require significant additional resources to implement. These projects can be addressed in the longer term (10+ years) as resources become available. The District may choose to pursue implementation of a few small or less challenging projects so that momentum increases. Then, as political will and resources align, advance relatively difficult or large projects.

Note: Concept designs are for illustrative purposes only and have not been formally reviewed nor approved by the City. Should these concept designs mature, they will undergo a formalized plan, design and construction process with appropriate permitting.

MOBILE VENDORS AND POP-UP EVENTS

Mobile vendors and pop-up events are one way to reinvent empty parking lots or vacant spaces. Setting up a community garden, farmers market, pop-up retail shop or other types of low-impact/mobile programming can enliven underutilized areas. Other ideas such as parklets or “Better Block” participation are additional opportunities for tactical community change.

ACTION STEPS

- Implement action committee to help oversee weekend events
- Identify partners for farmer’s markets and other pop up events within the District
- Identify potential location(s)
- Prepare a budget
- Recruit volunteer groups
- Obtain necessary permits
- Fund raise (as needed)
- Assign tasks
- Execute the plan



Hobbyfest is an annual pop-up event at William P. Hobby Airport. It brings families together along with aircraft, barbecue competition, fun games, giveaways, free food and more.

FUNDING SOURCES

- Tax Increment Reinvestment Zone (TIRZ) Funding
- Hobby Area Management District Funding
- Private Funding/Sponsorship
- Grant Funding
 - National Endowment for the Arts Our Town Placemaking Grant [<https://www.arts.gov/grants/apply-grant/grants-organizations>]

COMMUNITY PARTNERS

- Hobby Area Management District
- City of Houston (Planning and Development Department)
- Neighborhood volunteers
- Property owners
- Neighborhood Centers
- Mobile Food Unit Houston food truck collective (www.mfuhouston.com)
- Home Sweet Farm local farm collective (www.homesweetfarm.com)
- Wood Duck Farm local farm collective (www.woodduckfarm.com)
- Creek Fest Houston fun runs and festivals (www.creekfesthouston.com)

GOALS ACHIEVED*:



LIVABILITY PRINCIPLES**:



*SEE "PROJECT GOALS" ON PAGE 5.

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CULTURAL HISTORY PROGRAM

The District holds cultural and historic significance within the City of Houston and efforts should be made to recognize the District's history. Conversations with residents revealed that there are many areas within the District, not historically designated, that hold cultural significance including Telephone Road, Robert C. Stuart Park, and Sims Bayou. These points of interest could be highlighted through wayfinding signage and together make up a walking/biking or driving tour. Directional signage should be placed at key intersections and entrances into the District to guide visitors to areas of significance. Informational signage would call attention to and provide information about specific points of interest.

ACTION STEPS:

- Identify additional points of historic and cultural significance:
 - » Identify additional points of historical and cultural significance within the Hobby District Area in addition to the Glenbrook Valley Neighborhood and the 1940 Airport Terminal Museum. Additional significant historic buildings and sites should include:
 - 1954 Parade of Homes Model Home (7919 Glenview)
 - Anthony and Dot Caliva House (8002 Arletta Drive)
 - George and Mary Elizabeth Caliva House (8102 Glencrest Avenue)
 - Nicastro House (7831 Santa Elena Drive)
 - Prebble House (7711 Lakewind Street)
 - Richardson Nelson House (7911 Santa Elena Drive)
 - Johnson House (8114 Stony Dell Court)
 - Muscanere House (7843 Santa Elena)
 - Provenzano House (8206 Glencrest Avenue)
 - Carrabba House (7903 Glenview Drive)
 - Boss House (8114 Colgate Street)
 - Mandola House (7614 Montglen Drive)
 - Steve Tyrell House (8116 Glen Dell Court)
 - » Engage in conversations with property owners to identify points of interest and information about Telephone Road and other valued sites.
 - » Determine whether points of interest qualify for Houston's Historic Landmark Designation.
- Highlight points of interest:
 - » Design and install wayfinding signage at key gateways into the Hobby District Area Figure 38: District Wayfinding Vision on page 67 and key intersections to guide visitors to points of interest.



The architectural styles of Hobby's Glenbrook Valley neighborhood attracts visitors to the District.



Many homes were built in the late 50s and early 60s, and are traditional ranch, Modern or Spanish style.

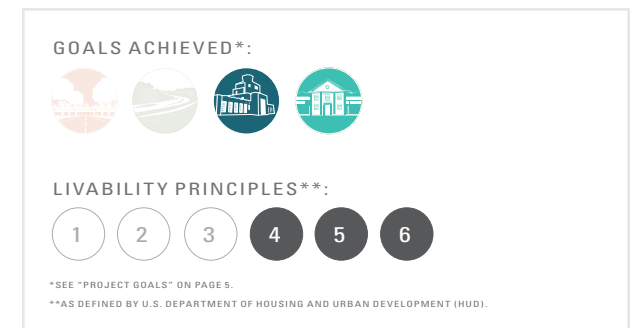
- » Design and install informational signage at specific points of interest.
- » Develop interpretive materials, such as a map or online app, that ties these locations together and helps residents and visitors navigate to them.
- » Partner with Preservation Houston and the Houston Arts Alliance to feature District cultural and historic destinations on their Architecture Walks Program tours.
- Hold cultural events:
 - » Host festivals that highlight the 1940 Airport Terminal Museum as a launching point for cultural tourism related to the District.
 - » Host festivals that highlight natural amenities such as Robert C. Stuart Park and Sims Bayou.
- Work with other organizations to create, fund and implement a district-wide arts/cultural tourism plan that meets the District's needs, while also furthering the goals of the recently updated Arts & Cultural Plan by the Mayor's Office of Cultural Affairs [http://www.houstontx.gov/culturalaffairs/Houston_Culture_Plan_2015.pdf]
- Coordinate with the Texas Commission on the Arts to see if the Hobby Area qualifies for destination as an Arts and Entertainment District. The Cultural District designation qualifies the District and nonprofit groups within it to apply for state and national project grants. To receive grant funding, an arts strategic plan is preferred so that funders can see how projects fit into the overall vision and furthers community-supported goals. If the District qualifies:
 - » Engage the arts and business communities in collaborative efforts that include events, educational workshops, public art projects and programming.
 - » Delineate the District's gateways with public art that brands the Hobby Area District in compliance with the mission, and leverage the cultural arts designation and visitor attendance to increase awareness of the District as a culturally significant destination.
 - » Coordinate formal review processes for the District to recruit, accept, review and implement temporary and permanent public art and civic art programs.
 - » Respond to residential and business owners' ongoing requests for quality opportunities for artists.
 - » Work with the Environmental and Urban Design Committee to annually review the cultural arts master plan and coordinate with the District's service plan to determine which projects to undertake.
 - » Based on the timeline and estimated budget for each recommendation, conclude the annual budget needed for the district to achieve strategies and make recommendations to the Board for approval.
 - » Conduct a monthly budget review to monitor and adjust spending and fundraising needs.
 - » Coordinate with partner organizations to identify additional funding for strategies that are not funded by the District.
 - » Maintain the Hobby Area District's destination by the Texas commission on the Arts as a Cultural Arts & Entertainment District.

FUNDING SOURCES:

- Tax Increment Reinvestment Zone (TIRZ) Funding
- Hobby Area Management District Funding
- General Obligation bonds
- General Fund
- Special Revenue Funds
- Grants

COMMUNITY PARTNERS:

- Tax Increment Reinvestment Zone #8 (Gulfgate TIRZ)
- Hobby Area Management District
- City of Houston Planning and Development - Historic Preservation
- Current property owners
- Houston-Galveston Area Council
- Hobby Area Management District



WEEKEND STREET FAIRS

Partner with local organizations to host weekend street fairs along the streets within the Industrial Hub. The community has expressed a desire for a central market place. The Industrial Hub offers a tight-knit grid that is ideal for pedestrian-only street fairs on the weekend. This provides the opportunity for entrepreneurs and retailers to share their goods and services.

ACTION STEPS:

- Implement action committee to help oversee a weekend street fair;
- Identify potential location(s);
- Identify partners (property owners and associated groups);
- Prepare a budget;
- Recruit volunteer groups;
- Obtain appropriate permits;
- Fund raise (as needed);
- Assign tasks; and
- Execute the plan.

FUNDING SOURCES

- Hobby Area Management District Funding
- Local non-profits
- Local business and farmers market organizations
- Private funding

COMMUNITY PARTNERS

- Hobby Area Management District
- City of Houston (permitting)
- Neighborhood volunteers
- Local organizations of entrepreneurs, farmers and industrial trades
- Property owners

GOALS ACHIEVED*:



LIVABILITY PRINCIPLES**:



*SEE "PROJECT GOALS" ON PAGE 5.

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Set up a farmers market or pop-up retail shop.



Underused parks are a great opportunity for pop-up performance art or new community gardens.



Pop-up events are a way to reinvigorate parking lots or vacant spaces with new uses.

TREE PLANTING

The NeighborWoods Program, a private/public volunteer initiative aimed at providing Houston neighborhoods with beautiful trees, is a resource for residents to help plant trees free of charge. Coordinating increased tree canopy cover along rights of way and streetscapes requires additional resources and planning to achieve. As an example, a recent large-scale planting efforts within the District included the planting of over 400 live oaks along Broadway as part of the Broadway Boulevard Beautification Project. The development of a district-wide tree inventory and management plan could focus similar efforts along other key corridors within the District.

ACTION STEPS

- Complete a district-wide inventory of existing trees to determine areas with the largest need
- Identify and prioritize areas within the Hobby Area District with the largest need for tree canopy
- Collaborate with the City of Houston and TxDOT regarding funding, implementation and maintenance

FUNDING SOURCES

- Tax Increment Reinvestment Zone (TIRZ) Funding
- Hobby Area Management District Funding
- General Obligation bonds
- General Fund
- Special Revenue Funds
- Grants
 - U.S. Environmental Protection Agency Environmental Education Grants [<https://www.epa.gov/education/environmental-education-ee-grants>]
 - Houston Endowment [<http://www.houstonendowment.org/GrantGuidelines/ApplicationTypes.aspx>]
 - Arbor Day Foundation TD Green Streets Grant Program

COMMUNITY PARTNERS

- Tax Increment Reinvestment Zone #8 (Gulfgate TIRZ)
- Hobby Area Management District
- Schools and other Institutions (Institution)
- City of Houston (Planning and Development Department)
- City of Houston (Parks and Recreation Department)
- City of Houston (Public Works and Engineering Department)
- City of Houston (Million Trees + Houston Mayor's Initiative)
- Houston-Galveston Area Council
- Texas Department of Transportation
- Non-profit - Trees for Houston [<http://www.treesforhouston.org/>]
- Scenic Houston

GOALS ACHIEVED*:



LIVABILITY PRINCIPLES**:

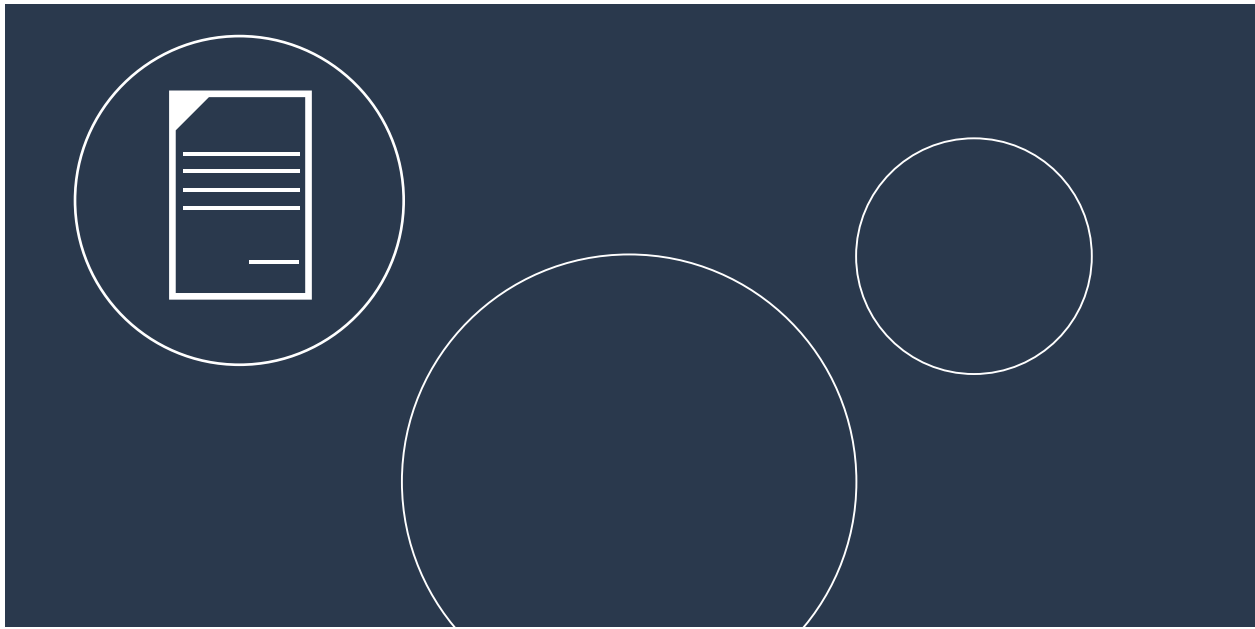


*SEE "PROJECT GOALS" ON PAGE 5.

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Increase tree canopy cover on new and existing properties, rights of way and streetscapes.



POLICIES

Policies are legal norms, rules or definitions that control and influence future changes.



Figure 49: Policy Ease of Implementation

The relative importance of each project, policy and program, as expressed by stakeholders through public feedback, must also be weighed against its ease and cost of implementation. Easy projects are those that are already underway or that are slated through existing planned improvements to be completed soon (0-10 years). Difficult projects are those that may be very important to the community, but require significant additional resources to implement. These projects can be addressed in the longer term (10+ years) as resources become available. The District may choose to pursue implementation of a few small or less challenging projects so that momentum increases. Then, as political will and resources align, advance relatively difficult or large projects.

Note: Concept designs are for illustrative purposes only and have not been formally reviewed nor approved by the City. Should these concept designs mature, they will undergo a formalized plan, design and construction process with appropriate permitting.

SHARED PARKING INCENTIVES

Existing surface parking lots can aid in future decisions about shared parking and indicate where people are coming from when driving to the District. Many existing parking areas are concentrated along Telephone Road, Airport Boulevard and the Gulf Freeway (IH-45).

Shared parking may be applied when land uses have different parking demand patterns and are able to use the same parking spaces/areas throughout the day. Shared parking is most effective when uses have significantly different peak parking characteristics that vary by time of day of week, and/or season of the year. In these situations, shared parking strategies will result in fewer total parking spaces needed when compared to the total number of spaces needed for each land use or business separately.

ACTION STEPS

- Conduct a district-wide shared parking study to determine the peak demand times for the businesses and organizations throughout the District.
- Advocate and actively seek metered parking in retail areas as the District grows and attracts visitors. Street parking is the most accessible shared parking and it already exists. However, if it is not metered, it is likely that it will be used for long-term parking by residents and employees. If the street parking spots are metered they will likely stay reserved for retail customers and other short-term parking needs.
- Identify existing parking lots, or vacant lots, in the District that can be used for public parking at alternative times, such as those belonging to community organizations such as schools and churches. Determine the time of day that the owners of the property use the lot and whether it would be feasible to share parking with adjacent uses.
- Propose a shared parking strategy that benefits both the owner of the underutilized lots and the adjacent uses. It may be necessary to charge an hourly parking fee in order to pay for the maintenance and operation of the parking lot and provide incentive for property owners.
- Mark the parking lots with signage that indicates when and how long people can park.
- Provide pedestrian wayfinding kiosks with district maps that can direct visitors to destinations once they have parked.

FUNDING SOURCES

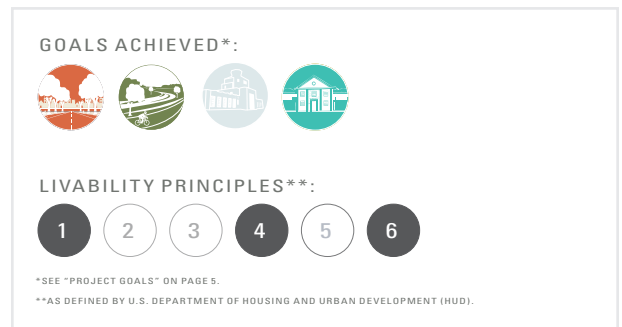
- Hobby Area Management District Funding

COMMUNITY PARTNERS

- Tax Increment Reinvestment Zone #8 (Gulfgate TIRZ)
- Hobby Area Management District
- Schools and other Institutions
- Community organizations
- City of Houston (Planning and Development Department)

COSTS

Parking Study: \$4,000



DESIGN GUIDELINES

To establish a cohesive district identity, design palettes should be established to maintain a consistent family of landscape treatments, materials, lighting, signage and banners across main corridors. Many communities utilize and enforce design guidelines as a way of establishing consistency in character and appearance. Design guidelines are valuable in guiding in discussions with property owners and interested developers as a way of expressing the desired character of future development. Design guidelines would ensure a consistent selection of lighting, banners, materials and furnishings across key corridors. Streets for which design palettes are recommended for include Telephone Road, Airport Boulevard, Bellfort Road, Dixie Drive, Almeda Genoa Road, Monroe Road and Mykawa Road.

The enforcement of design guidelines requires the establishment of an Architectural Review Committee (ARC) or other regulatory body with the power of law. In lieu of a regulatory body, the use of incentives such as funding assistance and permit expediting could encourage future developers to adhere to design guidelines. Design principles ensure that the development looks cohesive and retains a sense of identity for many decades, even after particular land uses or tenants change over time.

ACTION STEPS

- Engage stakeholders in a visioning/branding process for design guidelines
- Hire consultant team to develop design guidelines
- Determine incentives to encourage future developers to adhere to guidelines

FUNDING SOURCES

- General Fund
- Hobby Area Management District Funding

COMMUNITY PARTNERS

- Hobby Area Management District
- City of Houston (Planning and Development Department)
- City of Houston (Public Works and Engineering Department)
- Houston-Galveston Area Council
- Texas Department of Transportation

GOALS ACHIEVED*:



LIVABILITY PRINCIPLES**:



*SEE "PROJECT GOALS" ON PAGE 5.

**AS DEFINED BY U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT (HUD).

EXAMPLE DESIGN PRINCIPLES



MASSING

Varied roof planes and building heights break down the overall scale and massing of large full-block developments. Buildings should step back on the upper stories in order to minimize their appearance from the pedestrians. There should be a consistency to the building fabric that allows for highlighting exceptional moments. A turret, spire or tower may exceed maximum height of a building to accentuate signature places. Parking garages should be wrapped with building program where possible to ensure a vibrant public realm.

FAÇADE

The façade of the buildings will be a key determinant of the atmosphere created by new development. The façade should create unique interest with varying depth, height and materials. A playful combination of storefronts and street-level façades should bring hierarchy by drawing attention to important areas such as the shopping street while still creating wholesome experiences on the other street typologies. Encourage the use of materials or vegetation that create dynamic façades and screen raw parking structures. Parking garage façade elements, such as metal panels, create interest beyond the exposed structure of the garage. Parking garage screening elements also help to shield nearby windows from headlights in the evenings.

PUBLIC REALM

The character of the streetscape and built environment is greatly impacted by buildings and how they front the street. Arcades, display windows, entry areas, patios, awnings and other such design features should make up the majority of the ground floor façade. Retail frontages should employ a majority of clear glass to provide transparency between street and retail. This should also be tempered by overhangs or other elements that help mitigate the hot Texas climate.

PRIVATE SPACES

Private landscaped areas should have large shade trees with a minimum caliper of four inches. Paving materials should be warm toned, natural materials such as stone and brick. Surface parking lots shall be screened from all adjacent public streets and neighboring sites. Parking spaces shall not exceed 10 spaces in a row without being interrupted by a landscaped island. Loading, service and trash storage areas shall be screened from all public roadways. All roof mounted mechanical elements must be screened from view from the public right of way and neighboring properties.

EXAMPLE STREETSCAPE GUIDELINES - INDUSTRIAL HUB

PEDESTRIAN LIGHT

The lighting fixture should share the same style with street light in terms of form, color and materials, and also should contribute to the creation of spaces, wayfinding and social gathering. If applicable, it can share a pole with the street light.

Material preference: stainless steel, cast aluminum, powder coated steel

Color preference: black, dark grey

Optics preference: LED

Height preference: 12 - 17 feet

Color temperature preference: 4,000K

Space preference: achieving .5 foot candle min.; Pedestrian lights should line up with street light

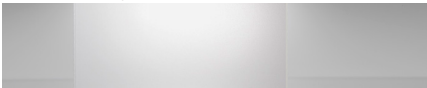
Banner preference: provide at least 9 foot clearance

Example: Hess-Canto G

Additional accent lights such as landscape lighting and recessed wall lights are encouraged as applicable as long as they are small and discrete.



Cast Aluminum, Black



Translucent Acrylic

CATENARY LIGHT

The lighting fixture should be gracefully arching to spatially define paths or roadways with a unique modern appearance for the industrial feel of the area.

Material preference: stainless steel, cast aluminum, powder coated steel

Color preference: black, dark grey

Optics preference: LED

Color temperature preference: 4,000K

Height preference: 17 foot min.

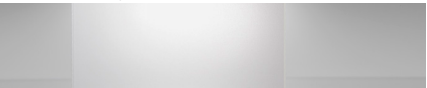
Space preference: varies

Banner: catenary system designed to hold banners

Example: Hess-Pendo



Cast Aluminum, Black



Translucent Acrylic

TRASH/RECYCLING RECEPTACLES

The trash/recycling receptacles should have a simple graceful form and be graffiti resistant.

Trash/recycling receptacles to be placed every 300-400 feet min. in commercial/mixed use area and 1,000 feet min. in residential areas.

Material preference: cast aluminum with polyethylene

Color preference: silver with black

Example: Landscape Form-35 Pitch Litter Receptacle



Polyethylene



Cast Aluminum, Silver

PLANTER

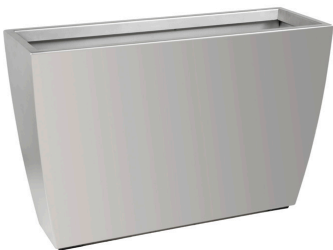
Accent planters are encouraged at intersections in the commercial/industrial/mixed use area.

Material preference: anodized aluminum or powder coated steel (with hardwood, optional)

Color preference: silver

Size: varies, provide a min. of 3 varying sizes

Example: Landscape Form-Sorella Planters



Cast Aluminum, Silver



Powder Coated Metal, Titanium

BENCH

Benches should ensure the human comfort, heat resistance, with a modern appearance.

Material preference: anodized aluminum or powder coated steel with thermal wood

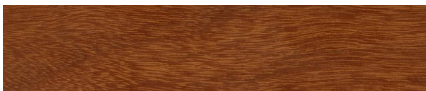
Color preference: silver

Backed: varies

Arms: varies

Spacing: Every 400-600 feet maximum in commercial/ industrial/mixed use areas. Not required in residential areas except in gathering areas.

Example: Landscape From-MultipliCITY Bench



Thermal wood



Cast Aluminum, Silver

BIKE RACK

Bike racks should share the same form language and material palette with benches.

Material preference: anodized aluminum or powder coated steel (with hardwood, optional)

Color preference: silver

Example: Landscape From-MultipliCITY Bench



Cast Aluminum, Silver

HARDSCAPE

Sidewalk: concrete (brush broom, sandblasted or acid wash) or pavers. Avoid large monotonous paving areas. Break up with material, texture, color or scoring banding.

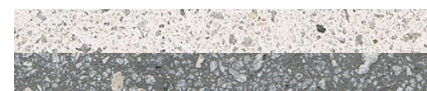
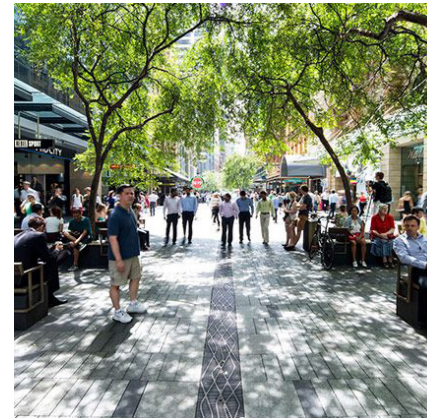
Artistic paving patterns are encouraged at pedestrian area of intersection or highly active areas to highlight the culture or history of the place.

All surface materials should be durable and slip resistant.

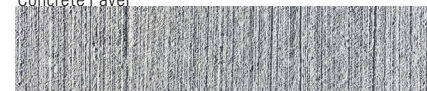
Material preference: concrete or clay pavers (promenade, multi-use path), grey standard concrete(sidewalk), permeable concrete or clay paver optional

Color preference: 20% dark grey and 80% light grey with color accents

Example: Concrete Collaborative-trails



Concrete Paver



Broom Finish Concrete

PLANTING

In general, planting design should perform as the primary backbone of the District by using showy texture species and focusing on facilitating stormwater management.

Tree planting design should be formal and be applied at regular intervals with street lights, in order to create a continuous canopy and memorable boulevard experience.

Shade tree spacing preference: 20 - 30 feet O.C. 4 feet from back of curb min.; species preference: White Oak, Mexican Sycamore, Cedar Elm; min. soil volume per tree: 600 cubic feet.

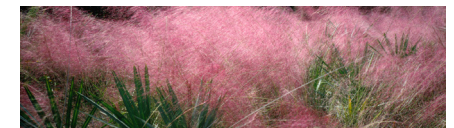
Ornamental tree spacing preference: 15 foot min.; species: Mexican Buckeye, Rusty Blackhaw Viburnum; min. soil volume per tree: 400 cubic feet.

Rain garden tree spacing preference: 20 feet min.; species: Bold Cypress, American Sycamore; min. soil volume per tree: 600 cubic feet.

Understory planting design: create edge, back drop; do not exceed 30 inches in height; should be colorful, seasonal, habitat benefit and variety of texture to create visual interests.

Maintenance: low maintenance

Sample species: Maiden Grass, White Azalea, Yarrow, Coneflower, Iris, Gulf Muhly, Bull Muhly, Fountain Grass, Spirea, Daylily, Black Eyed Susan, Sage, Mexican Feather Grass, Cardinal Flower, Sotol, Yucca, Turk's Cap, Pigeonberry, Mistflower



Gulf Muhly



Maiden Grass

EXAMPLE STREETSCAPE GUIDELINES - THOROUGHFARES

STREET LIGHT

The lighting fixture should be gracefully arching to spatially define paths or roadways with a unique modern appearance.

Material preference: stainless steel, cast aluminum, powder coated steel

Color preference: black, dark grey

Optics preference: LED

Color temperature preference: 4,000K

Height preference: 20 - 30 feet

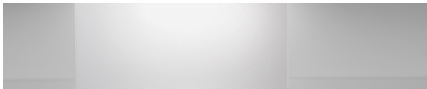
Space preference: achieving 1 foot candle min. on the roadway, provide additional light levels at intersection and pedestrian areas; 4 feet from face of curb; provide a min. of 10 - 12 foot distance between center of light poles and the centerline of trees

Banner preference: provide at least 12 foot clearance, not extending into travel lanes

Example: Hess-Canto G



Cast Aluminum, Black



Translucent Acrylic

PEDESTRIAN LIGHT

The lighting fixture should share the same style with street light in terms of form, color and materials, and should also contribute to the creation of spaces, wayfinding and social gathering. If applicable, it can share a pole with the street light.

Material preference: stainless steel, cast aluminum, powder coated steel

Color preference: black, dark grey

Optics preference: LED

Height preference: 12 - 17 feet

Color temperature preference: 4,000K

Space preference: achieving .5 foot candle min.; pedestrian lights should line up with street light

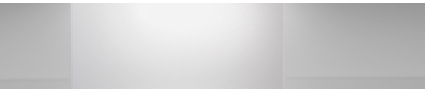
Banner preference: provide at least 9 foot clearance

Example: Hess-Canto G

Additional accent lights, such as landscape lighting and recessed wall lights, are encouraged when applicable, as long as they are small and discrete.



Cast Aluminum, Black



Translucent Acrylic

ILLUMINATING BOLLARD

The illuminating bollard should be used at high social activity areas or along the multi-use path to provide the safety and minimize energy use.

Material preference: cast aluminum with translucent matte acrylic

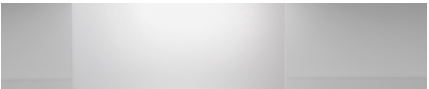
Color preference: black or graphite grey

Height preference: 3 feet

Example: Hess-Sierra



Cast Aluminum, Black



Translucent Acrylic

TRASH/RECYCLING AND WASTE

The trash/recycling receptacles should be placed close to building entrances and at primary intersections at a minimum.

Material preference: powder coated steel, stainless steel

Color preference: darker grey or black

Spacing preference: 300 - 800 feet

Height preference: 3 feet

Example: Mmcite-Radium, ADA Compliant.

Dog waste stations should be placed every 1,500 feet min. to promote cleanliness of the street.

Material preference: anodized aluminum or powder coated steel

Color preference: black

Example: TerraBound Dog Waste Station



Polyethylene



Cast Aluminum, Silver

SEATING

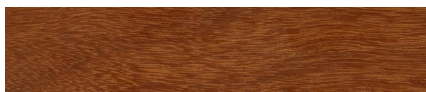
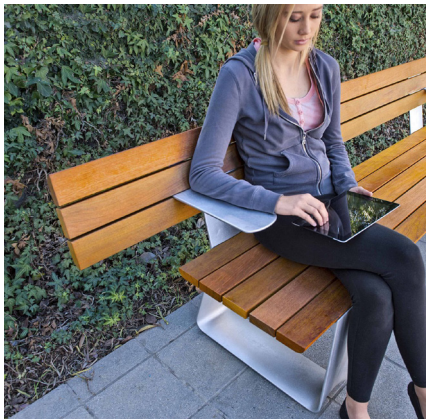
Seating should ensure human comfort and provide a desirable place for people to rest. Seating can be provided in a variety of forms: benches, seat walls and planters provide flexible options for people to enjoy the street lifestyle. Different forms of seating should be located at specific areas based on programming of those areas. Benches without backs should be consistently applied along the whole street. Benches with backs should be located at therapeutic garden areas along street.

Material preference: anodized aluminum or powder coated steel with thermal wood

Color preference: silver; Bench size preference: 2 feet x 5 feet x 3 feet (with back), 2 feet x 5 feet x 1.5 feet (without back)

Bench spacing preference (each side of street): max. 300 feet - 800 feet

Example: Landscape From-MultipliCITY Bench



Thermal wood



Cast Aluminum, Silver

BICYCLE RACK

Bicycle Racks tend to promote multi-modal transportation and should be located adjacent to destinations, such as transit stops, buildings, open spaces, gardens, parks and plazas.

Bicycle Racks should be secured regularly on the ground and angled parallel to the curb or 45 degrees if space is limited.

Material preference: anodized aluminum or powder coated steel (with hardwood, optional).

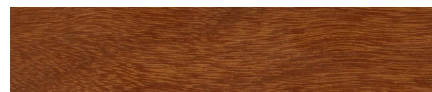
Individual bicycle parking size preference: 6 feet x 2 feet

Group bicycle parking spacing distance: 300-800 linear feet

Bicycle racks spacing preference: at centerline with trees and light poles; 3 feet min. between each rack

Color preference: silver

Example: Landscape From-MultipliCITY Bike Rack



Thermal wood



Cast Aluminum, Silver

HARDSCAPE

Sidewalk: concrete (brush broom, sandblasted or acid wash) or pavers. Avoid large monotonous paving areas. Break up with material, texture, color or scoring banding.

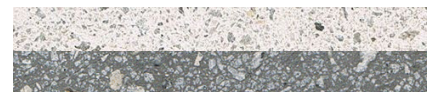
Shared use path: charcoal asphalt pavers on stabilized base or concrete-standard grey. Use permeable pavers as applicable.

Artistic paving patterns are encouraged at pedestrian area of intersection or highly active areas to highlight the culture or history of the place.

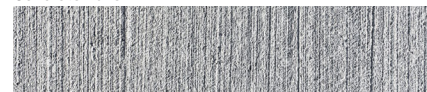
All surface materials should be durable and slip resistant.

Color preference: 20% dark grey and 80% light grey with color accents

Example: Concrete Collaborative-trails



Concrete Paver



Broom Finish Concrete

PLANTING

In general, planting design should perform as the primary backbone of the District by using showy texture species and focusing on facilitating stormwater management.

Tree planting design should be formal and be applied at regular intervals with street lights, in order to create a continuous canopy and memorable experiences. Median tree planting design should be spread out irregularly to create a lush experience.

Shade tree spacing preference: 20 - 30 feet O.C. 4 feet from back of curb min.; species preference: White Oak, Mexican Sycamore, Cedar Elm; minimum soil volume per tree: 600 cubic feet

Ornamental tree spacing preference: 15 foot min.; species: Mexican Buckeye, Rusty Blackhaw Viburnum; min. soil volume per tree: 400 cubic feet

Rain garden tree spacing preference: 20 feet min.; species: Bold Cypress, American Sycamore; min. soil volume per tree: 600 cubic feet

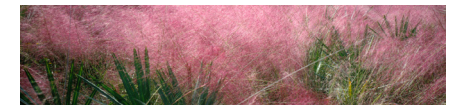
Understory planting design: create edge, back drop; do not exceed 30 inches in height; should be colorful, seasonal, habitat benefit and variety of texture to create visual interests.

Maintenance: low maintenance

Sample species: Yarrow, Coneflower, Iris, Gulf Muhly, Bull Muhly, Fountain Grass, Spirea, Daylilly, Black Eyed Susan, Sage, Mexican Feather Grass, Cardinal Flower, Sotol, Yucca, Turk's Cap, Pigeonberry, Mistflower



Coneflower



Gulf Muhly



Maiden Grass

EXAMPLE STREETSCAPE GUIDELINES - LOCAL STREETS

STREET LIGHT

The lighting fixture shall be a clean cylindrical poll top form with a flat spun top cap, setting up a simple gesture for passive residential street. Banners are not encouraged on passive neighborhood streets.

Material preference: stainless steel, cast aluminum, powder coated steel

Color preference: black, dark grey

Optics preference: LED

Color temperature preference: 4,000K

Height preference: 20 - 30 feet

Space preference: achieving 1 foot candle minimum on the roadway, provide additional light levels at intersection and pedestrian areas; 4 feet from face of curb; Provide a min. 10 - 12 foot distance between center of light poles and the centerline of trees.

Example: Hess-Avalon



Cast Aluminum, Black



Translucent Acrylic

PEDESTRIAN LIGHT

The lighting fixture should be a circular a poll top form with clean modern lines. It should contribute to the creation of spaces, wayfinding and social gathering.

Accent lights such as landscape lighting and recessed wall lights are encouraged as long as they are small and discrete.

Material preference: stainless steel, cast aluminum, powder coated steel

Color preference: black, dark grey

Optics preference: LED

Height preference: 12 -17 feet

Color temperature preference: 4,000K

Space preference: achieving .5 foot candle minimum; Pedestrian lights should line up with street light

Banner preference: provide at least 9 foot clearance

Example: Hess-Amalfi



Cast Aluminum, Black



Translucent Acrylic

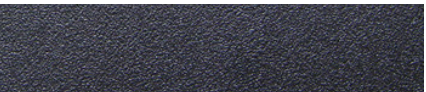
DOG WASTE STATION

Dog waste stations should be placed along the passive neighborhood street every 300 feet to promote cleanness of the street.

Material preference: anodized aluminum or powder coated steel

Color preference: black

Example: TerraBound Dog Waste Station



Powder Coated Steel, Black

SEATING

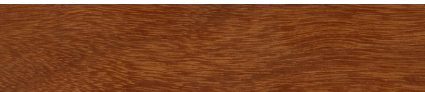
Seating should ensure the human comfort and provide a desirable place to people to rest. Benches without backs should be located in shaded areas as part of pedestrian gathering spaces.

Material preference: anodized aluminum or powder coated steel with thermal wood

Color preference: silver ; bench size preference: 2 feet x 5 feet x 1.5 feet (without back)

Bench spacing preference: 1000 foot min.

Example: Landscape From-FGP Bench



Thermal wood



Cast Aluminum, Silver

BIKE RACK

Bicycle Rack intends to promote multi-modal transportation and should be located adjacent to destinations, such as transit stops, buildings, open spaces, gardens, parks and plazas.

Bicycle Racks should be secured regularly on the ground and parallel to the curb or 45 degrees if space is limited.

Material preference: anodized aluminum or powder coated steel (with hardwood, optional)

Individual bicycle parking size preference: 6 feet x 2 feet

Group bicycle parking spacing distance: 1500 linear feet

Bicycle racks spacing preference: at centerline with trees and light poles; 3 foot min. between each rack

Color preference: silver

Example: Landscape From-Ride



Cast Aluminum, Silver

HARDSCAPE

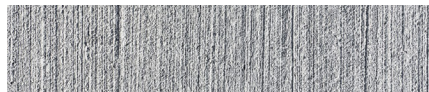
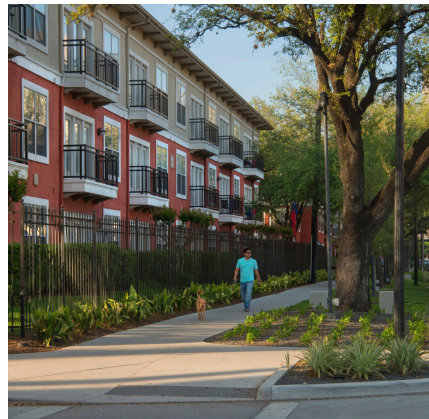
Sidewalk: concrete (brush broom, sandblasted or acid wash). Avoid large monotonous paving areas. Break up with material, texture, color or scoring banding. Use permeable pavers as applicable.

Artistic paving patterns are encouraged at pedestrian area of intersection or highly active areas to highlight the culture or history of the place.

All surface materials should be durable and slip resistant

Material preference: grey standard concrete(sidewalk), permeable concrete

Color preference: light grey



Broom Finish Concrete

PLANTING

In general, planting design should be simple and clean.

Tree planting design should be formal and be applied at regular intervals with street lights, in order to create a continuous canopy.

Shade tree spacing preference: 20 - 30 feet O.C. 4 feet from back of curb; species preference: White Oak, Mexican Sycamore, Cedar Elm; min. soil volume per tree: 500 cubic feet

Ornamental tree spacing preference: 15 feet max.; species: Mexican Buckeye, Redbud, Rusty Blackhaw Viburnum; min. soil volume per tree: 400 cubic feet

Understory planting design: the planting area between road and sidewalk should be 80% lawn; seasonal interest plantings are encouraged at intersections and pedestrian gathering space; do not exceed 30 inches in height

Maintenance: low maintenance

Sample species: Foxtail Fern, Liriope, Sedum, Sage, Yarrow, Coneflower, Iris, Gulf Muhly, Bull Muhly, Fountain Grass, Spirea, Daylily, Black Eyed Susan, Sage, Mexican Feather Grass, Cardinal Flower, Sotol, Yucca, Turk's Cap, Pigeonberry, Mistflower



Lawn



Foxtail Fern



Liriope

INFILL INCENTIVE PROGRAMS

Infill is the reuse of available land in an urban environment, usually open space, for new community improvement projects. The implementation of infill incentives for retail and housing in the short-term vision can lead to the desired infill development patterns in the long-range vision. This study recommends that mixed use infill development be focused along the Broadway corridor, the Industrial Hub, intersections at Bellfort Street and Telephone Road, Bellfort Street and Nun Street, Alameda Genoa Road and Telephone Road, and Alameda Genoa Road and Monroe Road.

There are a variety of incentives that can be offered that increase investment in the Hobby Area. Examples of incentives might include: waiver of select development-related fees, parking requirement reductions or assistance by City staff to expedite permitting procedures. The Hobby Area District could also encourage partnerships between Community Development Corporations (CDC's) looking to invest in projects consistent with the District's infill goals.

ACTION STEPS¹

- Involve key stakeholders (local government representatives, neighborhood organizations, property owners, realtors, home builders and commercial developers) in the development of a growth strategy for the District
- Carry out an infill parcel inventory within suggested priority areas
- Conduct a windshield survey at each priority site, looking for vacant lots, underutilized properties, conditions of public facilities, and existing neighborhood patterns
- Identify possible barriers to infill development at each site and design a strategy that addresses these barriers
- Design a strategy for encouraging infill development
- Adopt the program
- Spread the word to builders, real estate professionals and lenders through the Hobby Area District's website, the City of Houston planning and permitting offices, and marketing efforts
- Track progress and revise the program as needed

FUNDING SOURCES

- Tax Increment Reinvestment Zone (TIRZ) Funding
- Hobby Area Management District Funding

COMMUNITY PARTNERS

- Tax Increment Reinvestment Zone #8 (Gulfgate TIRZ)
- Hobby Area Management District
- Schools (Institution)
- City of Houston (Planning and Development Department)
- City of Houston (Public Works and Engineering Department)
- Houston-Galveston Area Council
- Texas Department of Transportation

¹ http://www.dca.state.ga.us/intra_nonpub/toolkit/guides/infildevtprog.pdf



LOOKING FORWARD: KEEPING HOBBY GREEN - THE VALUE OF URBAN AGRICULTURE

From the sky the District looks green. Hobby's history of farming, agriculture, and larger lot residential neighborhood development work alongside Houston's humid climate and rich soils to create this lush look.

Agricultural, rural lands and fields of green play an important role in creating a sustainable Hobby. They protect and improve natural systems and ecological functions along flood zones, bayous and wetlands. These greenspaces also tie together a larger series of greenways, parks, bayous, floodplains, hike and bike trails in the Houston region to ensure a connected Hobby.

These undeveloped lands, which comprise two percent of the District's area today [see Figure 4: Existing Land Use on page 12], also provide opportunities to ensure a vibrant and social Hobby. Urban agriculture could be a solution considered either as a short-term or permanent use, depending on continued dialogue with residents about their needs and desires for future growth. Examples of short-term, temporary solutions could include the installation of raised planter beds or other organic farming techniques that mitigate pollution and maximize available neighborhood space. Agricultural lands could be supported by strategically located farmers and flea markets at the Industrial Hub [page 78] that make a symbiotic connection between vacant lot farms and economic development, learning and job creation initiatives. Urban agriculture also builds upon the enduring farming and ranching culture in parts of the District, the history of Hobby's once rural neighborhoods and the need for economic opportunity and the upward economic mobility of residents. Vacant lots could become small farms and then transformed into appropriate development as those opportunities arise. As another example, past industrial parcels could first be bioremediated through the planting of native plants that cleanse soils. Then, once healthy, these parcels could be transformed into neighborhood gardens and organic farms.

Repurposing land and parcels in creative ways that fill unmet neighborhood needs, such as new community gardens, parks or urban farms can create job and learning opportunities for Hobby residents is recommended. Urban agriculture, farms and gardens are a way to support the cultural histories of Hobby's neighborhoods, bring people together through activities and programs, and at the same time, provide economic drivers for future change.



Local farmers can sell their goods at weekend street fairs and local markets.



Fresh local produce increases the community's access to healthy food.

CONCLUSIONS

ENGAGE THE COMMUNITY

To achieve the future vision for the District, interested parties and neighborhoods must come together and serve as change agents. Change agents focus their energies on achieving the Hobby Livable Centers Study vision and make efforts to achieve each and every project. Part of this effort will be to continue dialogue with key stakeholders about how to best achieve solutions in their neighborhood. All change agents can engage political leaders in actively supporting the vision and implementation projects.

IMPROVE THE PUBLIC REALM

It is also important to have key organizations, such as the Hobby Area Management District, continually pushing for the implementation of ideas detailed in the plan. Coordinate incremental improvements throughout the District with the goals of the plan. The Tax Increment Reinvestment Zone #8 (Gulfgate TIRZ) and Hobby Area Management District are the most localized and best suited to be the champion for improvements to the public realm, working in partnership with the City of Houston and H-GAC, however, everyone has a role as a change agent in the process.

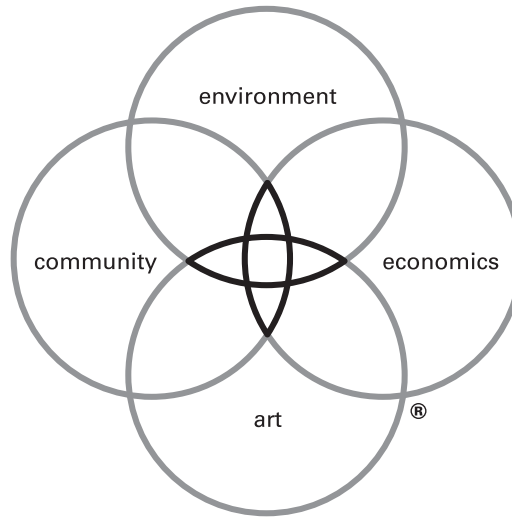
- Developers, property owners and local agencies can continue to explore potential public-private partnerships that contribute to revitalization efforts in the District.
- New developments can coordinate public realm plans with the recommendations of the Hobby Livable Centers Study to create coordinated streetscape improvements throughout the district.
- Local businesses and property owners can complete street-front building improvements to improve the public realm along sidewalks.
- The Tax Increment Reinvestment Zone #8 (Gulfgate TIRZ) can coordinate local businesses, developers, local government agencies, and the Management District to help manage parking as future growth and catalytic development occurs. It can also identify additional H-GAC and TxDOT funding and programming opportunities to support implementation projects.
- City departments can work with developers to issue project approvals, identify incentives, and lift restrictive development requirements inhibiting implementation of this plan.
- The Parks and Recreation Department, Houston Parks Board and Harris County Flood Control District can work collaboratively to acquire, upgrade and maintain parks to improve the public realm in the District, particularly in the southern part of the study area where access to parks is lacking.
- The Management District can continue to coordinate with Police Department to increase actual and perceived safety in the study area.

BUILD CATALYST PROJECTS

As an additional method for effecting change, catalyst projects should be selected and developed within the District. The purpose of a catalyst project is to present a vision of how the recommended projects, policies and programs work together to create change. As the District continues to see growth these areas provide a precedent for how development might occur in a way that supports Livable Centers goals. The catalyst sites presented in this plan were selected for their overall development potential and serve as typologies representative of redevelopment that could occur within the District. The development of the future envisioned catalyst sites should also consider market feasibility, and strategic placement for attracted investment and accessibility to the surrounding community.

MARKET THE DISTRICT

The recommendations outlined work together to create a vibrant, lively and desirable district for people to live and businesses to invest. In addition to the District's current cultural and recreational assets the plan primes the District for private investment. Marketing efforts and partnerships should be made to communicate the growing opportunities within the District.



DW LEGACY DESIGN®

We believe that when environment, economics, art and community are combined in harmony with the dictates of the land and needs of society, magical places result — sustainable places of timeless beauty, significant value and enduring quality, places that lift the spirit.

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for our clients, for society and for the well-being of our planet.

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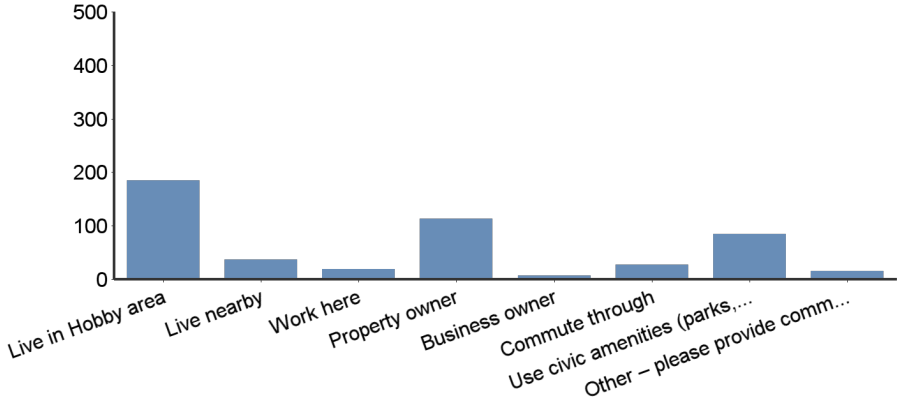


Appendix

APPENDIX A

VISION ONLINE POLL

Before we begin the online survey, please tell us your connection to the Hobby area
(choose all that apply):

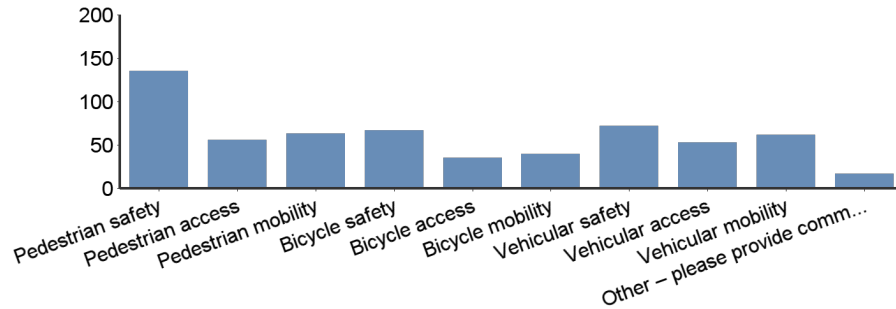


Value		Percent	Count	Percent
1	Live in Hobby area	<div></div>	185	77.7%
2	Live nearby	<div></div>	37	15.5%
3	Work here	<div></div>	19	8.0%
4	Property owner	<div></div>	113	47.5%
5	Business owner	<div></div>	7	2.9%
6	Commute through	<div></div>	27	11.3%
7	Use civic amenities (parks, churches, library, etc.)	<div></div>	85	35.7%
8	Other – please provide comment(s)	<div></div>	15	6.3%
-	Total	<div></div>	488	205.0%

Minimum	Maximum	Mean	Variance	Std. Dev.	Respondents
1	8	3.44	5.75	2.4	238

If circulation improvements were to take place in the Hobby area, what are the most important issues to address?
(choose your top three)

- **Circulation improvements** = upgrades that affect how people travel in the Hobby area.
- **Safety** = facilities that are safe, visible (well-lit, well-signed) and free from impediments to travel (such as disrepair, lack of drainage or perceived crime).
- **Access** = the ability to get to a destination. There are facilities such as streets, sidewalks, bike lanes or transit stops that allow you to get to a place.
- **Mobility** = the ability to move through destinations both within Hobby or beyond.

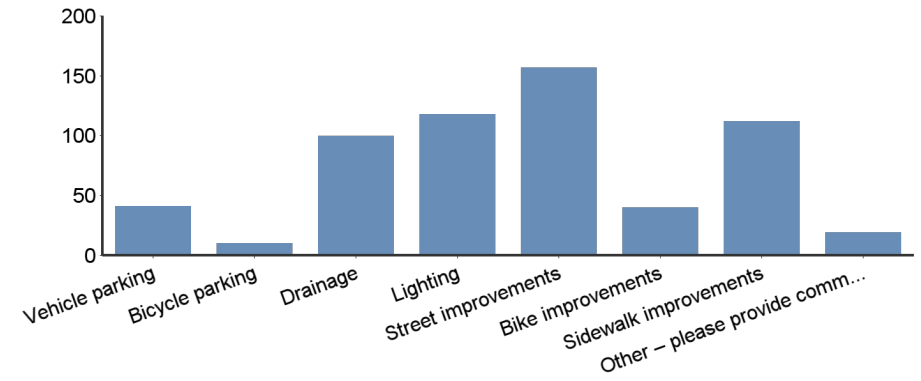


Value		Percent	Count	Percent
1	Pedestrian safety		135	67.5%
2	Pedestrian access		56	28.0%
3	Pedestrian mobility		63	31.5%
4	Bicycle safety		67	33.5%
5	Bicycle access		35	17.5%
6	Bicycle mobility		40	20.0%
7	Vehicular safety		72	36.0%
8	Vehicular access		53	26.5%
9	Vehicular mobility		62	31.0%
10	Other – please provide comment(s)		17	8.5%
-	Total		600	300.0%

Minimum	Maximum	Mean	Variance	Std. Dev.	Respondents
1	10	4.63	8.55	2.92	200

If infrastructure improvements were to take place in the Hobby area, what are the most important issues to address? (choose your top three)

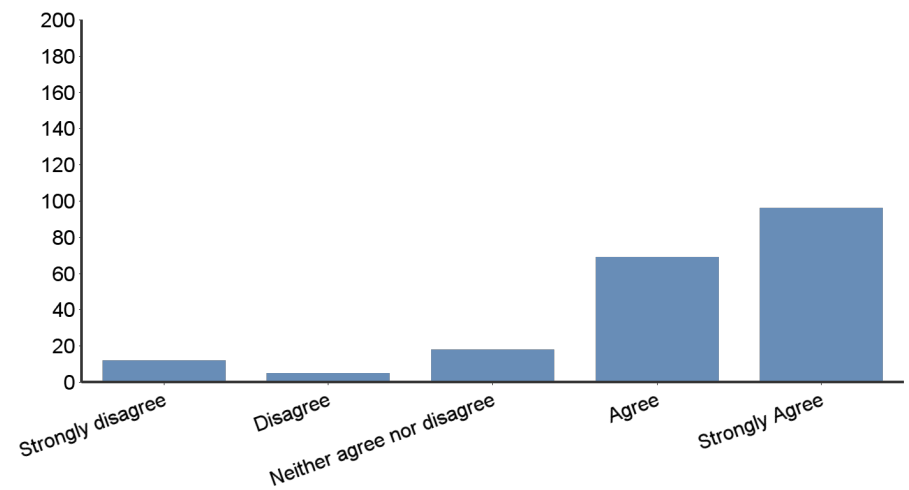
- Infrastructure improvements = upgrades to parking facilities, streets, sidewalks, bike or transit facilities, drainage facilities.



Value		Percent	Count	Percent
1	Vehicle parking		41	20.6%
2	Bicycle parking		10	5.0%
3	Drainage		100	50.3%
4	Lighting		118	59.3%
5	Street improvements		157	78.9%
6	Bike improvements		40	20.1%
7	Sidewalk improvements		112	56.3%
8	Other – please provide comment(s)		19	9.5%
-	Total		597	300.0%

Minimum	Maximum	Mean	Variance	Std. Dev.	Respondents
1	8	4.68	3.12	1.77	199

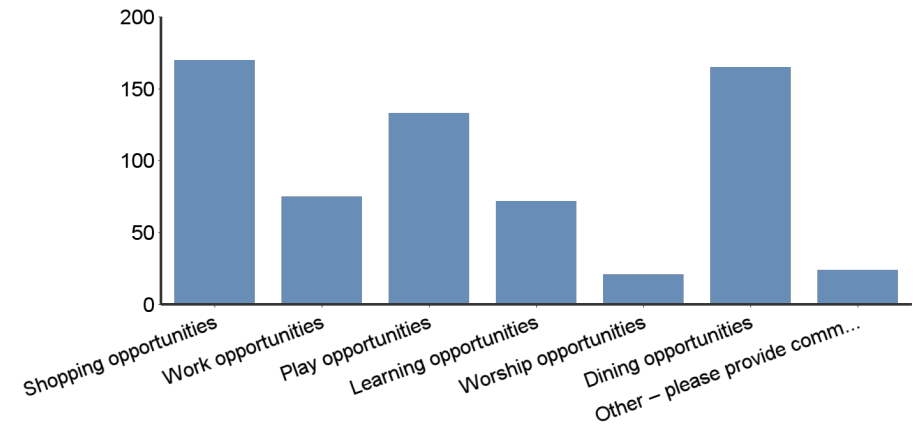
Do you agree with the following:
Providing travel choices in the Hobby area is important.



Value		Percent	Count	Percent
1	Strongly disagree	<div></div>	12	6.0%
2	Disagree	<div></div>	5	2.5%
3	Neither agree nor disagree	<div></div>	18	9.0%
4	Agree	<div></div>	69	34.5%
5	Strongly Agree	<div></div>	96	48.0%
-	Total	<div></div>	200	100.0%

Minimum	Maximum	Mean	Variance	Std. Dev.	Respondents
1	5	4.16	1.19	1.09	200

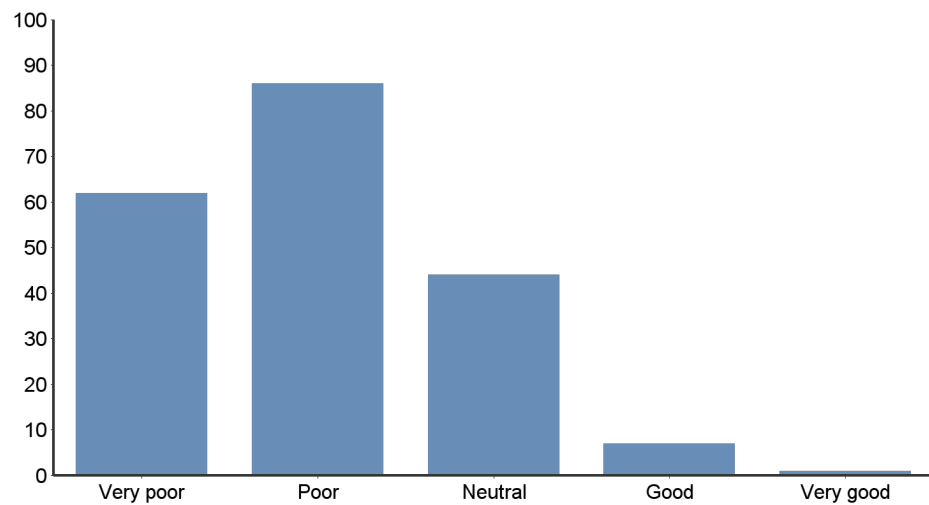
What types of additional activities or amenities would you like to see in the Hobby area?
(choose all that apply)



Value		Percent	Count	Percent
1	Shopping opportunities	<div></div>	170	85.0%
2	Work opportunities	<div></div>	75	37.5%
3	Play opportunities	<div></div>	133	66.5%
4	Learning opportunities	<div></div>	72	36.0%
5	Worship opportunities	<div></div>	21	10.5%
6	Dining opportunities	<div></div>	165	82.5%
7	Other – please provide comment(s)	<div></div>	24	12.0%
-	Total	<div></div>	660	330.0%

Minimum	Maximum	Mean	Variance	Std. Dev.	Respondents
1	7	3.44	4.03	2.01	200

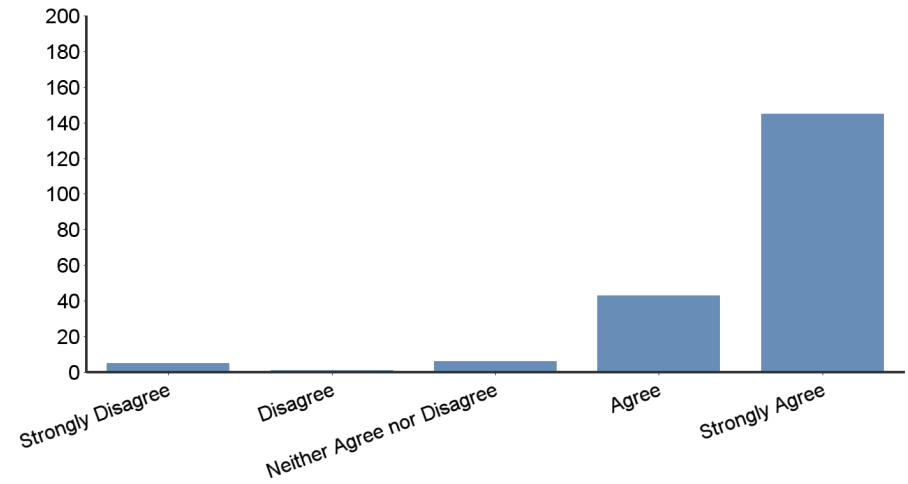
How would you rate the overall appearance of buildings in the Hobby area today?



Value		Percent	Count	Percent
1	Very poor	<div></div>	62	31.0%
2	Poor	<div></div>	86	43.0%
3	Neutral	<div></div>	44	22.0%
4	Good	<div></div>	7	3.5%
5	Very good	<div></div>	1	0.5%
-	Total	<div></div>	200	100.0%

Minimum	Maximum	Mean	Variance	Std. Dev.	Respondents
1	5	2	0.72	0.85	200

Do you agree with the following:
Creating quality places in the Hobby area is important.

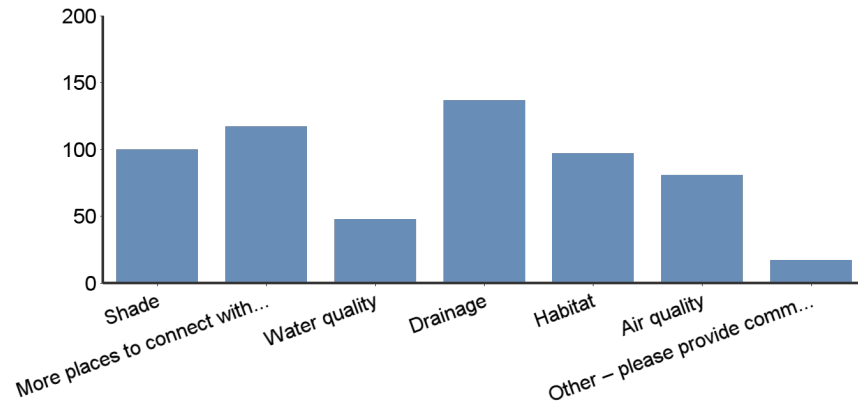


Value		Percent	Count	Percent
1	Strongly Disagree	<div></div>	5	2.5%
2	Disagree	<div></div>	1	0.5%
3	Neither Agree nor Disagree	<div></div>	6	3.0%
4	Agree	<div></div>	43	21.5%
5	Strongly Agree	<div></div>	145	72.5%
-	Total	<div></div>	200	100.0%

Minimum	Maximum	Mean	Variance	Std. Dev.	Respondents
1	5	4.61	0.63	0.79	200

If environmental improvements were to take place in the Hobby area, what are the important issues to address (choose your top three):

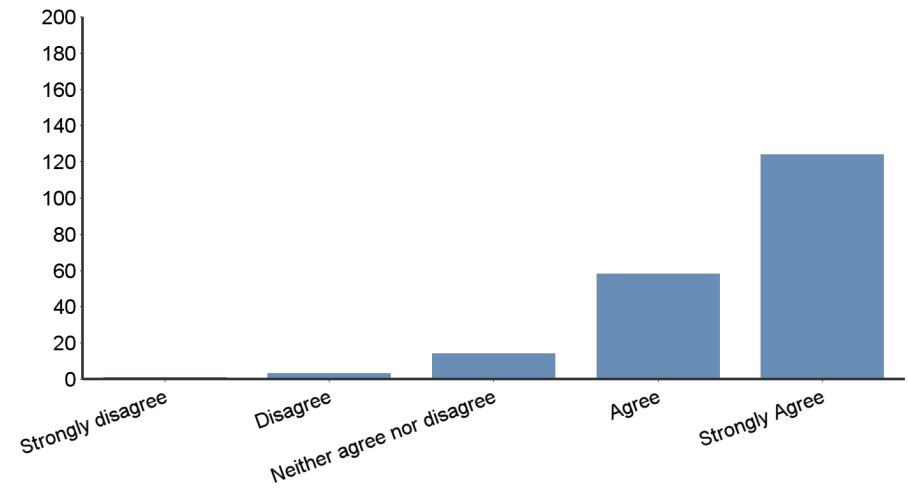
- Environmental improvements = relating to water, vegetation or air quality.



Value		Percent	Count	Percent
1	Shade	<div></div>	100	50.3%
2	More places to connect with nature	<div></div>	117	58.8%
3	Water quality	<div></div>	48	24.1%
4	Drainage	<div></div>	137	68.8%
5	Habitat	<div></div>	97	48.7%
6	Air quality	<div></div>	81	40.7%
7	Other – please provide comment(s)	<div></div>	17	8.5%
-	Total	<div></div>	597	300.0%

Minimum	Maximum	Mean	Variance	Std. Dev.	Respondents
1	7	3.54	3.13	1.77	199

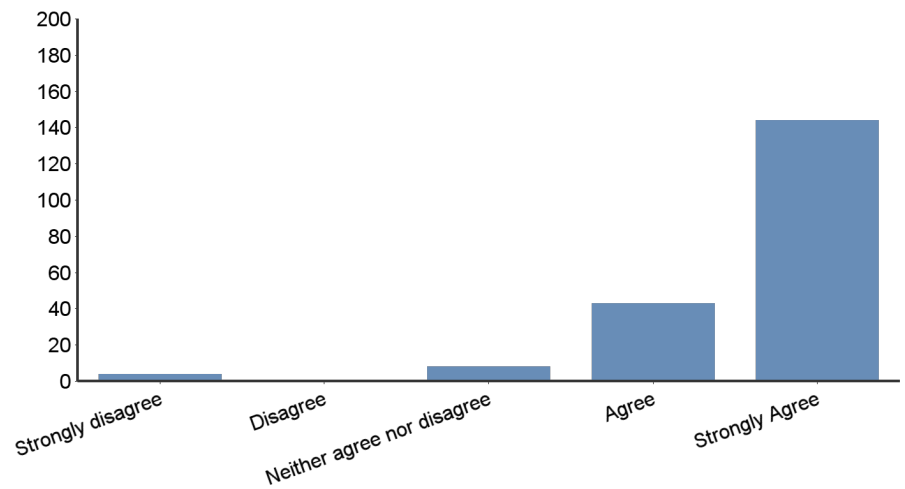
**Do you agree with the following:
Improving environmental quality in the Hobby area is important.**



Value		Percent	Count	Percent
1	Strongly disagree		1	0.5%
2	Disagree		3	1.5%
3	Neither agree nor disagree		14	7.0%
4	Agree		58	29.0%
5	Strongly Agree		124	62.0%
-	Total		200	100.0%

Minimum	Maximum	Mean	Variance	Std. Dev.	Respondents
1	5	4.51	0.54	0.74	200

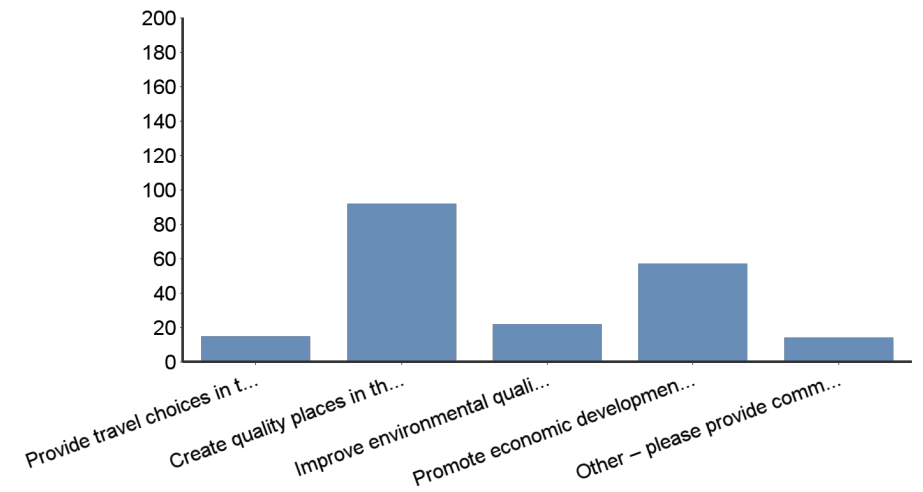
Do you agree with the following:
Promoting economic development in the Hobby area is important.



Value		Percent	Count	Percent
1	Strongly disagree	<div></div>	4	2.0%
2	Disagree		0	0.0%
3	Neither agree nor disagree	<div></div>	8	4.0%
4	Agree	<div></div>	43	21.6%
5	Strongly Agree	<div></div>	144	72.4%
-	Total	<div></div>	199	100.0%

Minimum	Maximum	Mean	Variance	Std. Dev.	Respondents
1	5	4.62	0.56	0.75	199

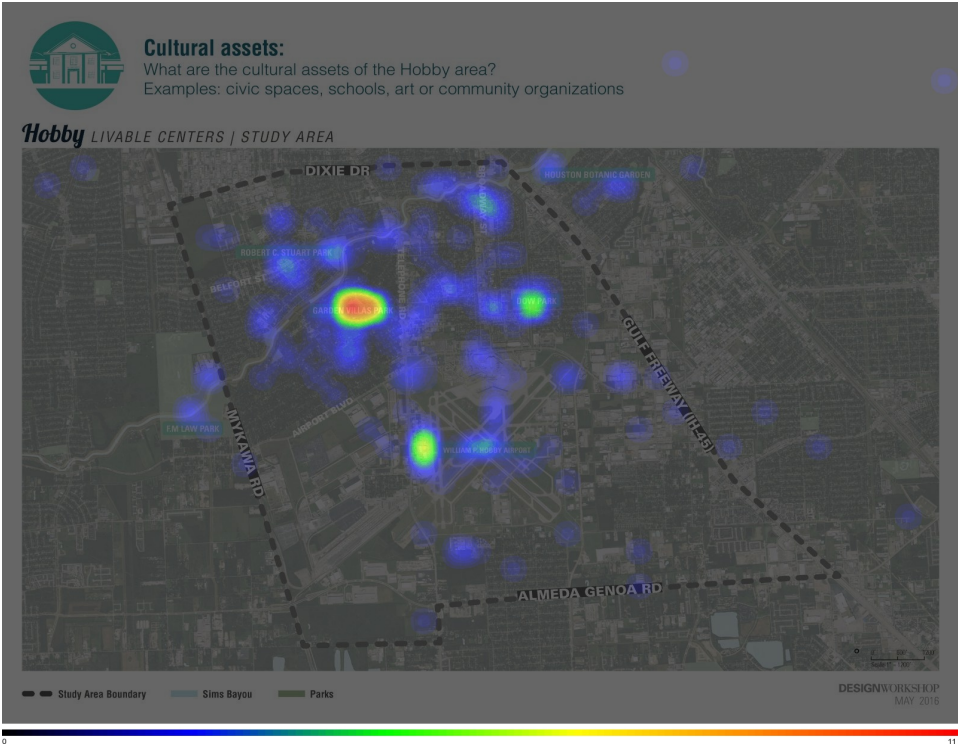
I believe the most important goal to focus on is (choose one)...



Value		Percent	Count	Percent
1	Provide travel choices in the Hobby area		15	7.5%
2	Create quality places in the Hobby area		92	46.0%
3	Improve environmental quality in the Hobby area		22	11.0%
4	Promote economic development in the Hobby area		57	28.5%
5	Other – please provide comment(s)		14	7.0%
-	Total		200	100.0%

Minimum	Maximum	Mean	Variance	Std. Dev.	Respondents
1	5	2.82	1.3	1.14	200

Click on the map to add a "pin" on the location of Hobby's cultural assets and opportunities.



If you have additional comments regarding Hobby's cultural assets, please specify below.

Access

Activities

Add

Air

Airport

Apartment

Area

Art

Artist

Asset

Association

Bayou

Big

Board

Broadway

Build

Built

Business

Care

Carmel

Cayton

Celebration

Center

Church

City

Civic

Club

Coffee

Community

Country

Courses

Cultural

Cut

Design

Display

District

Enjoy

Facilities

Farmers

Feel

Galleries

Garden

Ghetto

Glenbrook

Golf

Great

High

Historic

Hobby

Homes

Hosts

Houston

Improvement

Including

Joining

Lady

Left

Library

Live

Local

Map

Market

Meetings

Milby

Mount

Mt

Museum

Neighborhood

Organization

Parade

Park

Part

People

Place

Play

Public

Resolved

Safe

School

Serve

Shopping

Significance

Sims

Small

Spaces

Straddle

Streets

Studied

Telephone

Terminal

Town

Trail

Upgrade

Valley

Viewing

Villas

Work

Year

45

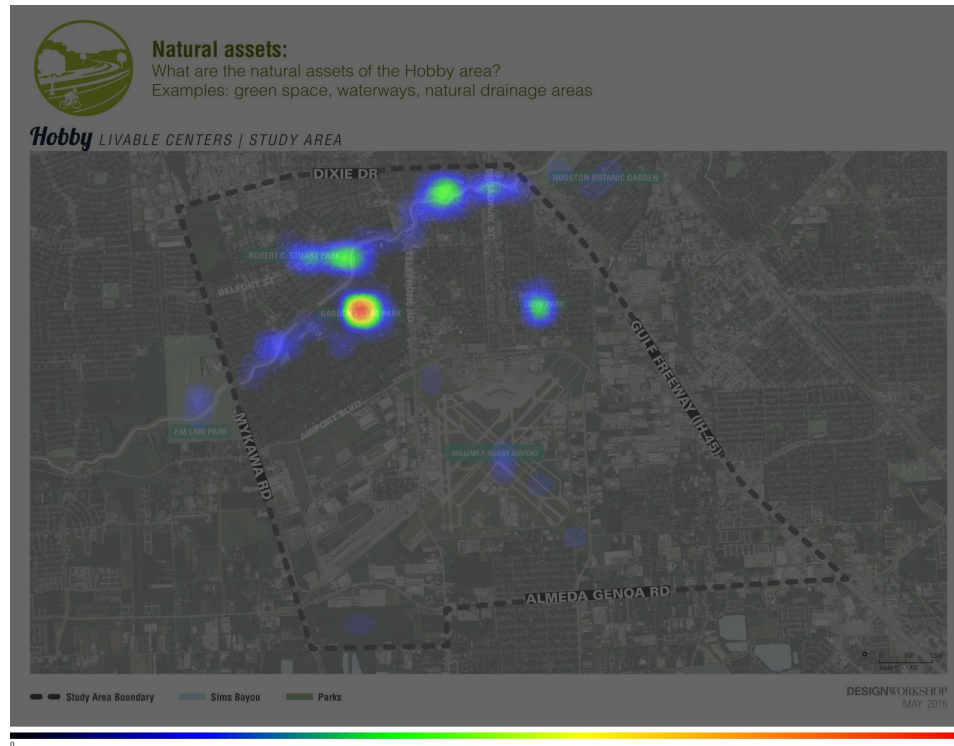
1940

1956

End Date	If you have additional comments regarding Hobby's cultural assets, please specify below.
2016-07-11 22:45:25	Hobby area has no art galleries, coffee shops that display local artist work, or a Hobby Community center.
2016-07-18 15:03:51	
2016-07-12 10:57:36	
2016-07-11 14:19:37	
2016-07-08 08:54:25	
2016-07-12 10:57:26	

Respondents
43

Click on the map to add a "pin" on the location of Hobby's natural assets and opportunities.



If you have additional comments regarding Hobby's natural assets, please specify below.

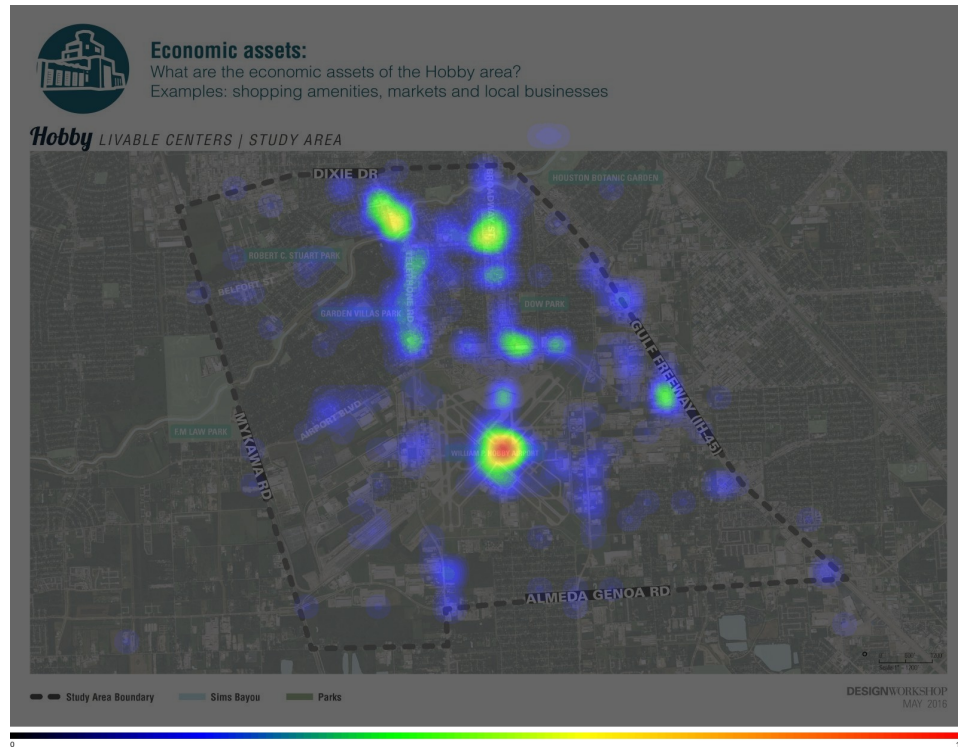
Area Asset Attention Bayou Beauty Begin Belfort Benefit Biggest Bike Blended
Botanic Boundaries Brays Buffalo Carter Channel Citizens City Clean Connect Courts Cut Developed Disposal
District Easement Enforced Enjoy Entire Environmental Exist Features Fm Garden Golf Good Great
Green Hard Hobby Homeless Include Issue Jail Land Large Law Lighting Live Love Map Mud Natural
Nearby Needed Neighborhood Nice Obstacle Opportunities Opposite Ordnance Oxbows
Park Parkl Parkway Path Pavillion Pecan People Personal Perspective Police Potential
Promised Proper Proposed Provide Recreation Restoration Reveille Safe Safety Side Sims Small Sort
Spaces Stewart Stuart Supportive Tee Template Tennis Trails Trees Type Villas Walking Wetland Years

End Date	If you have additional comments regarding Hobby's natural assets, please specify below.
2016-07-11 22:45:25	
2016-07-18 15:03:51	
2016-07-12 10:57:36	
2016-07-11 14:19:37	
2016-07-08 08:54:25	
2016-07-12 10:57:26	
2016-07-11 15:50:55	

Respondents

34

Click on the map to add a "pin" on the location of Hobby's economic assets and opportunities.



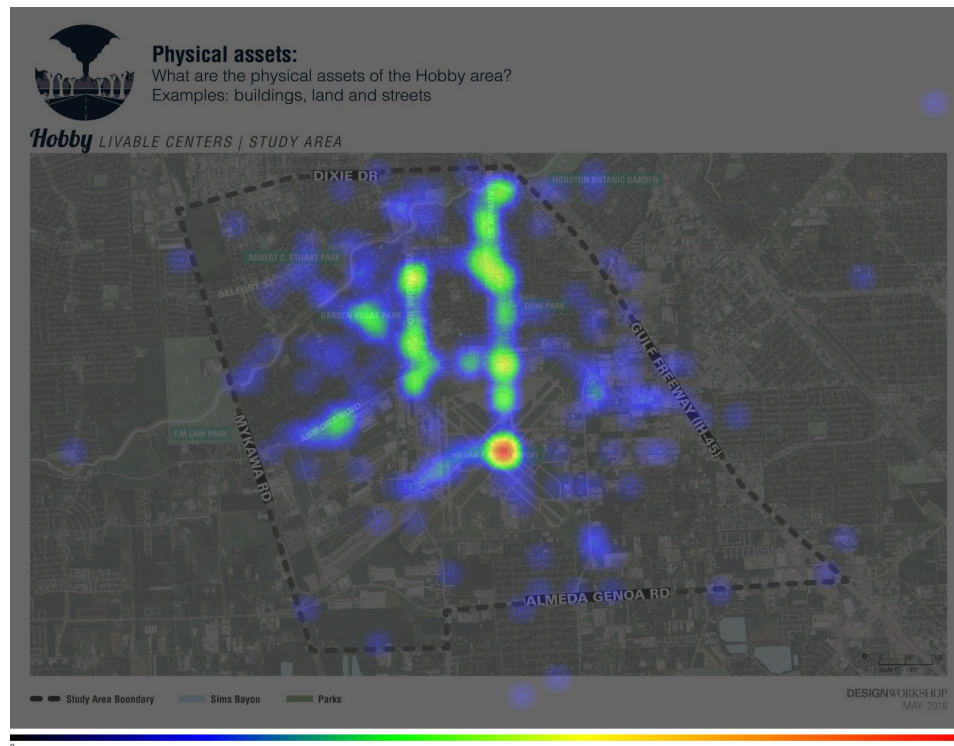
If you have additional comments regarding Hobby's economic assets, please specify below.

& **Airport** Alameda Architectural **Area** Asphalt **Asset** Attract
 Austin Aviation Bank Bbq Beautification Biggest Bnsf Bold Broadway Build **Businesses**
 Car Care Center Community Complex Corridor Design Development Diversity **Economic** Exterior
 Facelifts Fiesta Find Focus Great Gringo Grocery Held High Hispanic **Hobby** Hotels Hubs Improvements
 Industrial Jobs **Kroger** Lack Large Left Live Local Lots Maintain Major Make Map Med Monroe Neighborhood
 Opportunities Parking Personal Pizza Point Promote Quality Railway Redeveloping Redone Reflect Related Remodel
 Resident Respect **Restaurants** Retain Roadways Sadly Services Sexual Shipping **Shopping**
 Significant Standard **Stores** Streets Strip Structure Stuff Supporting Telephone Town Trees Tx Type
 Unappealing Upscale Visually Walgreens Walmart

End Date	If you have additional comments regarding Hobby's economic assets, please specify below.
2016-07-11 22:45:25	Business are lacking in our community.
2016-07-18 15:03:51	
2016-07-12 10:57:36	
2016-07-11 14:19:37	
2016-07-08 08:54:25	
2016-07-12 10:57:26	
2016-07-11 15:50:55	

Respondents
39

Click on the map to add a "pin" on the location of Hobby's physical assets and opportunities.



If you have additional comments regarding Hobby's physical assets, please specify below.

& Abandoned Absolutely Adolfo Affordable Ago Air **Airport** Apartments Appearance Architectural
Area Art Assets Belfort Big Blvd **Broadway** Buildings Businesses
 Centers Century Cheap **City** Community Complete Complexes Condition Construction Corridor Design Desirable Drainage
 Element Eventually Fix Garden Glenbrook Graphic Great **Hobby** Historic Homes Houston Huge Ideas
 Impact Implemented Importance **Improved** Industrial Insurance Invest Landscaping Leading Lightning Love Madrid–barajas
 Maintained Make Mid Neighborhood Nice Opportunities Organizations **Physical** Policy Poor Poorly Qualities Rail Reaching
 Reflect Removed Repair Requires Restaurants Road Run Sidewalks Significance Small Stars Stores
Streets Strip Stunning Suárez **Telephone** Terminal Transform Trees Unappealing
 Underestimate Unifying Valley Villas Visually Work Years 10

End Date	If you have additional comments regarding Hobby's physical assets, please specify below.
2016-07-11 22:45:25	Our streets are in poor condition!
2016-07-18 15:03:51	
2016-07-12 10:57:36	
2016-07-11 14:19:37	
2016-07-08 08:54:25	
2016-07-12 10:57:26	
2016-07-11 15:50:55	

Respondents
35

Help envision the far future of the Hobby area by answering the following.

In 20 years, I envision the Hobby area as _____ (fill in the blank with your ideas).

Area

& Access Activities Airport Apartments Bars Beautiful Businesses Children City

Clean Commercial Community Commute Connections Crime Cultural Desirable Destination Developed Dining

Diverse Downtown Drive Easy Economic Education Entertainment Environment Family Feel Friendly Full Fun

Garden Gateway Great Green Healthy Heights Higher Hobby Home Hope Housing Houston Hub Impression

Improved Including Inviting Job Light Line Livable Live Make Mixed Multi Natural Nearby Neighborhood Nice

Opportunities Options Parks Pedestrian People Place Play Proud Quality Rail Raise Recreation

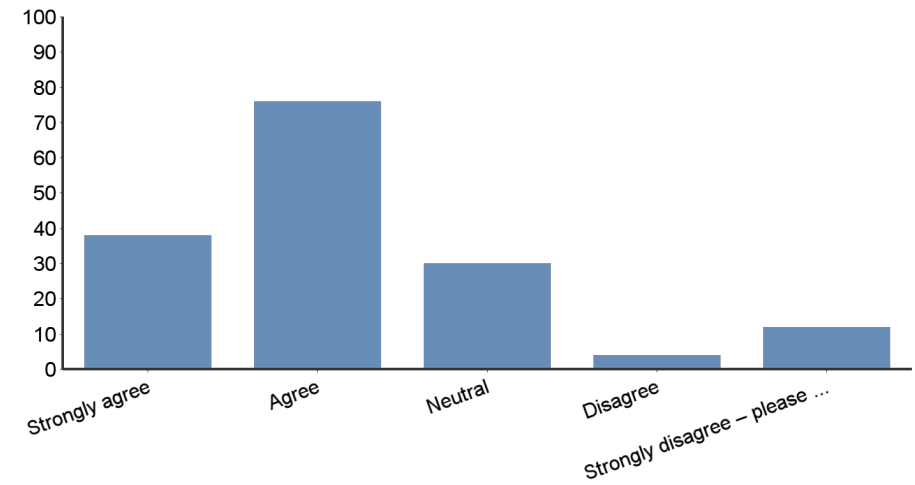
Residential Residents Restaurants Revitalized Roads Run Safe Schools Shopping Spaces Streets Thriving

Time Town Transportation Travel Trees Vibrant Villas Visit Visitors Walk Walkable Work Young

End Date	Help envision the far future of the Hobby area by answering the following. In 20 years, I envision the Hobby area as _____ (fill in the blank with your ideas).
2016-07-11 22:45:25	vital part of the Houston scene.
2016-07-18 15:03:51	
2016-07-12 10:57:36	
2016-07-11 14:19:37	
2016-07-08 08:54:25	

Respondents
136

Although I may not agree with everything stated in this online poll, I feel that the overall process for the Hobby Area Livable Centers Study is headed in the right direction.



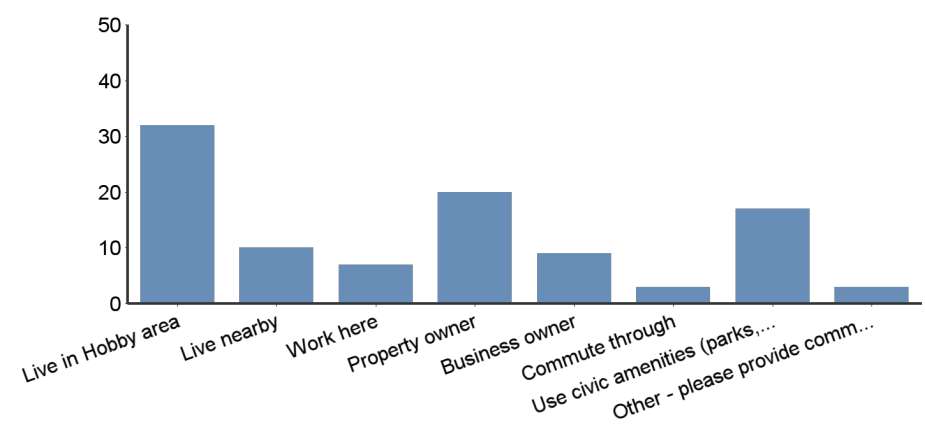
Value		Percent	Count	Percent
1	Strongly agree	<div></div>	38	23.8%
2	Agree	<div></div>	76	47.5%
3	Neutral	<div></div>	30	18.8%
4	Disagree	<div></div>	4	2.5%
5	Strongly disagree – please provide comment(s)	<div></div>	12	7.5%
-	Total	<div></div>	160	100.0%

Minimum	Maximum	Mean	Variance	Std. Dev.	Respondents
1	5	2.23	1.16	1.08	160

APPENDIX B

VALUES ONLINE POLL

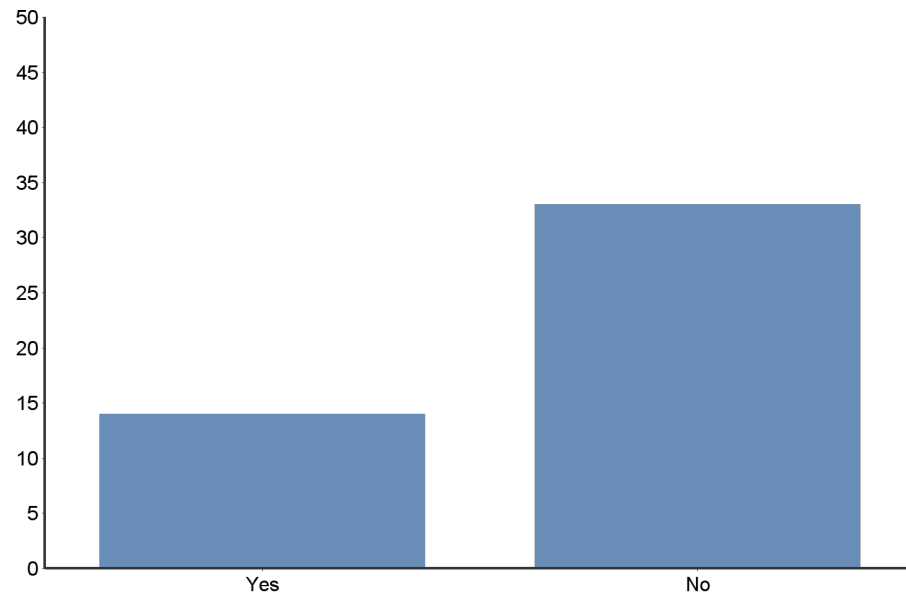
Before we begin the online survey, please tell us your connection to the Hobby area (Choose all that apply):



Value		Percent	Count	Percent
1	Live in Hobby area	<div></div>	32	69.6%
2	Live nearby	<div></div>	10	21.7%
3	Work here	<div></div>	7	15.2%
4	Property owner	<div></div>	20	43.5%
5	Business owner	<div></div>	9	19.6%
6	Commute through	<div></div>	3	6.5%
7	Use civic amenities (parks, churches, library, etc.)	<div></div>	17	37.0%
8	Other - please provide comment(s)	<div></div>	3	6.5%
-	Total	<div></div>	101	219.6%

Minimum	Maximum	Mean	Variance	Std. Dev.	Respondents
1	8	3.55	5.37	2.32	46

I was involved in or attended a meeting during May or July 2016.

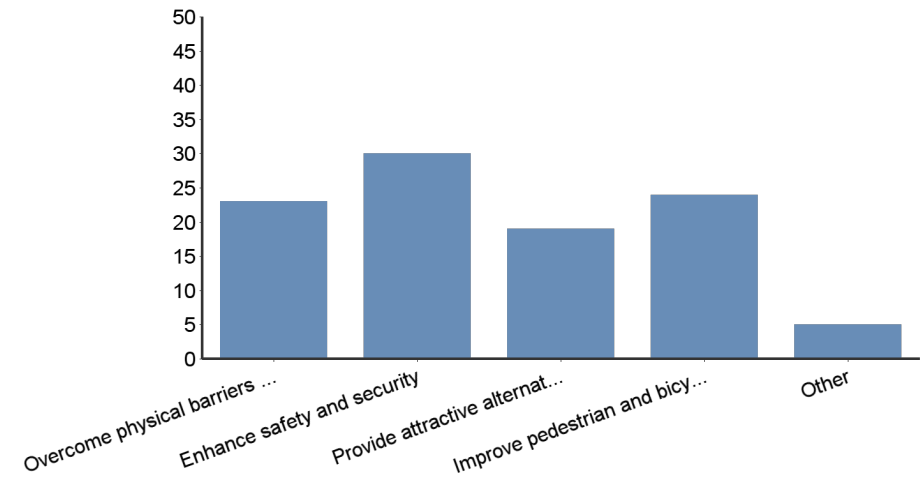


Value		Percent	Count	Percent
1	Yes	<div></div>	14	29.8%
2	No	<div></div>	33	70.2%
-	Total	<div></div>	47	100.0%

Minimum	Maximum	Mean	Variance	Std. Dev.	Respondents
1	2	1.7	0.21	0.46	47

GOAL: A CONNECTED HOBBY

Of the following ideas, which do you most agree with? (Choose all that apply):

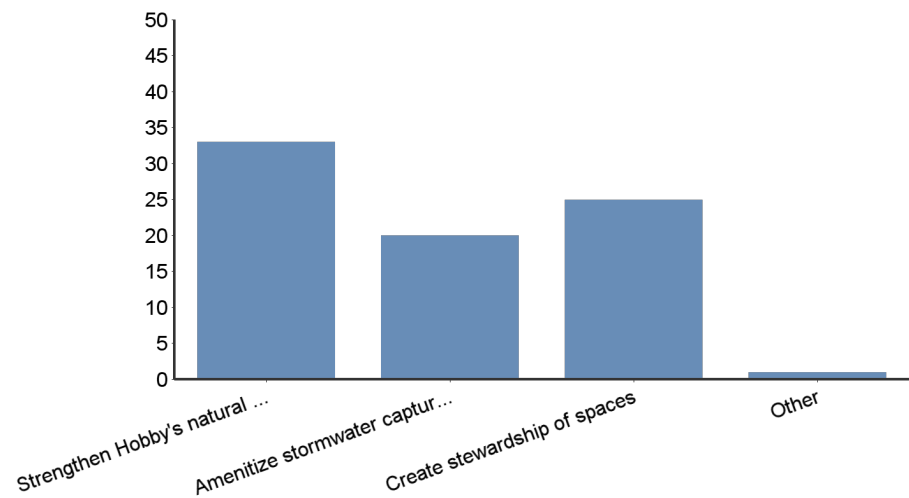


Value		Percent	Count	Percent
6	Overcome physical barriers to connect neighborhood with destinations	<div></div>	23	65.7%
7	Enhance safety and security	<div></div>	30	85.7%
8	Provide attractive alternative transportation	<div></div>	19	54.3%
9	Improve pedestrian and bicycle connections	<div></div>	24	68.6%
10	Other	<div></div>	5	14.3%
-	Total	<div></div>	101	288.6%

Minimum	Maximum	Mean	Variance	Std. Dev.	Respondents
6	10	7.58	1.49	1.22	35

GOAL: A SUSTAINABLE HOBBY

Of the following ideas, which do you most agree with? (Choose all that apply):

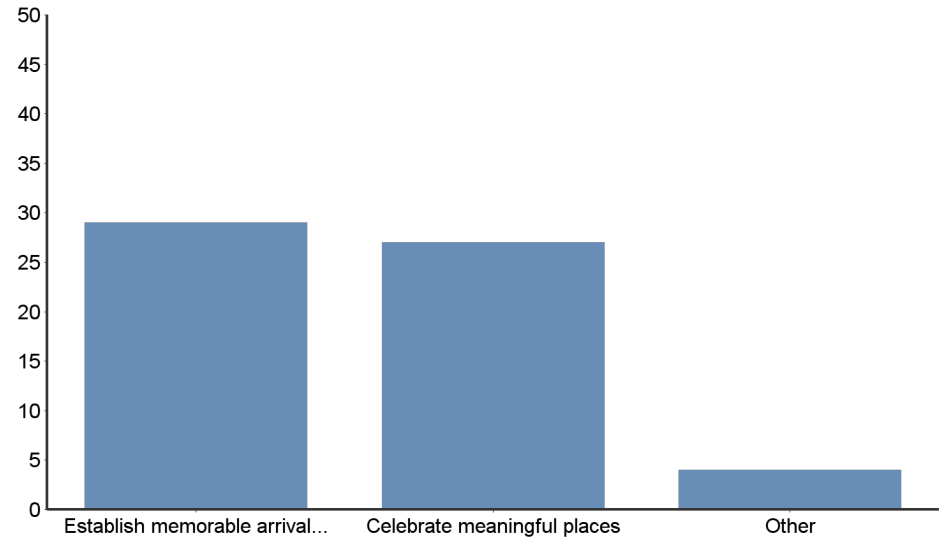


Value		Percent	Count	Percent
1	Strengthen Hobby's natural beauty	<div></div>	33	89.2%
2	Amenitize stormwater capture areas	<div></div>	20	54.1%
3	Create stewardship of spaces	<div></div>	25	67.6%
4	Other	<div></div>	1	2.7%
-	Total	<div></div>	79	213.5%

Minimum	Maximum	Mean	Variance	Std. Dev.	Respondents
1	4	1.92	0.79	0.89	37

GOAL: A VIBRANT HOBBY

Of the following ideas, which do you most agree with? (Choose all that apply):



Value		Percent	Count	Percent
1	Establish memorable arrival experiences	<div></div>	29	78.4%
2	Celebrate meaningful places	<div></div>	27	73.0%
3	Other	<div></div>	4	10.8%
-	Total	<div></div>	60	162.2%

Minimum	Maximum	Mean	Variance	Std. Dev.	Respondents
1	3	1.58	0.38	0.62	37

GOAL: A SOCIAL HOBBY

Of the following ideas, which do you agree with? (Choose all that apply):



Value		Percent	Count	Percent
4	Provide quality housing	<div></div>	22	59.5%
1	Activate social centers	<div></div>	26	70.3%
3	Enhance services for all	<div></div>	22	59.5%
8	"Hobby Centric"/Local Programing	<div></div>	26	70.3%
2	Support cultural expressionism	<div></div>	26	70.3%
5	Promote health and wellness	<div></div>	23	62.2%
6	Other	<div></div>	1	2.7%
-	Total	<div></div>	146	394.6%

Minimum	Maximum	Mean	Variance	Std. Dev.	Respondents
1	8	3.84	5.51	2.35	37

APPENDIX C

IMPLEMENTATION ONLINE POLL



EXPLORE PROJECTS

Projects are built, permanent physical changes.

Review each project and select "yes" for your favorites. After you have selected favorites, we will ask you to prioritize them.

	Minimum	Maximum	Mean	Variance	Std. Dev.	Respondents
Gateway features at key entry corridors	1	3	1.25	0.39	0.62	12
 Historic building preservation	1	3	1.33	0.42	0.65	12
Bayou entrances	1	1	1	0	0	12
Senior housing	1	3	1.42	0.45	0.67	12
Bayou trail art	1	1	1	0	0	12
Bayou retail	1	2	1.25	0.2	0.45	12
Bayou events plaza 	1	3	1.33	0.42	0.65	12
Neighborhood trail entrances	1	3	1.42	0.63	0.79	12
Neighborhood park	1	3	1.25	0.39	0.62	12
Bayou trail pedestrian bridge	1	3	1.42	0.45	0.67	12
1940 Air Terminal Museum entry plaza and park 	1	2	1.08	0.08	0.29	12
Streetscape improvements within the Artisan Industrial Hub	1	2	1.08	0.08	0.29	12
Safe crossing for bicyclists and pedestrians at Neuhaus Avenue	1	3	1.5	0.45	0.67	12
Walkable blocks along Broadway Street	1	2	1.08	0.08	0.29	12
Neighborhood goods and services	1	3	1.33	0.42	0.65	12
Light rail transit center near William P. Hobby Airport project	1	3	1.33	0.61	0.78	12
Safe bicycle routes	1	3	1.5	0.64	0.8	12
Shade tree planting	1	2	1.08	0.08	0.29	12
Inviting transit stops	1	3	1.42	0.45	0.67	12
Enhance existing parks and open spaces	1	3	1.17	0.33	0.58	12
Utility and drainage canal vision I-45 to Airport Boulevard	1	2	1.42	0.27	0.51	12
Utility and drainage canal vision Meldrum Lane	1	2	1.33	0.24	0.49	12



EXPLORE PROJECTS

Projects are built, permanent physical changes.

**Of your preferred projects, please rank each according to your priority.
(1 = highest priority)**

	Minimum	Maximum	Mean	Variance	Std. Dev.	Respondents
Gateway features at key entry corridors	1	3	1.25	0.39	0.62	12
 Historic building preservation	1	3	1.33	0.42	0.65	12
Bayou entrances	1	1	1	0	0	12
Senior housing	1	3	1.42	0.45	0.67	12
Bayou trail art	1	1	1	0	0	12
Bayou retail	1	2	1.25	0.2	0.45	12
Bayou events plaza 	1	3	1.33	0.42	0.65	12
Neighborhood trail entrances	1	3	1.42	0.63	0.79	12
Neighborhood park	1	3	1.25	0.39	0.62	12
Bayou trail pedestrian bridge	1	3	1.42	0.45	0.67	12
1940 Air Terminal Museum entry plaza and park 	1	2	1.08	0.08	0.29	12
Streetscape improvements within the Artisan Industrial Hub	1	2	1.08	0.08	0.29	12
Safe crossing for bicyclists and pedestrians at Neuhaus Avenue	1	3	1.5	0.45	0.67	12
Walkable blocks along Broadway Street	1	2	1.08	0.08	0.29	12
Neighborhood goods and services	1	3	1.33	0.42	0.65	12
Light rail transit center near William P. Hobby Airport project	1	3	1.33	0.61	0.78	12
Safe bicycle routes	1	3	1.5	0.64	0.8	12
Shade tree planting	1	2	1.08	0.08	0.29	12
Inviting transit stops	1	3	1.42	0.45	0.67	12
Enhance existing parks and open spaces	1	3	1.17	0.33	0.58	12
Utility and drainage canal vision I-45 to Airport Boulevard	1	2	1.42	0.27	0.51	12
Utility and drainage canal vision Meldrum Lane	1	2	1.33	0.24	0.49	12



PRIORITIZE PROGRAMS

One-time events or ongoing actions that do not require permanent physical changes.

**Review each program idea for Hobby, then rank them in order of importance.
(1 = highest priority)**

	Minimum	Maximum	Mean	Variance	Std. Dev.	Respondents
Job training resource fair	1	3	2.2	0.7	0.84	5
Weekend street fairs	1	3	1.33	0.67	0.82	6
Cultural history program	2	3	2.33	0.27	0.52	6



REVIEW POLICIES

Legal norms, rules or definitions that control and influence future changes.

**Review each policy idea for Hobby, then rank them in order of importance.
(1 = highest priority)**

	Minimum	Maximum	Mean	Variance	Std. Dev.	Respondents
Design guidelines for artisan industrial hub	2	4	2.8	0.7	0.84	5
Infill and reuse incentives	1	4	2.4	1.3	1.14	5
Shared parking for transit-oriented development	1	4	2.6	1.3	1.14	5
Corridor-wide design palettes	1	4	1.83	1.77	1.33	6

Please also rank your "Maybe" ideas. This will help narrow projects that are supported, but that may be more appropriate for future efforts.

(Top of the list = highest priority. To re-arrange the list, click on a project then use the arrows on either side of the window to move it up or down.)

	Minimum	Maximum	Mean	Variance	Std. Dev.	Respondents
Gateway features at key entry corridors	1	3	1.25	0.39	0.62	12
 Historic building preservation	1	3	1.33	0.42	0.65	12
Bayou entrances	1	1	1	0	0	12
Senior housing	1	3	1.42	0.45	0.67	12
Bayou trail art	1	1	1	0	0	12
Bayou retail	1	2	1.25	0.2	0.45	12
Bayou events plaza 	1	3	1.33	0.42	0.65	12
Neighborhood trail entrances	1	3	1.42	0.63	0.79	12
Neighborhood park	1	3	1.25	0.39	0.62	12
Bayou trail pedestrian bridge	1	3	1.42	0.45	0.67	12
1940 Air Terminal Museum entry plaza and park 	1	2	1.08	0.08	0.29	12
Streetscape improvements within the Artisan Industrial Hub	1	2	1.08	0.08	0.29	12
Safe crossing for bicyclists and pedestrians at Neuhaus Avenue	1	3	1.5	0.45	0.67	12
Walkable blocks along Broadway Street	1	2	1.08	0.08	0.29	12
Neighborhood goods and services	1	3	1.33	0.42	0.65	12
Light rail transit center near William P. Hobby Airport project	1	3	1.33	0.61	0.78	12
Safe bicycle routes	1	3	1.5	0.64	0.8	12
Shade tree planting	1	2	1.08	0.08	0.29	12
Inviting transit stops	1	3	1.42	0.45	0.67	12
Enhance existing parks and open spaces	1	3	1.17	0.33	0.58	12
Utility and drainage canal vision I-45 to Airport Boulevard	1	2	1.42	0.27	0.51	12
Utility and drainage canal vision Meldrum Lane	1	2	1.33	0.24	0.49	12

APPENDIX D

CONGESTION MITIGATION AND AIR QUALITY BENEFITS: AIRPORT BOULEVARD

The following metrics and table represent a high level estimate of potential air quality benefits that could arise from the development of an improved bicycle/pedestrian circulation network in the Hobby Area District.

The methodology used for this study is based on calculations derived by Cambridge Systematics for the Atlanta Regional Commission (ARC), the Atlanta Georgia region being another large urban area.

These numbers serve as a broad level estimate, as specific details of impacts due to multi-modal transportation in the Houston region would require further study.

Bike + Ped + Transit		
CALCULATION INPUTS		Source
Data Type	User-Defined Values	
Scenario Year	2017	
Annual average daily traffic (ADT) on the parallel arterial	24,456	Houston Regional Traffic Count
Capacity of parallel arterial (vph)	1,000	Atlanta Regional Council (ARC)
Length of bike/ped project (miles)	3.8	Design Workshop
Posted Speed on parallel arterial (mph)	40	Google Earth Pro
Number of destinations within 1/2 mile of project	6	Site Visits/Google Earth
Within 2 miles of a university or college (Y/N)?	N	Site Visits/Google Earth
Area Type	Suburban	Site Visits/Google Earth
Bicycle		
Does this project have a bicycle component?	Y	
Average length of one-way bicycle trips (miles)	1.8	ARC
Pedestrian		
Does this project have a pedestrian component?	Y	
Average length of one-way pedestrian trips (miles)	0.5	ARC
Transit		
Does project provide access to transit (Y/N)?	Y	
Average length of one-way transit trips (miles)	3.9	ARC
Existing daily transit boardings in project transit corridor or at fixed-guideway station	81	
Is ped/bike access to fixed guideway transit (Y/N)?	N	METRO Ridership
CONSTANTS		
Look Up Table Values and Other constants		Values
(C) activity center credit near project		0.001
(A) adjustment factor for ADT		0.002
Annualization factor		250
Increase in transit trips resulting from new bike/ped connections		2.0%
ADT to Hourly Volume Conversion		10.0%
Volume Density Function/BPR Curve Alpha		0.71
Volume Density Function/BPR Curve Beta		2.10
SCENARIO YEAR OUTPUTS		
Data Type	Value	
Annual One-Way Auto Trips Reduced (bike)	17,731	
Annual One-Way Auto Trips Reduced (walk)	17,731	
Annual One-Way Auto Trips Reduced (transit)	405	
Annual One-Way Auto Trips Reduced - Total	35,866	
Daily One-Way Auto Trips Reduced - Total	143	
Hourly Volume Reduced due to Improvements	14	
Free flow travel time on parallel arterial (minutes)	5.7	
V/C Ratio before improvements on parallel arterial	2.45	
V/C Ratio after improvements on parallel arterial	2.43	
Congested Travel Time before Improvements on parallel arterial (mins)	32.17	
Congested Travel Time after Improvements on parallel arterial (mins)	31.84	
Congested Speed (mph) before Improvements on parallel arterial	7.09	
Congested Speed (mph) after Improvements on parallel arterial	7.16	
Emission Factors - Existing		
Light Duty Emission Factor CO2(g/mi)	940.87	
Light Duty Emission Factor PM NOx(g/mi)	0.59	
Light Duty Emission Factor PM (g/mi)	0.05	
Light Duty Emission Factor NOx (g/mi)	0.91	
Light Duty Emission Factor VOC (g/mi)	0.48	

Emission Factors - Improved

Light Duty Emission Factor CO2(g/mi)	934.60
Light Duty Emission Factor PM NOx(g/mi)	0.59
Light Duty Emission Factor PM (g/mi)	0.05
Light Duty Emission Factor NOx (g/mi)	0.91
Light Duty Emission Factor VOC (g/mi)	0.47

Emissions - Existing

Light Duty Emissions CO2(g)	21,859,445,177.89
Light Duty Emissions PM NOx(g)	13,732,141.94
Light Duty Emissions PM (g)	1,133,189.79
Light Duty Emissions VOC (g)	11,106,378.59

Emissions - Improved

Light Duty Emissions CO2(g)	21,674,236,969.82
Light Duty Emissions PM NOx(g)	13,657,041.21
Light Duty Emissions PM (g)	1,123,400.35
Light Duty Emissions NOx (g)	21,098,326.56
Light Duty Emissions VOC (g)	10,999,624.85

RESULTS

DELAY/VMT IMPACT

Reduction in Annual Vehicle Hours of Delay	52,156
Annual Auto VMT Reduced	42,360

TOTAL REDUCTION

Total Annual Reductions in GHG emissions (g CO2 /year)	185,208,208
Total Annual Reductions in PM NOx Emissions (g/year)	75,101
Total Annual Reductions in PM Emissions (g/year)	9,789
Total Annual Reductions in NOx Emissions (g/year)	143,417
Total Annual Reductions in VOC Emissions (g/year)	106,754
Total Daily Reductions in GHG emissions (short tons/day)	0.817
Total Daily Reductions in PM NOx Emissions (short tons/day)	0.00033
Total Daily Reductions in PM Emissions (short tons/day)	0.00004
Total Daily Reductions in NOx Emissions (short tons/day)	0.00063
Total Daily Reductions in VOC Emissions (short tons/day)	0.00047

CONGESTION MITIGATION AND AIR
QUALITY BENEFITS: BELFORT STREET

Bike + Ped + Transit			
CALCULATION INPUTS			Source
Data Type		User-Defined Values	
Scenario Year		2017	
Annual average daily traffic (ADT) on the parallel arterial		22,943	Houston Regional Traffic Count
Capacity of parallel arterial (vph)		1,000	Atlanta Regional Council (ARC)
Length of bike/ped project (miles)		3.2	Design Workshop
Posted Speed on parallel arterial (mph)		35	Google Earth Pro
Number of destinations within 1/2 mile of project		16	Site Visits/Google Earth
Within 2 miles of a university or college (Y/N)?		N	Site Visits/Google Earth
Area Type		Suburban	Site Visits/Google Earth
Bicycle			
Does this project have a bicycle component?		Y	
Average length of one-way bicycle trips (miles)		1.8	ARC
Pedestrian			
Does this project have a pedestrian component?		Y	
Average length of one-way pedestrian trips (miles)		0.5	ARC
Transit			
Does project provide access to transit (Y/N)?		Y	
Average length of one-way transit trips (miles)		5.2	ARC
Existing daily transit boardings in project transit corridor or at fixed-guideway station		1849	
Is ped/bike access to fixed guideway transit (Y/N)?		Y	METRO Ridership
CONSTANTS			
Look Up Table Values and Other constants		Values	
(C) activity center credit near project		0.002	ARC
(A) adjustment factor for ADT		0.003	ARC
Annualization factor		250	ARC
Increase in transit trips resulting from new bike/ped connections		4.0%	ARC
ADT to Hourly Volume Conversion		10.0%	ARC
Volume Density Function/BPR Curve Alpha		0.71	ARC
Volume Density Function/BPR Curve Beta		2.10	ARC
SCENARIO YEAR OUTPUTS			
Data Type		Value	
Annual One-Way Auto Trips Reduced (bike)		24,090	
Annual One-Way Auto Trips Reduced (walk)		24,090	
Annual One-Way Auto Trips Reduced (transit)		18,490	
Annual One-Way Auto Trips Reduced - Total		66,670	
Daily One-Way Auto Trips Reduced - Total		267	
Hourly Volume Reduced due to Improvements		27	
Free flow travel time on parallel arterial (minutes)		5.5	
V/C Ratio before improvements on parallel arterial		2.29	
V/C Ratio after improvements on parallel arterial		2.27	
Congested Travel Time before Improvements on parallel arterial (mins)		27.76	
Congested Travel Time after Improvements on parallel arterial (mins)		27.22	
Congested Speed (mph) before Improvements on parallel arterial		6.92	
Congested Speed (mph) after Improvements on parallel arterial		7.05	
Emission Factors - Existing			
Light Duty Emission Factor CO2(g/mi)		955.75	
Light Duty Emission Factor PM NOx(g/mi)		0.60	
Light Duty Emission Factor PM (g/mi)		0.05	
Light Duty Emission Factor NOx (g/mi)		0.93	
Light Duty Emission Factor VOC (g/mi)		0.49	

Emission Factors - Improved

Light Duty Emission Factor CO2(g/mi)	943.86
Light Duty Emission Factor PM NOx(g/mi)	0.59
Light Duty Emission Factor PM (g/mi)	0.05
Light Duty Emission Factor NOx (g/mi)	0.92
Light Duty Emission Factor VOC (g/mi)	0.48

Emissions - Existing

Light Duty Emissions CO2(g)	17,542,256,277.03
Light Duty Emissions PM NOx(g)	10,942,568.33
Light Duty Emissions PM (g)	909,741.25
Light Duty Emissions NOx (g)	16,977,853.03
Light Duty Emissions VOC (g)	8,936,671.02

Emissions - Improved

Light Duty Emissions CO2(g)	17,180,929,322.71
Light Duty Emissions PM NOx(g)	10,777,652.79
Light Duty Emissions PM (g)	890,726.81
Light Duty Emissions NOx (g)	16,681,750.22
Light Duty Emissions VOC (g)	8,734,046.94

RESULTS

DELAY/VMT IMPACT

Reduction in Annual Vehicle Hours of Delay	81,899
Annual Auto VMT Reduced	151,555

TOTAL REDUCTION

Total Annual Reductions in GHG emissions (g CO2 /year)	361,326,954
Total Annual Reductions in PM NOx Emissions (g/year)	164,916
Total Annual Reductions in PM Emissions (g/year)	19,014
Total Annual Reductions in NOx Emissions (g/year)	296,103
Total Annual Reductions in VOC Emissions (g/year)	202,624
Total Daily Reductions in GHG emissions (short tons/day)	1.593
Total Daily Reductions in PM NOx Emissions (short tons/day)	0.00073
Total Daily Reductions in PM Emissions (short tons/day)	0.00008
Total Daily Reductions in NOx Emissions (short tons/day)	0.00131
Total Daily Reductions in VOC Emissions (short tons/day)	0.00089

CONGESTION MITIGATION AND AIR
QUALITY BENEFITS: TELEPHONE ROAD

Bike + Ped + Transit		
CALCULATION INPUTS		Source
Data Type	User-Defined Values	
Scenario Year	2017	
Annual average daily traffic (ADT) on the parallel arterial	22,305	Houston Regional Traffic Count
Capacity of parallel arterial (vph)	1,000	Atlanta Regional Council (ARC)
Length of bike/ped project (miles)	4.0	Design Workshop
Posted Speed on parallel arterial (mph)	35	Google Earth Pro
Number of destinations within 1/2 mile of project	11	Site Visits/Google Earth
Within 2 miles of a university or college (Y/N)?	N	Site Visits/Google Earth
Area Type	Suburban	Site Visits/Google Earth
Bicycle		
Does this project have a bicycle component?	Y	
Average length of one-way bicycle trips (miles)	1.8	ARC
Pedestrian		
Does this project have a pedestrian component?	Y	
Average length of one-way pedestrian trips (miles)	0.5	ARC
Transit		
Does project provide access to transit (Y/N)?	Y	
Average length of one-way transit trips (miles)	3.9	ARC
Existing daily transit boardings in project transit corridor or at fixed-guideway station	57	
Is ped/bike access to fixed guideway transit (Y/N)?	N	METRO Ridership
CONSTANTS		
Look Up Table Values and Other constants		Values
(C) activity center credit near project	0.002	ARC
(A) adjustment factor for ADT	0.003	ARC
Annualization factor	250	ARC
Increase in transit trips resulting from new bike/ped connections	2.0%	ARC
ADT to Hourly Volume Conversion	10.0%	ARC
Volume Density Function/BPR Curve Alpha	0.71	ARC
Volume Density Function/BPR Curve Beta	2.10	ARC
SCENARIO YEAR OUTPUTS		
Data Type	Value	
Annual One-Way Auto Trips Reduced (bike)	23,420	
Annual One-Way Auto Trips Reduced (walk)	23,420	
Annual One-Way Auto Trips Reduced (transit)	285	
Annual One-Way Auto Trips Reduced - Total	47,126	
Daily One-Way Auto Trips Reduced - Total	189	
Hourly Volume Reduced due to Improvements	19	
Free flow travel time on parallel arterial (minutes)	6.9	
V/C Ratio before improvements on parallel arterial	2.23	
V/C Ratio after improvements on parallel arterial	2.21	
Congested Travel Time before Improvements on parallel arterial (mins)	33.10	
Congested Travel Time after Improvements on parallel arterial (mins)	32.64	
Congested Speed (mph) before Improvements on parallel arterial	7.25	
Congested Speed (mph) after Improvements on parallel arterial	7.35	
Emission Factors - Existing		
Light Duty Emission Factor CO2(g/mi)	926.77	
Light Duty Emission Factor PM NOx(g/mi)	0.59	
Light Duty Emission Factor PM (g/mi)	0.05	
Light Duty Emission Factor NOx (g/mi)	0.90	
Light Duty Emission Factor VOC (g/mi)	0.47	

Emission Factors - Improved

Light Duty Emission Factor CO2(g/mi)	917.84
Light Duty Emission Factor PM NOx(g/mi)	0.58
Light Duty Emission Factor PM (g/mi)	0.05
Light Duty Emission Factor NOx (g/mi)	0.90
Light Duty Emission Factor VOC (g/mi)	0.46

Emissions - Existing

Light Duty Emissions CO2(g)	20,671,530,081.37
Light Duty Emissions PM NOx(g)	13,075,166.45
Light Duty Emissions PM (g)	1,071,200.99
Light Duty Emissions NOx (g)	20,166,521.24
Light Duty Emissions VOC (g)	10,475,435.37

Emissions - Improved

Light Duty Emissions CO2(g)	20,422,042,194.40
Light Duty Emissions PM NOx(g)	12,974,557.02
Light Duty Emissions PM (g)	1,058,011.43
Light Duty Emissions NOx (g)	19,973,822.39
Light Duty Emissions VOC (g)	10,331,460.27

RESULTS

DELAY/VMT IMPACT

Reduction in Annual Vehicle Hours of Delay	68,722
Annual Auto VMT Reduced	54,978

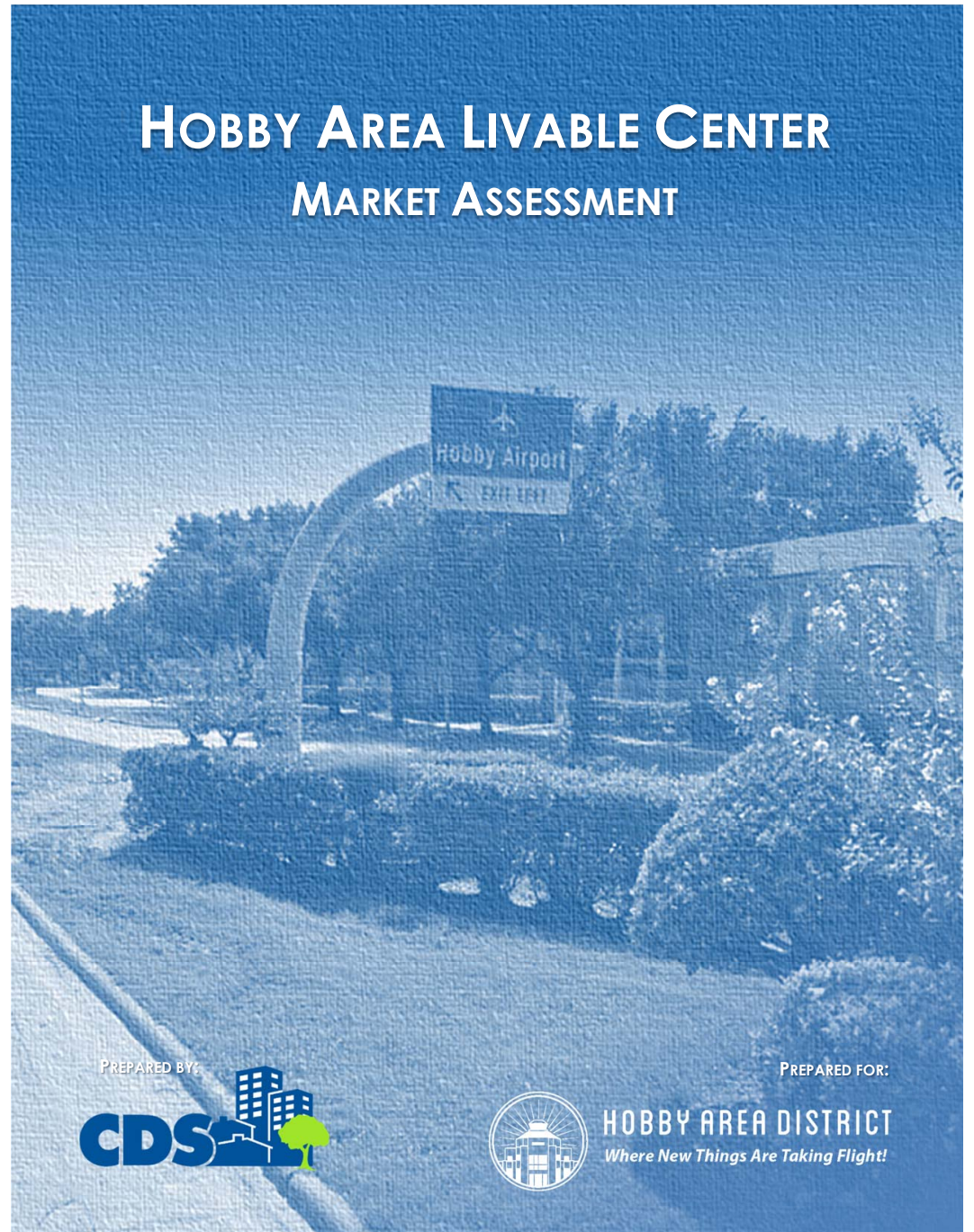
TOTAL REDUCTION

Total Annual Reductions in GHG emissions (g CO2 /year)	249,487,887
Total Annual Reductions in PM NOx Emissions (g/year)	100,609
Total Annual Reductions in PM Emissions (g/year)	13,190
Total Annual Reductions in NOx Emissions (g/year)	192,699
Total Annual Reductions in VOC Emissions (g/year)	143,975
Total Daily Reductions in GHG emissions (short tons/day)	1.100
Total Daily Reductions in PM NOx Emissions (short tons/day)	0.00044
Total Daily Reductions in PM Emissions (short tons/day)	0.00006
Total Daily Reductions in NOx Emissions (short tons/day)	0.00085
Total Daily Reductions in VOC Emissions (short tons/day)	0.00063

APPENDIX E

CDS HOBBY AREA LIVABLE CENTER MARKET ASSESSMENT

HOBBY AREA LIVABLE CENTER MARKET ASSESSMENT



PREPARED BY:



PREPARED FOR:



HOBBY AREA DISTRICT
Where New Things Are Taking Flight!

HOBBY AREA LIVABLE CENTER MARKET ASSESSMENT

Prepared for:

Hobby Area Management District

Prepared by:

CDS Community Development Strategies

1001 S. Dairy Ashford, Suite 450

Houston, TX 77077

(713) 465-8866

www.cdsmr.com

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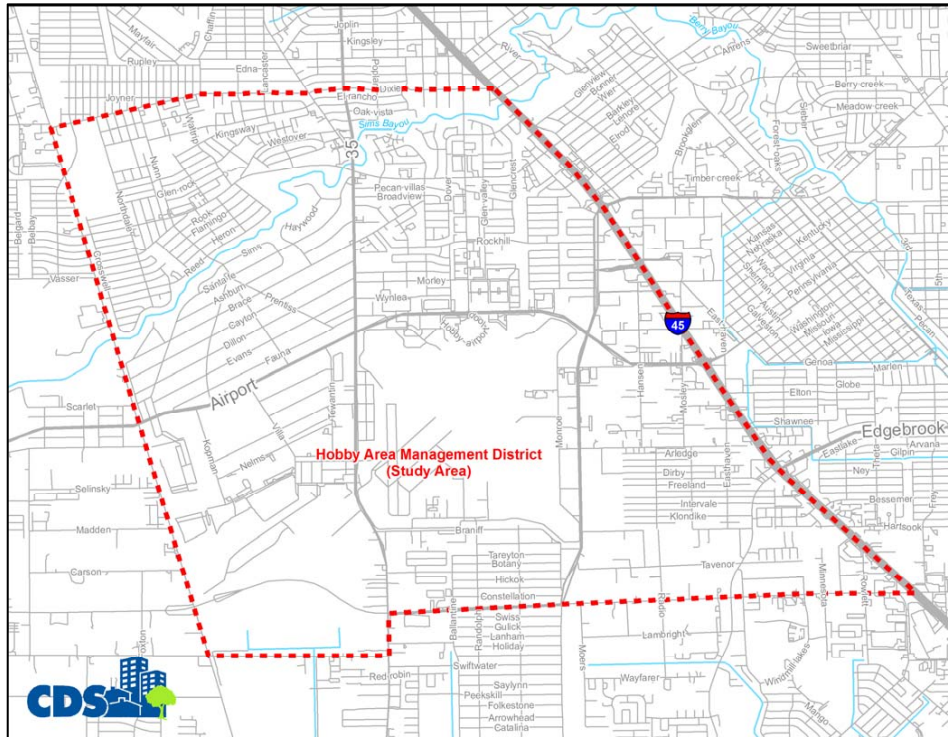
INTRODUCTION

This report summarizes the research and analysis performed by CDS Community Development Strategies (CDS) for the Hobby Area Management District Livable Center Study of the Houston-Galveston Area Council (H-GAC). It contains an overview of the market conditions and opportunities that will ultimately shape the recommendations for revitalization, redevelopment, and general enhancement of the Livable Center study area.

HOBBY AREA MANAGEMENT DISTRICT (STUDY AREA)

The Hobby Area Management District, also known as Harris County Improvement District #9, was created by the 80th Legislature in June 2007 under Section 59, Article XVI, of the Texas Constitution and Chapter 4110 of Special District Local Laws Code. The Hobby Area Management District is also referred to in this report as the District and the study area.

Figure 1: Map of Hobby Area Management District



The District includes the area south of Dixie Drive, west of Interstate 45 South, north of Almeda Genoa Road and east of Mykawa Road. This encompasses the following zip codes: 77061, 77075, and 77087.

Figure 2: Images of the Hobby Management District



Source: CDS Community Development Strategies

Purpose of the District

The vision of the District according to the 10-Year Service, Improvement and Assessment Plan (2008-2017) is to strengthen the Hobby Area Management District's local economy; enhance property values; and, improve the quality of life for both the business and residential communities utilizing urban development techniques that have already been implemented in other Management Districts in Harris County.

The thrust of the District is to promote a sense of place – a concept of identity that calls attention to the area's unique attributes and their special value to the Greater Houston Metropolitan Region. By emphasizing these attributes, the District serves as a powerful advocate on matters regarding transportation, public safety, environmental planning, and business development.

Throughout this effort, our mission is to provide positive returns on our constituents' investments, generating higher property values and a better quality of life. Our Ten-Year Plan provides a base level of services and improvements designed to achieve this by making the District safer, more attractive, and more competitive. Moreover, the plan will adapt to changing conditions and demands within the District and the community at large.

In creating a management district, property owners seek to:

- Organize themselves to pursue a common vision.
- Create capital investment, services, and improvements and supplement them where needed.
- Render continuous, focused, and professional management of the area's needs.
- Provide cost-effective funding mechanisms for improvements.
- Maintain the District as a superior place to live, work, shop, and invest.

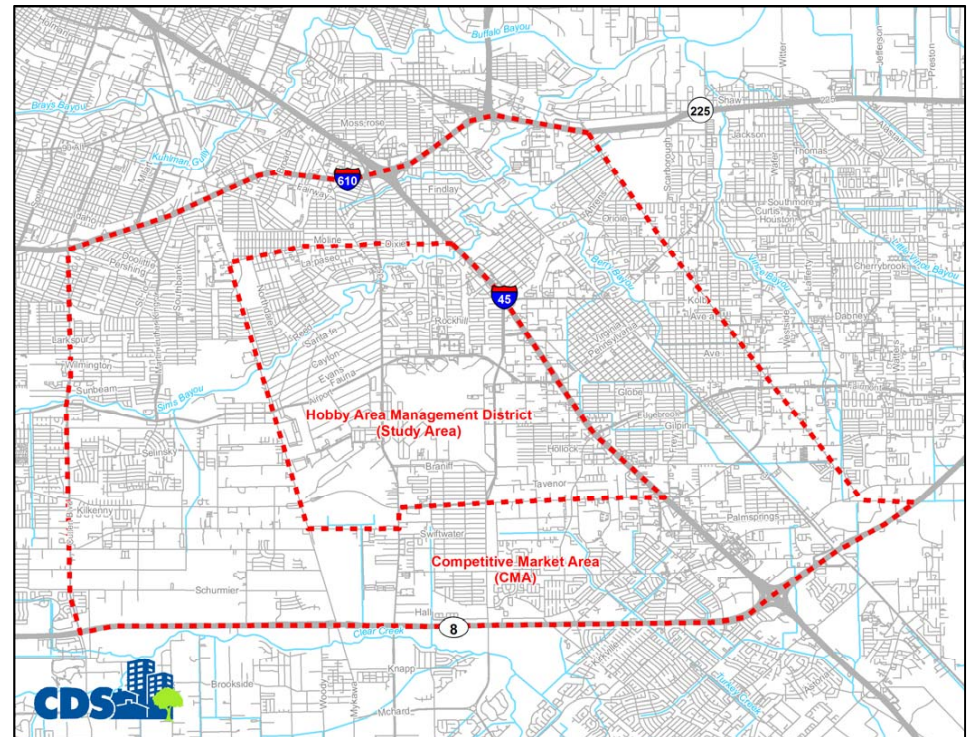
The District's Board of Directors will pursue these goals through a variety of programs and projects that are outlined in the next section. Projects for the first ten years will be focused on four areas:

1. Security and Public Safety
2. Business Development
3. Transportation Planning
4. Visual Improvements and Cultural Promotion

HOBBY AREA MANAGEMENT DISTRICT COMPETITIVE MARKET AREA (CMA)

The economic and development opportunities within the Livable Center study area are ultimately determined by the overall nature and volume of market demand in the greater area of Harris County in which the study area is located. CDS considered a Competitive Market Area (CMA), encompassing an area that is roughly bounded by the following landmarks: Loop 610 to the north, S. Allen-Genoa Road to the east, S Sam Houston Tollway (Beltway 8) to the south, and Cullen Boulevard to the west. The term “market area” and CMA are used interchangeably in this report.

Figure 3: Map of the Competitive Market Area



HOBBY AREA MANAGEMENT AREA CHARACTERISTICS

William P. Hobby Airport

William P. Hobby International Airport is a commercial & general aviation airport located about seven miles SE of downtown Houston, just west of the Gulf Freeway (US Highway - Interstate 45). With four runways and a yearly estimate of 10-million passengers, Hobby Airport is Houston's second busiest airport, after Bush Intercontinental Airport, ranked 34th in the USA for passenger traffic. In 1969, the first sections of the new Houston Intercontinental Airport (IAH) were completed, and Hobby's scheduled passenger traffic was relocated to IAH. Hobby Airport continued to serve private aviation as a "general aviation airport", which included FBO operations, corporate flights, flight training, & air-cargo operations. In 1971, Southwest Airlines reinstituted scheduled domestic passenger traffic at Hobby airport. As IAH became more crowded, other airlines also began operations at Hobby. Twelve commercial airlines currently serve Hobby Airport. The airport covers 1,304 acres which comprises a large portion of the Hobby Area Management District.

Figure 4: Aerial Images of the Hobby Airport



Source: Google Earth

Schools

The Houston Independent School District comprises to District with the exception of one elementary and one middle school located in Pasadena ISD and three alternative/charter schools. HISD enrollment in the District includes 7,508 students; Pasadena ISD enrollment is 1,704 and alternative/charter enrollment is 821 students.

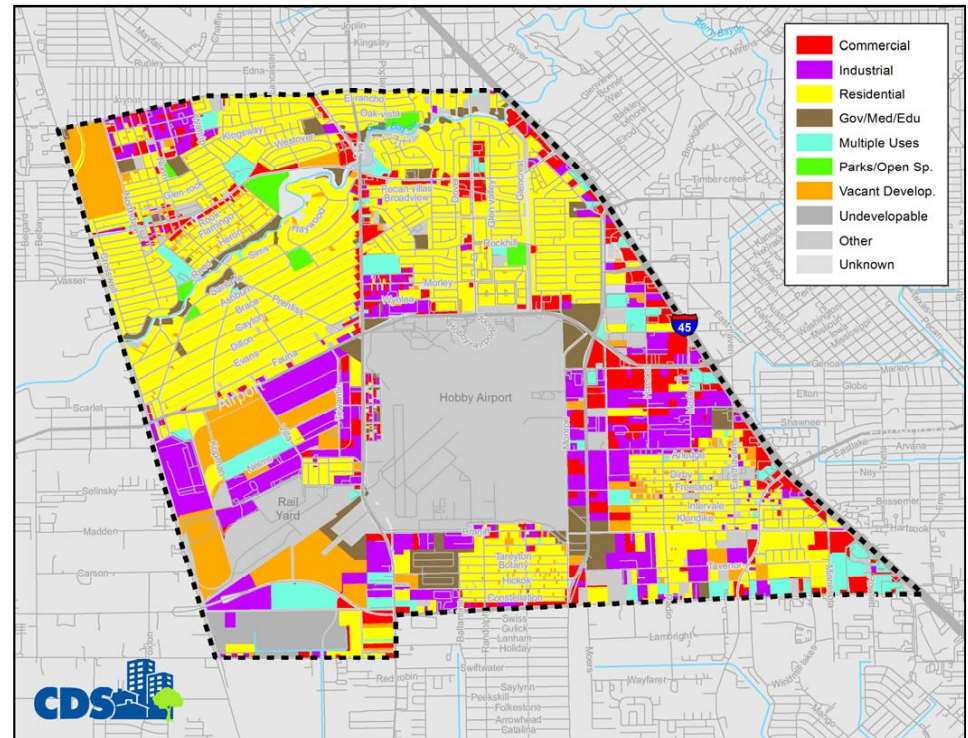
Redevelopment

The District, in partnership with Scenic Houston, the City of Houston, and others, has initiated a project aimed at improving the aesthetic appearance and pedestrian experience along Broadway Street extending from Airport Boulevard to the Gulf Freeway. The \$7.5 million project builds upon the \$17 million Broadway reconstruction project that is currently underway by the City of Houston. Upon completion, the project will present a substantially enhanced gateway into Houston from Hobby Airport while also improving mobility and quality of life for area residents, particularly those that walk the corridor or depend on METRO for travel.

Land Uses

The study area includes large areas of residential uses. Commercial, Industrial and Government / Medical / Educational uses are scattered throughout the area. The William P. Hobby airport is a major land use in the study area.

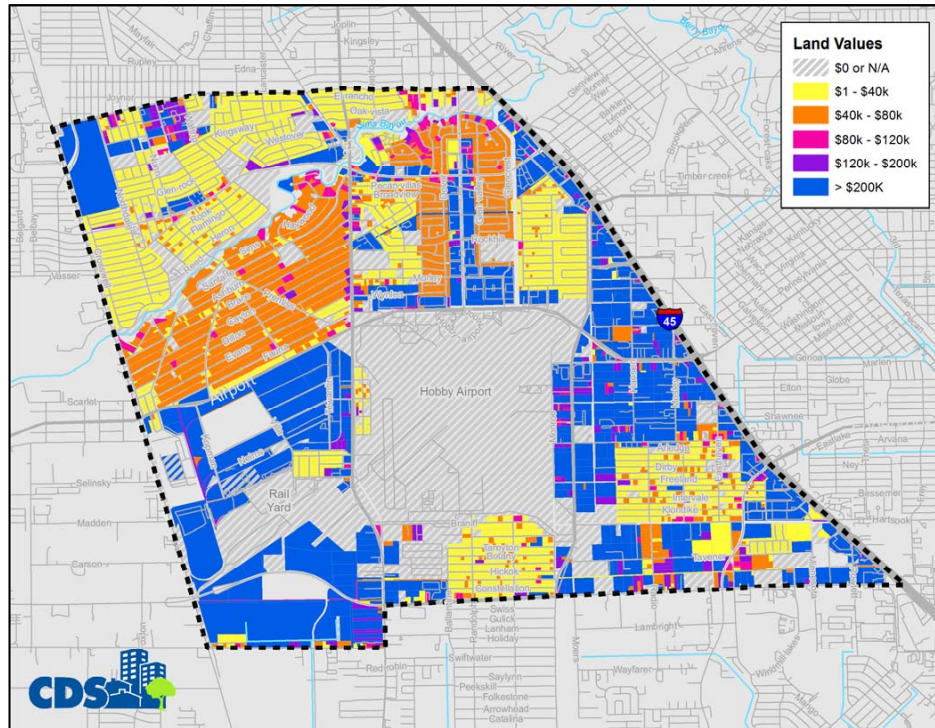
Figure 5: Land Uses in the Hobby Area Management District



Study Area Land Values

Land values in the study area vary according to the uses. Residential tends to be in the lowest land values (\$1 to \$80,000). Commercial, Industrial and Government / Medical / Educational are typically the values of \$200,000 and above.

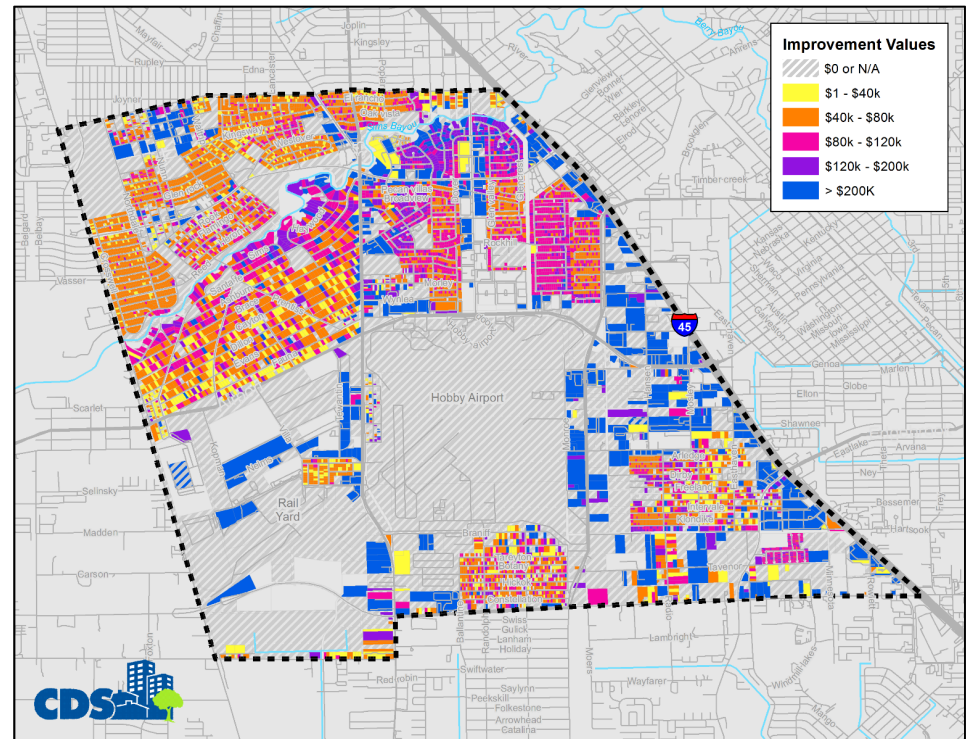
Figure 6: Land Values in the Hobby Area Management District



Study Area Improvement Values

Improvement values are scattered thru-out the study area. Residential values tend to range from \$1 to \$200,000. Commercial, Industrial and Government / Medical / Educational improvements tend to be upwards of \$200,000.

Figure 7: Improvement Values in the Hobby Area Management District



SUMMARY OF FINDINGS

DEMOGRAPHIC AND ECONOMIC ANALYSIS

- The Competitive Market Area (CMA) includes 77033, 77048, 77061 77075, 77087, 77017, 77587, and a large portion of 77034, and a small portion of 77504.
- The Study Area is defined largely by zip 77061 with a small portion of 77087 and 77075.
- The study area includes 51,917 persons while the CMA has a population of 237,434
- Since 2010, estimates for the study area show a marginal population increase of 5.4%. Over the same time period from 2010 to 2016, the CMA has seen steady growth at 6.5% while the City experienced strong growth at 10.2%.
- The CMA saw decreases in several age groups from 2010 to 2016; the largest decreases were in ages 18 to 20 and 45 to 54. The study area experienced decreases in almost half of all age groups. The highest percentage of decline in the study area took place in the age groups of 21 to 24, followed by 18 to 20. The largest increase was in ages 65 to 74 in the study area.
- The study area has 69.8% Hispanic or Latino population
- Average Household size is 3.1 in the study area and 3.2 in the CMA
- Educational attainment in the study area and CMA shows a higher portion of lower educated individuals in households as compared to the City of Houston.
- The average income in the study area is \$49,010; in the CMA, \$52,255.
- According to 2016 estimates, the study area has a slightly higher percentage of families in poverty (26.49%), when compared with the CMA and the City.
- The 2020 projections from the H-GAC and CDS projections estimate that the population in the CMA will increase by roughly 4.5%.

Table 1: Average of CDS and HGAC Forecasts - CMA

AVERAGE	2015	2020	2025	2030	2035	2040
Population	240,398	251,114	267,737	277,881	281,888	290,372
Households	74,554	77,744	83,001	86,900	89,494	93,243
Employment	80,530	83,479	87,336	90,259	93,343	95,828

- The CMA has 99,290 employed, or 41.8% of the population; there are 33.46% white collar and 43.46% blue collar workers in the study area.

SINGLE FAMILY HOUSING MARKET

- According to the latest monthly report prepared by the Houston Association of Realtors (HAR), March single-family home sales declined 2.2 percent versus March 2015, with a total of 6,001 sales compared to 6,137 a year earlier.
- The single-family home average price declined 1.6 percent to \$272,658.

Competitive Market Area Housing

- The CMA includes 73,782 housing units of which 54.8% are owner occupied.
- The median housing value of owner occupied homes is \$102,117 in the CMA.
- There were 237 sales in the first 4.5 months of 2016 in the CMA. The average price was \$109,601.
- The average price has increased by 30.3% in the CMA over the past six years.
- There were 119 sales in the CMA over \$200,000 in the past 6.5 years. On average 18 homes sold per year over \$200,000. The median sales price in this group was \$234,900.

Table 2: Housing Market CMA Home Sales

Home Sales Data	2010	2011	2012	2013	2014	2015	1/1-4/14 2016
Average DOM	64	74	68	55	53	38	36
Median DOM	40	49	36	31	24	18	17
Average Sales Price	\$84,054	\$76,152	\$81,378	\$92,898	\$102,811	\$111,805	\$109,601
Median Sales Price	\$82,700	\$75,000	\$78,050	\$85,000	\$100,000	\$112,000	\$107,900
SP/LP %	96%	95%	97%	97%	97%	97%	97%
Total Sales	872	907	924	909	978	967	237

Sources: HAR, CDS

Study Area Housing Market

- There are an estimated 18,531 housing units in the study area. Approximately 46.3% of the occupied units are owner-occupied.
- The median value for owner-occupied housing is \$111,916 which is greater than the CMA (\$102,117).
- There are 50.5% (9,358) single family housing units in the Hobby Area District (study area) and 48.2% multifamily units (8,937) which includes apartments, townhomes, duplexes, tri-plexes and four-plexes.
- In the study area, the newest development is found in Southview Villas along Hefferman Street. This development includes “for lease” townhomes built in 2015.
- Glenbrook Valley, a subdivision of midcentury homes in the study area is growing in interest to home buyers
- In the past six years (2010 - April 2016) there have been 103 sales in Glenbrook Valley. According to local realtor, Robert Searcy, prices have risen significantly over the past three years from \$69psf in 2013 to \$114 in 2016.
- There were 41 sales in the first 4.5 months of 2016 in the study area. The average price was \$114,253 which is higher than the CMA at \$109,601.
- The average price has increased by 23.1% in the study area compared to 30.3% in the CMA over the past six years.

Table 3: Study Area Housing Market Home Sales

Home Sales Data	2010	2011	2012	2013	2014	2015	1/1-4/14 2016
Average DOM	74	79	70	50	51	46	34

HOBBY AREA LIVABLE CENTER MARKET ASSESSMENT

Home Sales Data	2010	2011	2012	2013	2014	2015	1/1-4/14 2016
Median DOM	51	50	36	23	27	19	18
Average Sales Price	\$92,769	\$81,509	\$85,300	\$103,472	\$115,356	\$124,769	\$114,253
Median Sales Price	\$90,000	\$239,000	\$80,000	\$92,000	\$115,000	\$120,000	\$95,400
Average Sales Price/SF	\$52.69	\$46.14	\$47.27	\$55.98	\$62.34	\$66.11	\$68.61
SP/LP %	96%	95%	95%	93%	92%	96%	93%
Total Sales	155	170	163	131	165	163	41

Sources: HAR, CDS

- There were 44 sales in the CMA over \$200,000 in the past 6.5 years. On average 6.7 homes sold per year over \$200,000. The median sales price in this group was \$234,900.
- Average and median number of days on the market (DOM) are on a downward trend.

Potential Demand – Single Family Housing

- At 2016, Hobby Area Management District has an estimated 18.1% capture of the overall CMA housing units. Application of the capture rate to the CMA single family forecasted demand results in 361 homes by 2020 or 72 homes per year based on projected demand.

Table 4: Study Area Single Family Demand

	2020	2025	2030
CMA Projected Single Family Demand	1,990	3,278	2,431
Study Area housing unit demand (34.3%)	361	594	441
Study Area Single Family Demand Annually	72	119	88

Sources: PCensus for Map Info, Copyright 2016 Tetrad Corporation, CDS, HGAC

- Based on 2015 average sales price of \$124,769, it should be noted that the total (72 annually) does not explicitly consider supportable price feasibility – in some parts of the Study Area, it may not be feasible for a private developer to build new single family homes at the supportable market prices. Also, some demand can be satisfied by renovation or redevelopment of existing single family, some of which are currently rented.

MULTIFAMILY HOUSING MARKET

- Construction finally began to drop off in 2016 after peaking in fourth quarter 2015 at 29,005 units under construction.
- Multifamily occupancy fell slightly to 90.3% in the first quarter, from 90.6% at year-end 2015
- Average effective rents increased slightly in the first quarter to \$968 per unit, up from \$966 per unit at the close of the year.

CMA Multifamily Housing Market

- The CMA includes 23,481 units. Of these, 3,831 are affordable units (708 are Senior units).
- The CMA is a Class B/C market with 91% of the units in the market this class. Only 3% of the CMA are Class A.

- Currently occupancy is at 88.7% overall.
- Average rental rates are \$0.90 per square foot
- On average 170 units have been absorbed annually since 2009.

Study Area Multifamily Housing Market

- There are 8,064 units in 46 properties in the study area. There are 616 affordable units (340 are Senior units).
- The current lease rates are on average at \$0.92psf. Absorption has been fairly positive over the past five years.

Table 5: Study Area Multifamily

	A	B	C	Overall
Total # Projects	1	12	42	55
Total # Units	276	3,866	3,922	8,064
Total # Units 1BR		2,689	1,804	4,493
Total # Units 2BR	60	1,171	1,671	2902
Total # Units 3BR	138	1	84	223
Avg SF	1214	759	760	911
Avg Physical Vacancy	1.5%	5.75%	6.91%	4.72%
Avg Market Rent/SF	\$0.69**	\$0.92	\$0.91	\$0.92
Avg Market Rent/Unit	\$826**	\$698	\$634	\$666.00

**Class A units are tax credit. Sources: CoStar and CDS

Potential Demand – Multifamily Housing

- At 2016 (estimate) Hobby Area Management District included 30.76% of the overall CMA housing units. Application of the capture rate to the CMA multifamily demand results in 344 apartments by 2020 or 69 homes per year.

Table 6: Study Area Multifamily Demand Projections Based on Forecasts

	2020	2025	2030
CMA Projected Multifamily Demand	1,119	1,844	1,368
Study Area Multifamily demand (30.76%)	344	567	421
Study Area Multifamily Annual Demand	69	113	84

Sources: PCensus for Map Info, Copyright 2016 Tetrad Corporation, CDS, HGAC

- Rents are estimated to be \$0.88 psf - a developer will probably find this rental rate is not feasible for new construction
- Affordable units are achieving higher rents on a per sf basis in this market, however the district is not wanting additional low income units at this time
- Given the number of existing apartments in the Study Area and rental rates, CDS does not recommend conventional market rate apartments at this time.

SENIOR HOUSING

- There are six Senior tax credit (affordable) properties in the CMA with 932 units (3.2% of the overall market). Rental rates range from \$0.65 - \$1.15psf with occupancy at 100%.
- There are two Senior Housing facilities in the study area
- The study area includes 9,319 persons over the age of 55
- By 2021, the population over age 55 is expected to increase by 10,632 or 19.4% of the total population
- 17.2% of the total HH over the age of 55 have incomes between \$50,000 and \$74,999

Potential Demand – Senior Housing

- CDS estimated that the study area could capture 25.5% of the estimated market growth based on the percentage of households age 55+ currently renting in the study area. The total future Study Area household growth results in 131 additional renters in the next five years (by 2021) age 55+.

Table 7: Study Area Adult Living Demand Projections

Demand Based on Age 55+	2016	2021
CMA HH Growth	74,554	77,744
Incremental HH Growth	3,191	5,257
9.8% CMA Households age 55+ Renters	313	515
25.5% Renter HH age 55+ in Study Area	80	131

Sources: PCensus for Map Info, Copyright 2016 Tetrad Corporation, CDS, HGAC

- Class B/B+ development
- Tax Credit appears to be the most feasible in this area
- Lease rates between \$0.74psf and \$1.10 (\$0.93 on average) depending on level of amenities and finishes
- Amenities should include access gates, community room, planned activities, BBQ area, walking trails, fitness room, and pool at a minimum.
- Higher rents could be supported by shuttle service, hair salon, coffee bar, etc.
- Unit mix should consist of 55% one bedroom and 40% two bedroom units and 5% three bedrooms
- Average unit size should be consistent with the current market – 796 square feet on average

RETAIL MARKET

- A full construction pipeline is needed in the Houston market as limited supply continues to constrain leasing.
- Houston absorbed 461,000 sq. ft. in Q1 2016
- Occupancy is at 93.8% and rental rates at \$22.80 NNN

CMA Retail Market

- There are 1,046 buildings including 11,926,488 sf in the CMA.
- The average rental rate is \$13.26psf (NNN) with a vacancy rate of 5.4%.
- There is 6,000sf currently under construction.

- In the past 12 months, 60,099 square feet have been absorbed in the market.

Study Area Retail

- There are 246 retail buildings including 2,965,946 square feet in the study area. An additional 32,400 square feet is currently under construction
- The average vacancy is 6.3% with rental rates at \$15.92 psf NNN. Retail is located along the main roadways and arteries.

Potential Demand – Retail Space

- By 2021, retail sales are expected to increase by \$41,216,312
- Sales growth would equate to a demand in the study area for 137,388 square feet of new retail space of all types over the next 5 years, or 27,477 sf annually.
- There is an under-supply of 5 additional general merchandise stores in the study area. Additional under supply is also found in Eating Places and Radio/TV/Other Electronics Stores.
- The retail space should be marketed to eating and drinking places, entertainment and music venues to name a few.
- The phenomenon of pioneering local businesses such as bars or restaurants investing in the study area, has happened somewhat, and is more likely to occur with incentives or additional middle income population in the area.
- Independent local businesses serving the area's moderate income population will generally prefer the lower-rent existing, if often aged, retail space in the area over more expensive newer space, which will attract the limited set of regional and national chains that target such demographics. Increasing population growth will help mitigate this situation over time as associated retail demand increases, along with the ability of local businesses to pay higher rents.
- In some cases, an independent entrepreneur will have enough access to capital to allow for new construction or substantial renovation of existing buildings.

OFFICE MARKET

- Houston has firmly become a tenant's market, and conditions will become even more tenant-favorable as the year progresses.
- Net absorption for all classes of space totaled 996,000 SF at first quarter
- The overall office vacancy rate (including sublet) was 13.8% at first quarter
- Asking rental rates for all classes of office space have increased 0.7% from year-end to \$28.39 per SF gross.

CMA Office Market

- There are 179 office buildings totaling 2,481,933 square feet in the CMA.
- The vacancy rate is 8.8% and gross rents are at \$20.01psf.
- The average year built is 1973. There is one existing Class A building (built 2010 – 22,706sf) and one proposed (82,324sf), both in 77034 zip code. Clearly this is a Class B market

Study Area Office Market

- The study area includes 57 buildings with 899,844 square feet. The average vacancy rate is 11.8% with rental rates at \$19.17psf (gross).
- Vacancy has decreased since 2013
- Rents have increased, as much as 36% from \$14 to \$19.17psf
- The 12-month absorption was a positive 8,063sf

Potential Demand – Office Space

- By 2020, the study area will have demand for 117,616 square feet of office space based on employment projections

Table 8: Study Area Office Demand

	2015	2020	2025	2030
CMA Employment Projections	80,530	83,479	87,336	90,259
39.08% CMA Labor Force/Prof. Jobs	31,471	32,624	34,131	35,273
5 Yr increase		1,152	1,507	1,142
340 SF per Job		391,840	512,487	388,385
Less: CMA pipeline space to 2020		(82,324)		
Total CMA Demand		309,516	512,487	388,385
Study Area 38% of CMA		117,616	194,745	147,586
Annual Study Area Demand		23,523	38,949	29,517

- Given the current vacancy of 11.8% and rents of \$19 it is suggested that this development be phased in
- Demand for typical office space will grow as population increases and employment growth continues. Absorption rates are difficult to project for such product, but increments of space in the 10,000 to 20,000 square foot range would likely lease up within 18 to 20 months.
- Single-tenant office demand will be comprised primarily of tenants that are businesses/suppliers in the area due to the airport.
- General multi-tenant office demand will be comprised primarily of smaller tenants that are local businesses. These tenants are likely underserved by the existing supply of quality office space, but many will have limited capacity to increase leasing costs

HOSPITALITY MARKET

- The Houston MSA includes 87,278 rooms (YE2015) with a 66.2% estimated occupancy and a \$73.71 REVPAR.

CMA Hotel Market

- The CMA contains 2,734 hotel rooms that vary in type, quality, and size. The most recent occupancy figures for the CMA show a range from 58.4% to 68.7% for an average of 64.7%. REVPAR on average is \$43.78.

Study Area Hotel Market

- The study area includes 1,718 rooms with occupancy at an average 66.5% and REVPAR at \$44.25. The Study area includes 62.8% of the overall CMA hotel supply.
- The area near Hobby Airport has higher occupancies at 68.7% and REVPAR at \$60.43; this is the best performing zip code (77061) in the CMA.
- Full service hotels have upwards of 70% occupancies and REVPAR at \$83 - \$86

Potential Demand – Hospitality

- Based on employment and population projections, CDS estimates there will be market supported demand of an additional 76 rooms in the study area by 2020 and 114 more in the period of 2021 to 2025.
- Given the improvements to Hobby Airport and Broadway Boulevard, CDS finds possible potential for construction of a full-service hotel in the immediate vicinity of the airport, though further analysis is warranted.

Table 9: Study Area Hotel Demand Projections

Category	2015	2016-2020	2021-2025	2026-2030
Total CMA Population + Employment	320,928	334,593	355,073	368,140
Incremental CMA Population and Employment Growth		13,665	20,480	13,067
Incremental CMA Hotel Demand (8.9 Rooms/ 1,000 Pop. and Emp.)		121	181	115
Study Area Share (62.8%) Rooms		76	114	72

Sources: For Texas and Houston Region lodging information: Source Strategies; for Population, PCensus for Map Info, Copyright 2016 Tetrad Corporation, CDS /HGAC

INDUSTRIAL MARKET

- Houston's industrial market continues to weather the effects of low oil prices with positive growth.
- Overall vacancy held steady at 4.9%
- The average quoted gross monthly rent rates are \$0.55 per sq. ft. for warehouse/distribution space; \$0.88 for flex/service space; and \$0.66 per sq. ft. for manufacturing space.

CMA Industrial Market

- There are 1,388 buildings including 26,565,705 square feet of industrial space. The average vacancy is 2.4% with rental rates at \$6.33psf.
- Net absorption for the past 12 months was 14,426sf.
- There is 35,200sf under construction and an additional 116,604sf proposed

Study Area Industrial Market

- There are a total of 390 industrial buildings in the study area accounting for nearly 10 million square feet of industrial space; approximately 2% of the total industrial space in the Houston Area.
- Vacancy rate is particularly low at 1.6%.
- Rental rates are at \$6.83psf.
- According to commercial real estate brokers, the study area has both opportunities and challenges. Currently, there is a very low vacancy rate due mostly to the lack of new supply.
- Being located near major transportation corridors, including I-45, 610, and Beltway 8—is a major selling point of the study area. Having the airport nearby is also essential to a number of industrial tenants who deal with international freight shipped by air. It is also located near major industrial activity centers including the refinery activity to the south and the port activity to the east in Pasadena and Baytown. Proximity to these areas is important when considering oversized or extremely heavy loads; the shorter these loads have to travel, the better.
- Several current industrial tenants have located in the area because there is a large number of medium skilled but relatively lower wage workers. These type of workers provide a large labor pool for manufacturers.

Potential Demand – Industrial Space

- There is demand for 250,892sf in the study area by 2020 based on employment projections (50,178sf annually) despite 151,440 sf that is under construction or proposed in the CMA

Table 10: Study Area Hotel Demand Projections

Category	2015	2020	2025	2030
CMA Employment Projections	80,530	83,479	87,336	90,259
38.46% Labor Force/Industrial Jobs	25,367	26,296	27,511	28,432
5 Yr increase		929	1,215	921
825 SF per Job		766,371	1,002,338	759,615
Less: CMA pipeline space to 2020		-151,440		
Total CMA Demand		614,931	1,002,338	759,615
Study Area 36.57% of CMA		250,892	408,954	309,923
Annual Study Area Demand		50,178	81,791	61,985

- Construction of smaller free standing facilities are recommended for the smaller lots in the study area.
- Incentives should be considered for undeveloped lots with challenges to new construction—such as mitigating flood plain issues and finding alternative solutions for water retention requirements.
- Well-built public utilities are an essential element to successful industrial activity. Not only transportation, but also water, sewer and other utilities. New public investment in the area should consider the impact to industrial facilities.

- Optimal routes designating for trucking traffic are needed to promote growth and minimize the externalities to non-industrial users.
- There is potential to encourage manufacturing in the area, which would increase employment and daytime population, having a positive impact on other land uses such as retail and residential.

DEMOGRAPHIC AND ECONOMIC ANALYSIS

CDS researched primary and secondary data sources to provide a current demographic and economic portrait of the area. Past, present and future figures were estimated by utilizing data from the following sources: US Census, American Community Survey, Nielsen/Claritas – PCensus for ArcView (hereafter referred to as “PCensus”), Harris County Appraisal District, Houston—Galveston Area Council, and CDS Community Development Strategies.

Understanding the economic and demographic trends for an area is an important element in assessing the market demand for various land uses. This section examines those trends at two levels: a larger Competitive Market Area and a smaller Livable Center study area.

POPULATION CHARACTERISTICS

This section examines the historical population growth, current population estimates, ethnic makeup, household size, educational attainment, current household income, employment, and income trends of the study area, CMA, and City of Houston.

Historical Population Growth and Current Estimates

According to data from the US Census, population in the study area increased slightly from 2000 to 2010. Since 2010, estimates for the study area show a marginal increase of 5.4%. Over the same time period from 2010 to 2016, the CMA has seen steady growth at 6.5% while the City experienced strong growth at 10.2%.

Table 11: Population and Households, 2000 to 2021

Population	2000 Census	2010 Census	2016 Estimate	2021 Estimate	↑ '16-'21
Study Area	44,896	49,217	51,917	54,650	5.26%
CMA	199,410	222,900	237,434	251,150	5.78%
City of Houston	1,974,547	2,099,451	2,315,052	2,464,955	6.48%
Households	2000 Census	2010 Census	2016 Estimate	2021 Estimate	↑ '16-'21
Study Area	15,053	15,877	16,574	17,372	4.81%
CMA	64,544	69,665	73,782	77,935	5.63%
City of Houston	725,156	780,148	865,980	926,843	7.03%

Source: US Census, American Community Survey, Nielsen/Claritas 2016 Estimates – PCensus for ArcView (hereafter referred to as PCensus)

The following table breaks down the population growth by age groups. The CMA saw decreases in several age groups, the largest decrease in ages 18 to 20 and 45 to 54. The study area experienced decreases in almost half of all age groups. The highest percentage of decline in the study area took place in the age groups of 21 to 24, followed by 18 to 20. The largest increase was in ages 65 to 74 in the study area.

Table 12: Population by Age, 2010 to 2016

Population By Age	LC Study Area			CMA			City of Houston		
	2010	2016	% ↑	2010	2016	% ↑	2010	2016	% ↑
Total Population	49,217	51,917		222,900	237,434		2,099,451	2,315,052	
Age 0 to 4	4,903	4,895	-0.53%	20,770	21,047	-0.46%	170,783	174,590	-0.59%
Age 5 to 9	4,219	4,407	-0.08%	19,144	19,810	-0.25%	151,525	170,698	0.15%
Age 10 to 14	3,861	4,192	0.22%	18,226	19,052	-0.16%	137,765	159,359	0.32%
Age 15 to 17	2,263	2,411	0.04%	10,925	11,246	-0.16%	83,941	91,642	-0.04%
Age 18 to 20	2,370	2,198	-0.59%	10,742	10,294	-0.48%	89,672	90,264	-0.37%
Age 21 to 24	3,342	2,990	-1.03%	14,011	14,173	-0.32%	139,168	123,869	-1.28%
Age 25 to 34	8,037	8,449	-0.06%	34,584	36,915	0.03%	372,267	400,665	-0.42%
Age 35 to 44	6,571	7,205	0.53%	29,934	32,476	0.25%	291,620	331,098	0.41%
Age 45 to 54	5,810	5,852	-0.53%	26,990	27,624	-0.48%	269,566	281,881	-0.66%
Age 55 to 64	4,290	4,887	0.69%	19,070	22,441	0.89%	203,367	245,722	0.92%
Age 65 to 74	2,094	2,845	1.23%	10,780	13,595	0.89%	106,547	148,141	1.33%
Age 75 to 84	1,077	1,174	0.07%	5,935	6,529	0.09%	60,132	69,131	0.13%
Age 85 and over	380	413	0.03%	1,790	2,232	0.14%	23,098	27,992	0.11%
Median Age	29.54	30.76		30.1	31.26		32.44	33.66	

Source: US Census, American Community Survey, PCensus

Household Size

The following table provides statistics on the various household sizes contained within the outlined geographies. Both the study area and the CMA closely resemble each other, although the study area and CMA have larger household sizes. A noticeable difference is in the 1-person households which are significantly greater in the City.

Table 13: Household Size, 2016

Category	LC Study Area	CMA	City of Houston
Total Households	16,574	73,782	865,980
1-person household	22.02%	20.53%	31.20%
2-person household	23.22%	22.86%	27.45%
3-person household	17.46%	17.49%	15.24%
4-person household	15.52%	15.96%	12.13%
5-person household	10.61%	11.47%	7.23%
6-person household	5.92%	6.28%	3.72%
7+ household	5.25%	5.42%	3.01%
Estimated HH Size	3.13	3.21	2.63

Source: US Census, American Community Survey, PCensus

Educational Attainment

Educational attainment in the study area and CMA has a higher portion of lesser-educated individuals in households as compared to the City. The study area has roughly one-third the percentage of bachelor's degrees and professional and graduate degrees (master's and doctorate), when compared with the City of Houston.

Table 14: Educational Attainment of Population 25+ Years Old, 2016

Category	LC Study Area	CMA	City of Houston
Less than 9th grade	23.86%	20.25%	13.72%
Some High School, no diploma	15.68%	14.76%	10.07%
High School Graduate (or GED)	31.98%	31.13%	22.75%
Some College, no degree	15.33%	19.02%	18.92%
Associate Degree	3.97%	4.33%	4.61%
Bachelor's Degree	6.64%	7.51%	18.43%
Master's Degree	1.83%	2.15%	7.47%
Professional School Degree	0.54%	0.51%	2.49%
Doctorate Degree	0.15%	0.34%	1.53%

Source: US Census, American Community Survey, P Census

Household Income

This section provides information on income growth for households in the study area and CMA. From the year 2000 to 2016. As can be seen in the table, the share of all households in the CMA making over \$75,000 increased, with significant growth seen between the \$100,000 to \$199,999 categories. The study area also saw a concurrent increase in higher incomes with the exception of incomes over \$500,000.

Table 15: Household Income Groups, 2000 to 2016

Household Income	LC Study Area 2000		LC Study Area 2016		CMA 2000		CMA 2016	
Households	15,049		16,574		64,557		73,782	
Less than \$15,000	3,017	20.05%	3,087	18.63%	13,236	20.50%	11,952	16.20%
\$15,000 to \$24,999	2,770	18.40%	2,831	17.08%	10,541	16.33%	11,069	15.00%
\$25,000 to \$34,999	2,614	17.37%	2,080	12.55%	10,873	16.84%	9,488	12.86%
\$35,000 to \$49,999	2,618	17.40%	2,906	17.53%	11,959	18.53%	12,480	16.91%
\$50,000 to \$74,999	2,155	14.32%	2,485	14.99%	10,676	16.54%	12,198	16.53%
\$75,000 to \$99,999	1,062	7.06%	1,345	8.12%	4,225	6.54%	7,685	10.42%
\$100,000 to \$124,999	467	3.10%	865	5.22%	1,518	2.35%	4,577	6.20%
\$125,000 to \$149,999	122	0.81%	476	2.87%	583	0.90%	2,077	2.82%
\$150,000 to \$199,999	103	0.68%	309	1.86%	440	0.68%	1,411	1.91%
\$200,000 to \$249,999	58	0.39%	101	0.61%	295	0.46%	439	0.59%
\$250,000 to \$499,999	44	0.29%	69	0.42%	179	0.28%	327	0.44%
\$500,000 or more	19	0.13%	21	0.13%	31	0.05%	81	0.11%
Estimated Avg. Income		\$41,290		\$49,010		\$41,007		\$52,255

Source: US Census, American Community Survey, P Census, Bureau of Labor Statistics CPI Inflation Calculator

Poverty Status

The poverty status of families is examined in order to ascertain the level of economic challenge. The data presented comes from the Census Bureau, which uses a set of money income thresholds that vary by family size and composition to determine who is in poverty. If a family's total income is less than the family's threshold, then that family and every individual in it is considered in poverty. The official poverty thresholds do not vary geographically, but they are updated for inflation using Consumer Price Index. The official poverty definition uses money income before taxes and does not include capital gains or noncash benefits (such as public housing, Medicaid, and TANF).

Table 16: Poverty Status, 2016

Income	LC Study Area	CMA	City of Houston
2016 Families at or Above Poverty	73.51%	76.75%	80.15%
2016 Families at or Above Poverty with Children	40.29%	41.07%	37.52%
2016 Families Below Poverty	26.49%	23.25%	19.85%
2016 Families Below Poverty with Children	22.22%	19.54%	15.98%

Source: US Census, American Community Survey, PCensus

According to 2016 estimates, the study area has a slightly higher percentage of families in poverty, when compared with the CMA and the City.

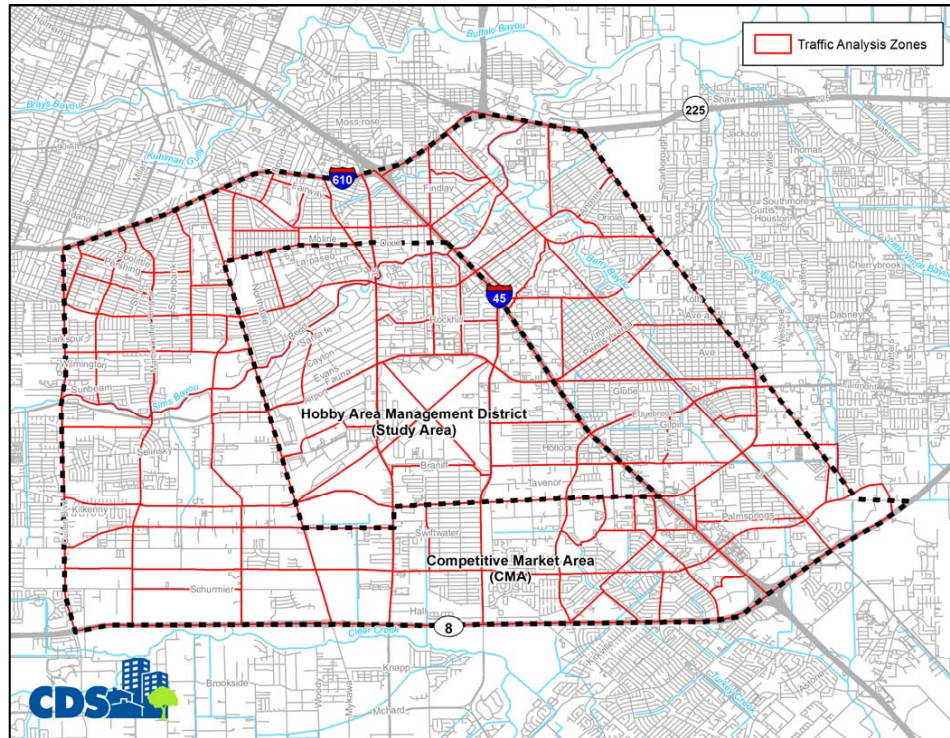
LONG TERM AREA PROJECTIONS

This section presents population projections which estimate both the short term and long term demographic possibilities for the study area and CMA. Developers who are interested in investing in the area will likely consult such projections in order to determine how successful their project may be.

Short term, demographic forecasts for the study area and CMA were determined by utilizing PCensus data, which uses a formula to project future numbers based on existing Census data trends. Long term projections in the Houston MSA are provided by the The Houston—Galveston Area Council (H-GAC), which offers five year projections extending from 2015 to 2040. These estimates are available by Traffic Area Zones (TAZ).

CDS Community Development Strategies also provides future population projections, and these have been included. The projections by CDS are similar to the H-GAC's projections in that they are also connected to the TAZ geography. As can be seen in the following map, the TAZs associated with the CMA and study area are roughly equivalent to the area boundaries.

Figure 8: Traffic Analysis Zones Covering the CMA



The following three tables display short term study area and CMA projections based on Census trends, as well as longer term study area and CMA projections provided by the H-GAC and CDS Community Development Strategies.

Table 17: Short Term Study Area and CMA Projections Based on US Census Trends

Population	2000 Census	2010 Census	2016 Estimate	2021 Estimate
Study Area	44,896	49,217	51,917	54,650
CMA	199,410	222,900	237,434	251,150
Households	2000 Census	2010 Census	2016 Estimate	2021 Estimate
Study Area	15,053	15,877	16,574	17,372
CMA	64,544	69,665	73,782	77,935

Source: US Census, American Community Survey, PCensus

The short term projections based on US Census trends estimate that from the year 2016 to 2021 the study area population will grow at 4.8% while the CMA will grow at 5.7%. This equates to roughly 798 new individuals in the

study area and 13,716 in the CMA. The 2020 projections from the H-GAC and CDS projections estimate that the population in the CMA will increase by roughly 4.5%. However, the estimates vary by the number of persons.

Table 18: Longer Term CMA Projections from the H-GAC

H-GAC Forecasts	2015	2020	2025	2030	2035	2040
Population	255,583	266,605	293,180	308,108	312,453	326,940
Households	77,619	80,164	88,189	93,947	97,862	104,477
Employment	69,417	71,728	74,461	76,412	79,186	81,060

Source: H-GAC 2016 Forecasts

Table 19: Longer Term CMA Projections from CDS

CDS Forecasts	2015	2020	2025	2030	2035	2040
Population	225,212	235,622	242,294	247,653	251,323	253,804
Households	71,488	75,324	77,813	79,853	81,125	82,009
Employment	91,642	95,229	100,211	104,106	107,499	110,596

Source: CDS Community Development Strategies, 2015

The projections from the H-GAC and CDS also include estimates for households, and employment. Looking at jobs gains, both projections assume the areas will continue to grow, although the CDS is much more ambitious in its forecast for the CMA, while H-GAC estimates the study area will gain more employment. For our analysis herein, we will use an average of both of these forecasts due to the differences in actual numbers. The following will be used to illustrate the growth in the CMA.

Table 20: Average CDS and HGAC Projections for the CMA

AVERAGE	2015	2020	2025	2030	2035	2040
Population	240,398	251,114	267,737	277,881	281,888	290,372
Households	74,554	77,744	83,001	86,900	89,494	93,243
Employment	80,530	83,479	87,336	90,259	93,343	95,828

Source: CDS Community Development Strategies, H-GAC

EMPLOYMENT AND ECONOMY

This section provides local employment and economic statistics—key indicators used to examine the development potential of an area.

Employment by Occupation and Classification

As previously mentioned, the study area has a population of 51,917. Of that amount, 21,531—or 41.4%—are at least 16 years old and employed. The CMA has 99,290 employed, or 41.8%. For the City, the percentage of those 16 and older who are employed is 47.5%. The following tables break down this employed population by occupation for all geographies.

Table 21: Employment by Occupation, 2016

Estimated Employed Population Age 16 and Over by Occupation	Study Area		CMA		City of Houston	
	21,531	%	99,290	%	1,100,253	%
Architect/Engineer	148	0.69%	834	0.84%	30,619	2.78%
Arts/Entertainment/Sports	168	0.78%	785	0.79%	19,029	1.73%
Building Grounds Maintenance	1,592	7.39%	6,618	6.67%	64,451	5.86%
Business/Financial Operations	405	1.88%	2,394	2.41%	59,391	5.40%
Community/Social Services	201	0.93%	1,022	1.03%	12,148	1.10%
Computer/Mathematical	122	0.57%	768	0.77%	24,911	2.26%
Construction/Extraction	3,656	16.98%	14,359	14.46%	94,920	8.63%
Education/Training/Library	676	3.14%	3,517	3.54%	54,252	4.93%
Farming/Fishing/Forestry	169	0.79%	497	0.50%	2,196	0.20%
Food Prep/Serving	1,904	8.84%	7,611	7.67%	70,457	6.40%
Healthcare Practitioner	433	2.01%	2,684	2.70%	48,626	4.42%
Healthcare Support	588	2.73%	2,749	2.77%	26,910	2.45%
Maintenance Repair	1,461	6.79%	4,728	4.76%	35,896	3.26%
Legal	125	0.58%	591	0.59%	20,199	1.84%
Life/Physical/Social Science	35	0.16%	442	0.44%	14,188	1.29%
Management	639	2.97%	3,922	3.95%	88,000	8.00%
Office/Admin. Support	2,678	12.44%	13,745	13.84%	129,379	11.76%
Production	2,535	11.78%	10,552	10.63%	68,712	6.25%
Protective Service	319	1.48%	1,853	1.87%	18,203	1.65%
Sales/Related	1,576	7.32%	8,102	8.16%	111,837	10.16%
Personal Care/Service	420	1.95%	2,968	2.99%	34,485	3.13%
Transportation/Moving	1,682	7.81%	8,550	8.61%	71,444	6.49%
Type of Worker						
Blue Collar	9,335	43.36%	38,189	38.46%	270,972	24.63%
White Collar	7,205	33.46%	38,805	39.08%	612,579	55.68%
Service & Farm	4,991	23.18%	22,296	22.46%	216,702	19.70%

Source: US Census, American Community Survey, PCensus

As shown, there are 33.46% white collar and 43.46% blue collar workers in the study area. The largest percentage of the population are in Construction/Extraction occupations, followed by Office/Admin Support. As compared to the City, the study area and the CMA have a much lower percentage of white collar workers. These percentages corroborate the information presented earlier, showing the study area and CMA with lower educational attainment rates and lower average incomes.

Employment Inflow and Outflow

To better understand local demand for various land uses, it is helpful to take a look at the jobs data provided by the Longitudinal Employer-Household Dynamic (LEHD), which is part of the US Census Bureau. While the most recent data available is from 2014 (and differs slightly from the employment estimates provided previously), it is still helpful in understanding present day commuting patterns.

Table 22: Employment Inflow and Outflow, 2014

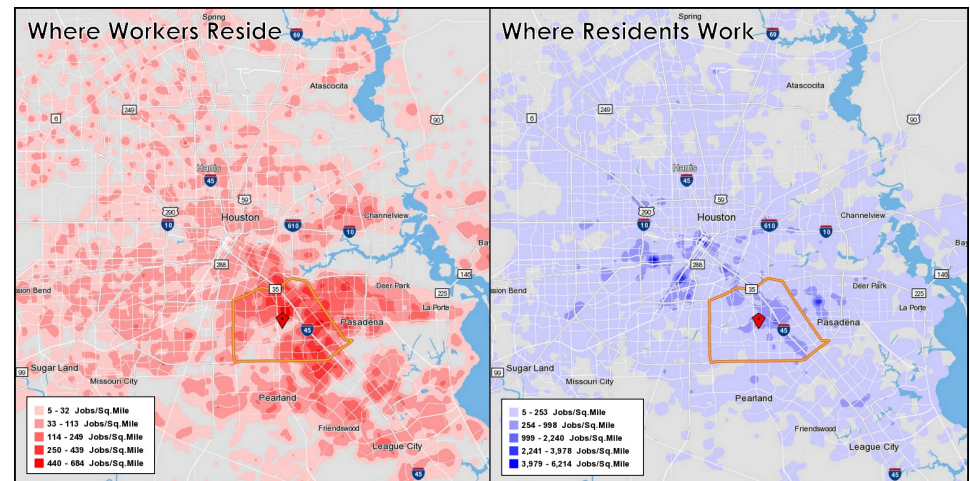
Employment Inflow/Outflow	Study Area		CMA	
	#	%	#	%
Employed in the Area	23,405	100.0%	70,140	100.0%
Employed in the Area but Living Outside	22,387	95.7%	60,440	86.2%
Employed in the Area and Living Inside	1,018	4.3%	9,700	13.8%
Living in the Area and Employed	17,217	100.0%	89,580	100.0%
Living in the Area but Employed Outside	16,199	94.1%	79,880	89.2%
Living in the Area and Employed Inside	1,018	5.9%	9,700	10.8%

Source: US Census Longitudinal Employer-Household Dynamics, 2014

Note: 2014 is latest data available from the Census LEHD

The following figure utilizes LEHD data to provide a visualization of where workers in the CMA reside, and where residents in the CMA work. As can be seen, workers come from all parts of the Houston area, but a relatively large percentage (13.8%) are employed in the CMA *and* living inside.

Figure 9: Where Workers in the CMA Reside, Where Residents in the CMA Work



Source: US Census, LEHD 2014, CDS

SINGLE FAMILY HOUSING

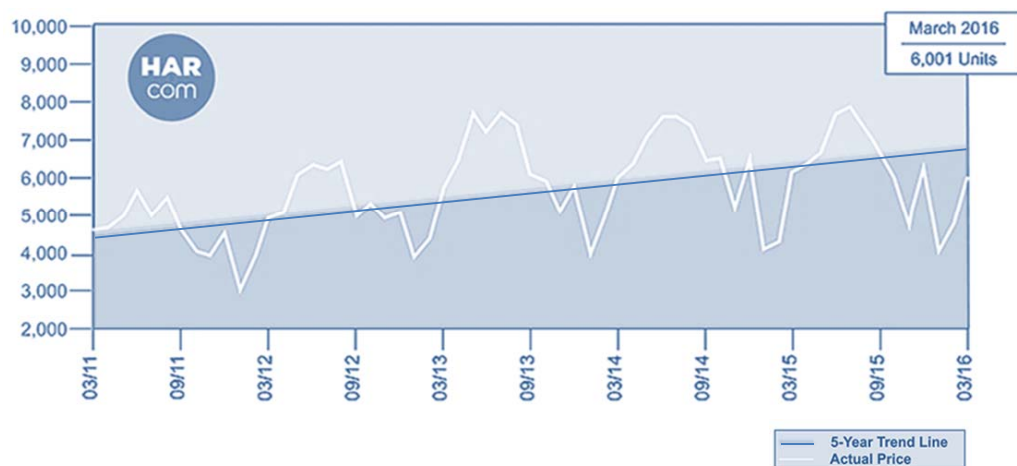
OVERALL HOUSTON MARKET

Houston Association of Realtors (HAR) reported despite continued strains in the oil patch, the Houston real estate market demonstrated more sustainable conditions in March, with positive sales among mid-range homes and a growing supply of homes from which buyers can choose.

According to the latest monthly report prepared by the Houston Association of Realtors (HAR), March single-family home sales declined 2.2 percent versus March 2015, with a total of 6,001 sales compared to 6,137 a year earlier. On a year-to-date basis, however, home sales are 1.0 percent ahead of last year's pace. New listings helped boost inventory from a 2.8-months supply to 3.6 months. "Overall home sales held steady throughout March, and much of that may be due to an influx of new residents throughout the Houston area even as the energy industry suffered more layoffs," said HAR Chairman Mario Arriaga with First Group. "Positive home sales in the \$150,000 to \$250,000 price range and increasing housing inventory suggest that we are in a more sustainable market."

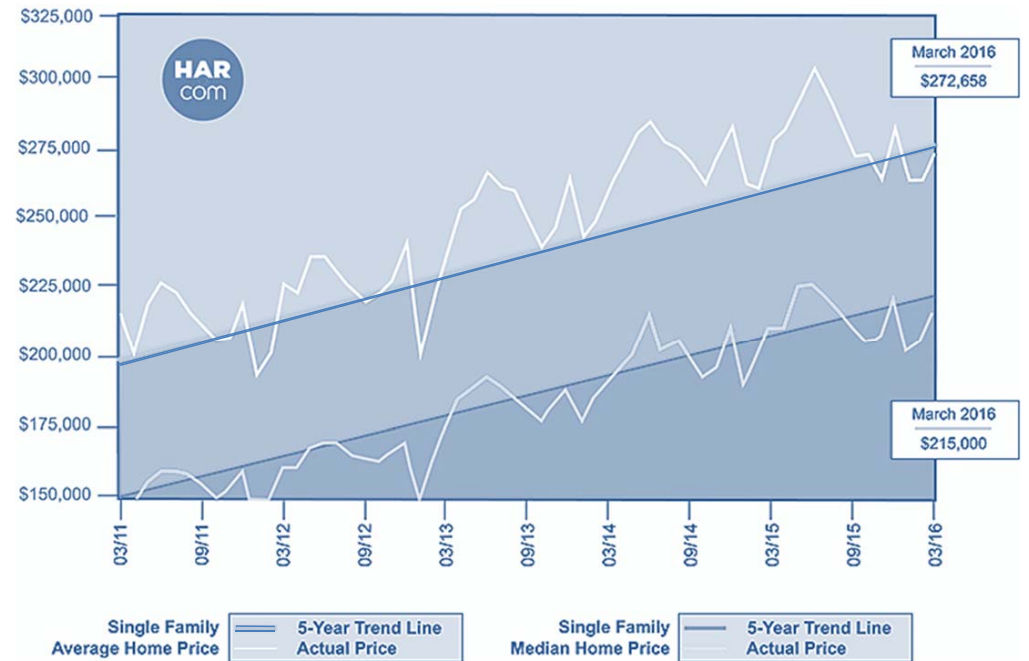
In its April 2016 report on the Houston economy, the Greater Houston Partnership (GHP) cited U.S. Census Bureau data showing the Houston metropolitan area leading the nation in population growth in 2015, with the addition of over 159,000 new residents. GHP stated that since April 2010, Houston has added over 736,000 residents and that energy industry layoffs have been offset by job creation in other sectors. Home prices showed mixed readings in March. The single-family home average price declined 1.6 percent to \$272,658. The median price—the figure at which half of the homes sold for more and half sold for less—rose 2.4 percent to \$215,000, the highest price ever for a March. March sales of all property types in Houston totaled 7,375, down 1.0 percent from the same month last year. Total dollar volume for properties sold in March fell 2.5 percent to \$1.9 billion.

Figure 10: Single Family Home Sales in Houston



HAR also breaks out the sales figures for existing single-family homes. Existing home sales totaled 5,066 in March, down 1.0 percent versus the same month last year. The average sales price fell 2.7 percent year-over-year to \$254,012 while the median sales price climbed 2.9 percent to \$198,000.

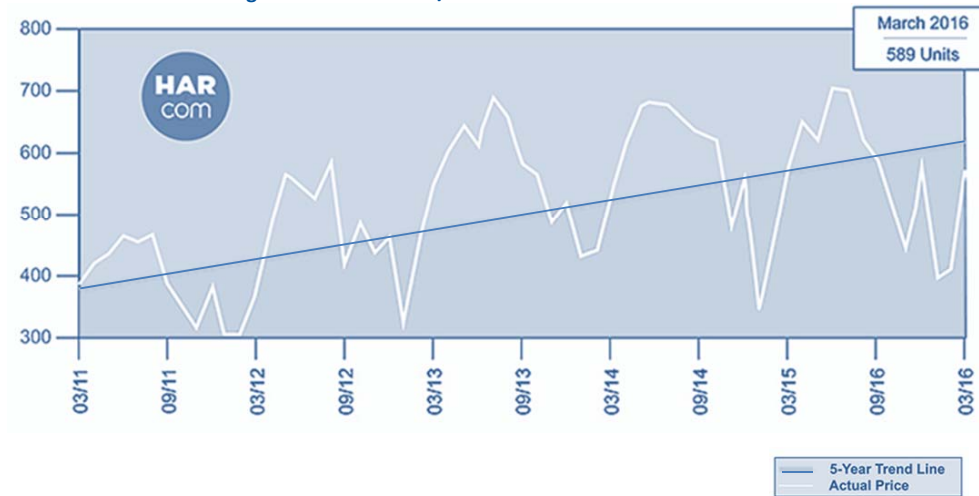
Figure 11: Single Family Average Home Price & Single Family Median Home Price in Houston



HOBBY AREA LIVABLE CENTER MARKET ASSESSMENT

Sales of townhouses and condominiums rose 1.9 percent in March coming off of last month's year-over-year decline of 10.5 percent. A total of 589 units sold compared to 578 properties in March 2015. The average price declined 2.0 percent to \$193,483 while the median price rose 4.9 percent to \$150,000. Inventory grew from a 2.6-months supply to 3.5 months.

Figure 12: Townhouse / Condominium Sales in Houston



CMA SINGLE FAMILY HOUSING MARKET

The CMA includes 73,782 housing units of which 54.8% are owner occupied. The median housing value of owner occupied homes is \$102,117. Approximately 35% of the housing units are multifamily (29,049 units) which includes townhomes, duplexes, apartments, etc.

Table 23: CMA Housing Statistics

Category	Number	Percentage
2016 Est. Occupied Housing Units by Tenure	73,782	
Owner-Occupied	40,485	54.87%
Renter-Occupied	33,297	45.13%
2016 Occupied Housing Units: Avg. Length of Residence		
Owner-Occupied		19
Renter-Occupied		7
2016 Est. Owner Occupied Housing Units by Value		
Value Less than \$20,000	1,406	3.47%
Value \$20,000 to \$39,999	1,603	3.96%
Value \$40,000 to \$59,999	3,014	7.44%
Value \$60,000 to \$79,999	5,738	14.17%
Value \$80,000 to \$99,999	7,895	19.50%
Value \$100,000 to \$149,999	13,874	34.27%
Value \$150,000 to \$199,999	4,530	11.19%
Value \$200,000 to \$299,999	1,483	3.66%
Value \$300,000 to \$399,999	348	0.86%
Value \$400,000 to \$499,999	164	0.41%
Value \$500,000 to \$749,999	196	0.48%
Value \$750,000 to \$999,999	90	0.22%
Value \$1,000,000 or more	144	0.36%
2016 Est. Median All Owner-Occupied Housing Unit Value	\$102,117	
2016 Est. Housing Units by Units in Structure	82,794	
1 Unit Attached	1,709	2.06%
1 Unit Detached	49,925	60.30%
2 Units	1,159	1.40%
3 or 4 Units	2,434	2.94%
5 to 19 Units	14,056	16.98%
20 to 49 Units	3,865	4.67%
50 or More Units	7,535	9.10%
Mobile Home or Trailer	2,064	2.49%
Boat, RV, Van, etc.	47	0.06%
Total Housing Units in the CMA	82,794	
Housing Units Built 2010 or later	5,017	6.06%
Housing Units Built 2000 to 2009	11,241	13.58%

HOBBY AREA LIVABLE CENTER MARKET ASSESSMENT

Category	Number	Percentage
Housing Units Built 1990 to 1999	4,069	4.91%
Housing Units Built 1980 to 1989	6,547	7.91%
Housing Units Built 1970 to 1979	17,407	21.02%
Housing Units Built 1960 to 1969	13,173	15.91%
Housing Units Built 1950 to 1959	17,906	21.63%
Housing Units Built 1940 to 1949	5,105	6.17%
Housing Units Built 1939 or Earlier	2,329	2.81%
Dominant Year Structure Built	1972	

Source: US Census, American Community Survey, PCensus

Resale Market

There were 237 sales in the first 4.5 months of 2016 in the CMA. The average price was \$109,601. The average price has increased by 30.3% in the CMA over the past six years. There were 119 sales in the CMA over \$200,000 in the past 6.5 years. On average 18 homes sold per year over \$200,000. The median sales price in this group was \$234,900. Currently there are 154 homes "For Sale" in the CMA with an average listing price of \$157,501 which is significantly above the average sales price of \$109,601.

Table 24: CMA Home Sales over \$200,000, 2010-2016

119 Total Sales	Sale Price	SP/LP %	DOM
Min	\$200,000	73%	0
Average	\$276,163	96%	100
Max	\$1,899,900	115%	1036
Median	\$234,900	97%	50

Source: Houston Association of Realtors (HAR)

Table 25: CMA Active Home Listings

154 Total Listings	List Price	DOM
Min	\$30,000	1
Average	\$157,501	81
Max	\$745,000	1143
Median	\$139,999	64

Source: Houston Association of Realtors (HAR)

New Home Construction

There appears to be new construction just south of the study area in the CMA on Fabiola Drive. The new homes are located in Las Alamedas subdivision off Edgebrook/Clearwood. The homes range in price from \$169,900 to \$204,999 (2181 sf to 2311sf). There are 20 lots in the subdivision. One home has been sold and two are under contract at the time of this report. The homes are located in the Pasadena ISD.

STUDY AREA SINGLE FAMILY HOUSING MARKET

There are an estimated 18,531 housing units in the study area currently including single family and multifamily. Approximately 46.3% of the occupied units are owner-occupied. The median value for owner-occupied housing is \$111,916 which is greater than the CMA (\$102,117). There are 50.5% single family housing units in the Hobby Area District (study area) and 48.2% multifamily units (8,937) which includes apartments, townhomes, duplexes, tri-plexes and four-plexes. The largest share of the housing structures were built between 1970 and 1979. 76.6% of the structures were built before 1980. Only 4.6% have been built in the past six years.

Table 26: Housing Statistics for the Study Area

Category	Number	Percentage
2016 Est. Occupied Housing Units by Tenure	16,574	
Owner-Occupied	7,677	46.32%
Renter-Occupied	8,897	53.68%
2016 Occupied Housing Units: Avg. Length of Residence		
Owner-Occupied	18	
Renter-Occupied	7	
2016 Est. Owner Occupied Housing Units by Value	7,677	
Value Less than \$20,000	264	3.43%
Value \$20,000 to \$39,999	268	3.49%
Value \$40,000 to \$59,999	366	4.77%
Value \$60,000 to \$79,999	873	11.37%
Value \$80,000 to \$99,999	1,426	18.58%
Value \$100,000 to \$149,999	2,693	35.08%
Value \$150,000 to \$199,999	1,125	14.66%
Value \$200,000 to \$299,999	427	5.57%
Value \$300,000 to \$399,999	129	1.68%
Value \$400,000 to \$499,999	58	0.76%
Value \$500,000 to \$749,999	34	0.44%
Value \$750,000 to \$999,999	12	0.16%
Value \$1,000,000 or more	1	0.02%
2016 Est. Median All Owner-Occupied Housing Unit Value	\$111,916	
2016 Est. Housing Units by Units in Structure	18,531	
1 Unit Attached	211	1.14%
1 Unit Detached	9,147	49.36%
2 Units	198	1.07%
3 or 4 Units	748	4.04%
5 to 19 Units	3,814	20.58%
20 to 49 Units	1,197	6.46%
50 or More Units	2,980	16.08%
Mobile Home or Trailer	216	1.17%
Boat, RV, Van, etc.	20	0.11%
Dominant structure type	1 Unit Detached	

HOBBY AREA LIVABLE CENTER MARKET ASSESSMENT

Category	Number	Percentage
2016 Est. Housing Units by Year Structure Built	18,531	
Housing Units Built 2010 or later	864	4.66%
Housing Units Built 2000 to 2009	1,395	7.53%
Housing Units Built 1990 to 1999	705	3.80%
Housing Units Built 1980 to 1989	1,371	7.40%
Housing Units Built 1970 to 1979	5,146	27.77%
Housing Units Built 1960 to 1969	3,392	18.31%
Housing Units Built 1950 to 1959	3,737	20.16%
Housing Units Built 1940 to 1949	1,082	5.84%
Housing Units Built 1939 or Earlier	839	4.53%
Dominant Year Structure Built	1970 to 1979	

Source: US Census, American Community Survey, PCensus

New Home Development

In the study area, the newest development is found in Southview Villas along Hefferman Street. This development includes “for lease” townhomes built in 2015. The 4/2.5/2 homes (1847sf) are listed for \$1425 per month which includes lawn maintenance. There does not appear to be any “for sale” new construction in the study area. There is new construction just south of the district borders in the CMA – Las Almadras which is in the Pasadena ISD. Out of twenty lots, one home has sold and two are under contract. Prices range from \$169,900 to \$204,999.

Figure 13: Examples of Single Family Housing in the Study Area

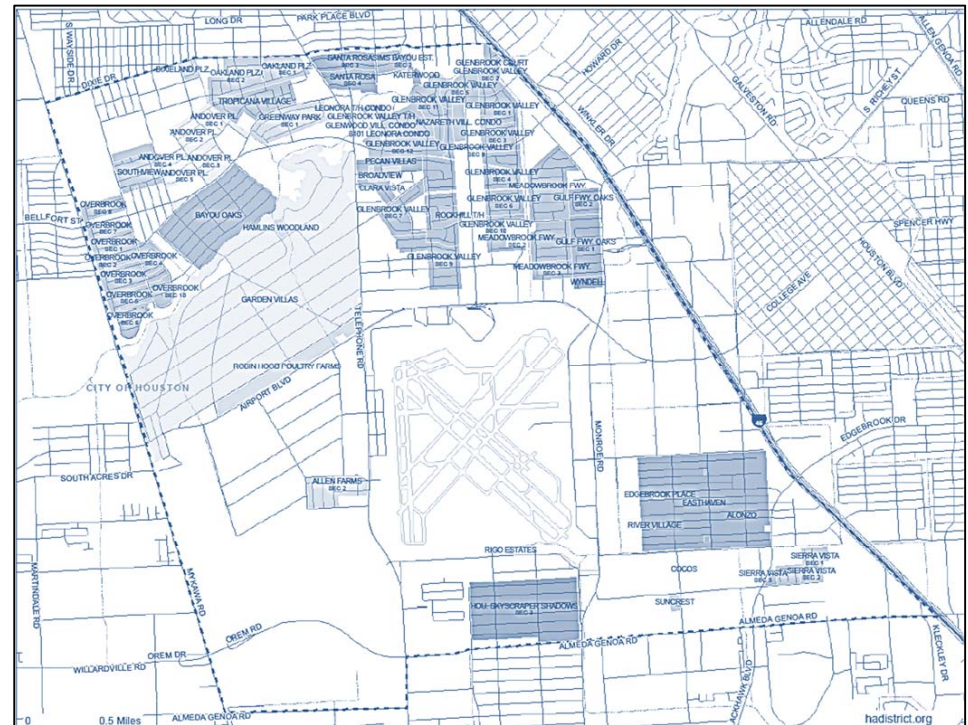


Source: Multiple Listing Service

Study Area Subdivisions

There are 43 subdivisions in the Hobby Area Management District (study area). As seen the majority are in the northern section of the district.

Figure 14: Map of Study Area Subdivisions



Glenbrook Valley Historic District

Glenbrook Valley, a subdivision of midcentury homes near Hobby Airport, has been the first neighborhood outside the 610 Loop to receive historic district designation by the city of Houston (2011). Originally developed between 1953 and 1962, the Glenbrook Valley neighborhood has approximately 1,250 homes, many of them architect-designed and custom built for the Houston community's then-leaders. Kansas City landscape architects Hare and Hare worked with developer Fred McManus on the design of the tract. It includes expansive lots, some of which front on a bayou.

Table 27: Glenbrook Valley Sales Trends, 2010-2016

	SqFt	Beds	FB	HB	Sale Price	SP/SqFt	SP/LP %	DOM	CDOM	Year Built
Min	1,232	2	1	0	\$47500	25.22	55%	0	0	1955
Average	2,424	3.37	2.21	0.45	\$162,776	67.15	95%	55.85	96.87	1960
Max	7,226	7	4	2	\$525,000	114.9	107%	430	921	1978
Median	2,220	3	2	0	\$144,000	68.52	96%	29	43	1959

Source: Houston Association of Realtors (HAR)

In the past six years (2010 - April 2016) there have been 103 sales in Glenbrook Valley. According to local realtor, Robert Searcy, prices have risen significantly over the past three years from \$69psf in 2013 to \$114 in 2016. The inventory is tight in this area and homes receive multiple offers from buyers. The majority of the buyers are white and Hispanic both white collar and blue collar from all areas of Houston who are wanting the 8- mile commute to downtown.

Examples of Current Single Family Listings in the Study Area

6842 Cherrydale Dr	8115 Dover St	8014 Colgate	8048 N Alameda Genoa
• 1358 SF	• 2073 SF	• 3334 SF	• 3600 SF
• 3 Beds/2 Bath	• 3 Beds/2 Baths	• 4 Beds/3 Baths	• 5 Beds/2 Baths
• \$65,000	• \$165,000	• \$349,000	• \$475,000
• Built: 1957	• Built: 1959	• Built: 1959	• Built: 1984
• DOM: 10	• DOM: 202	• DOM: 89	• DOM: 45

Figure 15: Examples of Current Single Family Listings in the Study Area



Study Area Sales Trends

There were 41 sales in the first 4.5 months of 2016 in the study area. The average price was \$114,253 which is higher than the CMA at \$109,601. The average price has increased by 23.1% in the study area compared to 30.3% in the CMA over the past six years. There were 44 sales in the CMA over \$200,000 in the past 6.5 years. On average 6.7 homes sold per year over \$200,000. The median sales price in this group was \$234,900. Currently there are 30 homes "For Sale" in the study area with an average listing price of \$83.53 psf (\$211,890) which is significantly above the average sales price of \$114,253.

Table 28: Study Area Housing Market Home Sales

Home Sales Data	2010	2011	2012	2013	2014	2015	1/1-4/14 2016
Average DOM	74	79	70	50	51	46	34
Median DOM	51	50	36	23	27	19	18
Average Sales Price	\$92,769	\$81,509	\$85,300	\$103,472	\$115,356	\$124,769	\$114,253
Median Sales Price	\$90,000	\$239,000	\$80,000	\$92,000	\$115,000	\$120,000	\$95,400
Average Sales Price/SF	\$52.69	\$46.14	\$47.27	\$55.98	\$62.34	\$66.11	\$68.61
SP/LP %	96%	95%	95%	93%	92%	96%	93%
Total Sales	155	170	163	131	165	163	41

Source: Houston Association of Realtors (HAR)

Table 29: Study Area Home Sales over \$200,000, 2010 - 2016

44 Total Sales	Sale Price	SP/LP %	DOM	SF	\$/SF
Min	\$200,000	82%	0	1,866	\$49.40
Average	\$262,980	96%	61	3,375	\$76.98
Max	\$525,000	115%	381	7,226	\$127.40
Median	\$234,900	95%	22	3,141	\$80.14

Source: Houston Association of Realtors (HAR)

Table 30: Study Area Active Home Listings

30 Total Listings	List Price	DOM	SF	\$/SF
Min	\$49,999	3	820	\$39.59
Average	\$193,506	42	2209	\$83.53
Max	\$349,000	82	3334	\$104.68
Median	\$164,750	56	1997	\$82.21

Source: Houston Association of Realtors (HAR) The MAX value includes a package of 5 homes for \$745,000 which has been removed from the table above so as not to skew the values.

Average and median number of days on the market (DOM) are on a downward trend. Median DOM went from 51 to 46 over the past five years. The average DOM is slightly higher but went from 74 days in 2010 to 46 in 2015. Home prices in the study area have continued to increase since 2010. Average home prices have risen by 23% in the past six years while median prices have increased by 6%. Price per square foot followed a similar trajectory, going from the 2010 low of \$52/sf to the 2015 high of \$68/sf.

Figure 16: Study Area Single Family Homes Days on Market

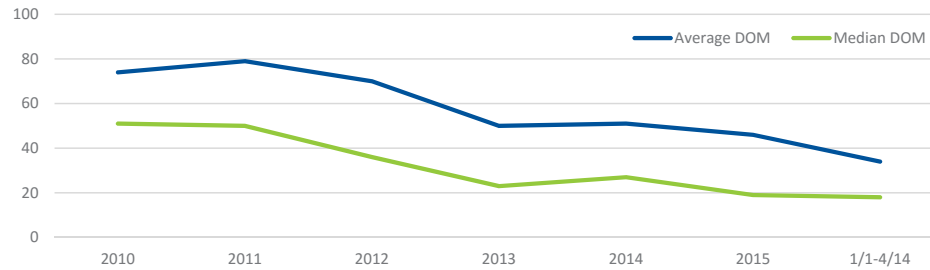


Figure 17: Study Area Single Family Homes Sales Price

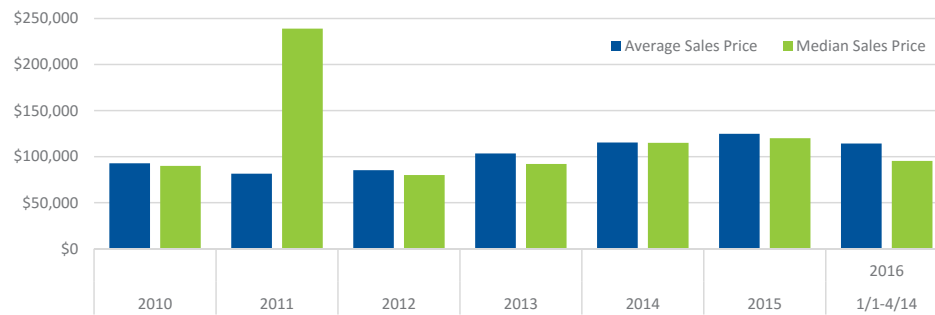
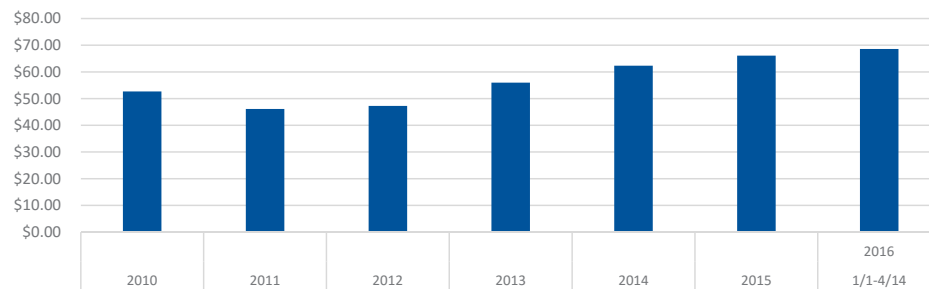


Figure 18: Study Area Single Family Homes Average Sales Price per Square Foot



POTENTIAL DEMAND – SINGLE FAMILY HOUSING

Demand for new construction of single family homes is primarily rooted in the need to house additional population in an area. Therefore, we will quantify demand for new homes within the CMA based on the previously mentioned CDS/HGAC forecasts that have been prepared for the CMA as well as market performance within the CMA.

Table 31: Average CDS and HGAC Projections for the CMA

AVERAGE	2015	2020	2025	2030	2035	2040
Population	240,398	251,114	267,737	277,881	281,888	290,372
Households	74,554	77,744	83,001	86,900	89,494	93,243
Employment	80,530	83,479	87,336	90,259	93,343	95,828

Source: CDS Community Development Strategies, H-GAC

To plan and project new housing units, the number of projected housing units is multiplied by the percentage of owners for single family homes. As shown using the 75.8% of households owning in the CMA (2015 estimate) there is a potential demand to support 2,317 new homes through 2020.

Table 32: CMA Single Family Demand

Category	2015	2020	2025	2030
Total current and projected CMA households	74,554	77,744	83,001	86,900
Incremental housing unit demand		3,191	5,257	3,899
CMA single family demand (62.36%)		1,990	3,278	2,431
CMA Single Family Demand Annually		398	656	486

Sources: US Census, American Community Survey, PCensus

At 2016, Hobby Area Management District has an estimated 18.1% capture of the overall CMA housing units. Application of the capture rate to the CMA single family forecasted demand results in 361 homes by 2020 or 72 homes per year based on projected demand.

Based on 2015 average sales price of \$124,769, it should be noted that the total (72 annually) does not explicitly consider supportable price feasibility – in some parts of the Study Area, it may not be feasible for a private developer to build new single family homes at the supportable market prices.

Table 33: Study Area Single Family Demand

Category	2020	2025	2030
CMA Projected Single Family Demand	1,990	3,278	2,431
Study Area housing unit demand (34.3%)	361	594	441
Study Area Single Family Demand Annually	72	119	88

MULTIFAMILY HOUSING

According to the 1Q2016 TransWestern Multifamily Market Report, construction finally began to drop off this quarter after peaking in fourth quarter 2015 at 29,005 units under construction. Occupancy and absorption are dipping in Class A product as new units continue to hit the market, and apartment owners are offering additional concessions and lease-up specials to combat the oversupply.

Performance in 2016 will vary widely by submarket and class as areas like the Energy Corridor and Westchase take a hit, while east side markets like Pasadena and Baytown are doing well as they provide housing for downstream workers. Class B and C properties should maintain high occupancy as Class A rent increases over the development cycle priced some tenants out of that market. A high level of units set to deliver in 2016, coupled with low oil prices, will create some challenges for the market.

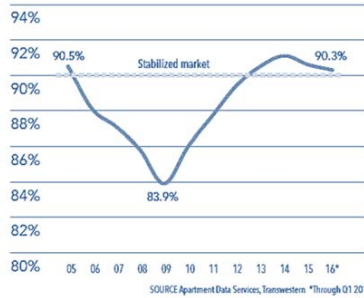
Multifamily occupancy fell slightly to 90.3% in the first quarter, from 90.6% at year-end 2015. Class C properties recorded the highest occupancy averaging 93.6%, followed by Class B assets at 93.0%, Class D assets at 90.4% and Class A properties at 81.3%. Although the market is still considered stable at 90% or greater, overall occupancy has declined each of the past three quarters. Looking ahead, occupancy in Class B and C assets will remain tight while occupancy in Class A will continue experience weakness.

The Houston metro absorbed 2,803 units in the first quarter, significantly lower than the 5,598 units absorbed in the first quarter of 2015.

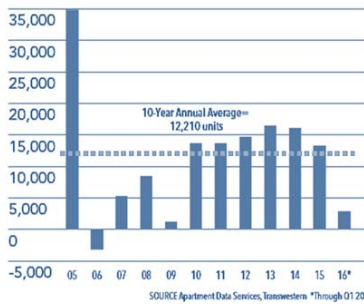
Average effective rents increased slightly in the first quarter to \$968 per unit, up from \$966 per unit at the close of the year. Rental rates, on an annualized basis, have decreased 0.9% over the past three months and 1.1% over the past six months but are still up 2.9% over the past 12 months.

Figure 19: Houston Multifamily Trends

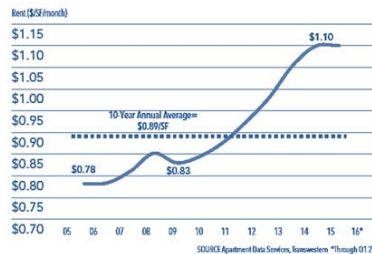
APARTMENT OCCUPANCY HOUSTON METRO AREA



APARTMENT ABSORPTION HOUSTON METRO AREA



APARTMENT RENTS/SF HOUSTON METRO AREA



HOBBY AREA LIVABLE CENTER MARKET ASSESSMENT

In the 12 months ending in March, nearly 23,000 units in 81 communities delivered across the Houston metro. Currently, there are 27,412 units in 99 communities under construction and 16,028 units in 55 communities proposed. The CMA is located in the UH/I45 South submarket with rents at \$0.87psf and average occupancy at 92.4%. As seen the rents are lower than those in the Greater Houston overall. However, occupancy is higher.

Table 34: Current Multifamily Rental Stats for Houston Area Neighborhoods

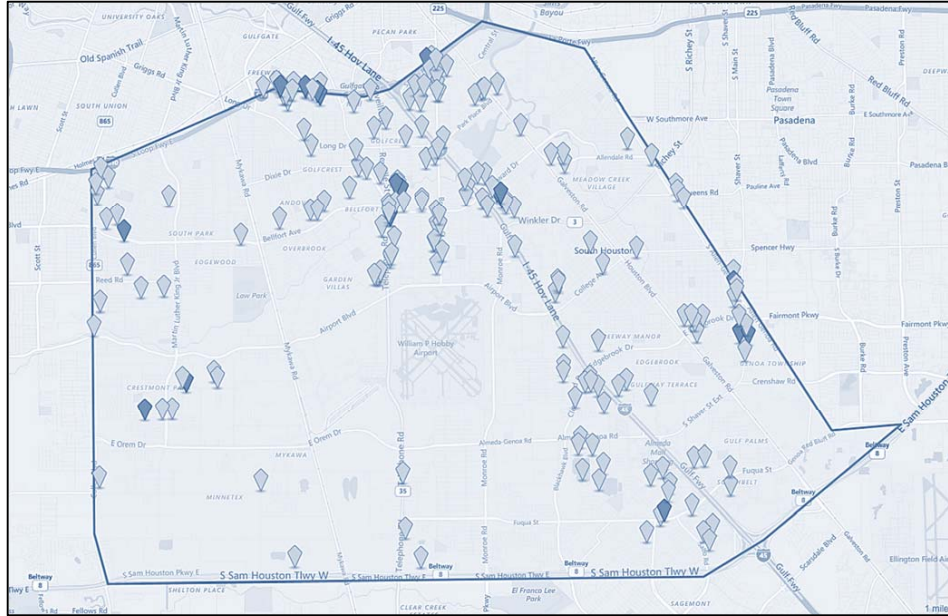
	SUBMARKET	# OF APT. COMMUNITIES	# OF APT. UNITS	AVERAGE OCCUPANCY	AVERAGE UNIT SF	AVERAGE EFFECTIVE RENT/MONTH	AVERAGE EFFECTIVE RENT/SF	UNITS UNDER CONSTRUCTION	UNITS ABSORBED Q1 2016
1	Montrose/Museum/Midtown	45	10,822	92.1%	926	\$1,668	\$1.08	3,255	(143)
2	Highland Village/Upper Kirby/West U	59	15,488	84.7%	961	\$1,699	\$1.77	1,195	202
3	Med Center/Braes Bayou	71	20,998	90.7%	876	\$1,283	\$1.47	2,644	(17)
4	Heights/Washington Ave	44	10,090	81.0%	894	\$1,522	\$1.70	900	110
5	Downtown	14	3,344	67.6%	949	\$1,852	\$1.95	2,667	56
6	I-10 East/Woodforest/Channelview	56	11,352	92.1%	832	\$773	\$0.93	246	(5)
7	I-69 North	26	3,503	92.2%	849	\$736	\$0.87	-	60
8	Northline	46	6,212	92.5%	840	\$714	\$0.85	-	(90)
9	Greenspoint/Northborough/Aldine	67	17,475	92.9%	794	\$654	\$0.82	-	43
10	FM 1960 East/IAH Airport	44	8,454	94.5%	899	\$829	\$0.92	228	116
11	Lake Houston/Kingwood	45	11,447	92.8%	936	\$1,055	\$1.13	304	88
12	Northeast Houston/Crosby	21	3,278	93.8%	886	\$722	\$0.82	-	(2)
13	Brookhollow/Northwest Crossing	88	19,473	93.7%	826	\$788	\$0.95	240	(133)
14	Memorial/Spring Branch	107	21,523	90.4%	915	\$907	\$0.99	-	132
15	Inwood/Hwy 249	33	6,030	94.0%	883	\$715	\$0.81	-	1
16	Willowbrook/Champions/Ella	156	38,773	92.1%	883	\$878	\$0.99	241	32
17	Jersey Village/Cypress	60	14,961	93.7%	908	\$964	\$1.06	-	(71)
18	Bear Creek/Copperfield/Fairfield	58	15,677	87.9%	899	\$995	\$1.11	288	214
19	Katy/Cinco Ranch/Waterside	80	22,311	81.2%	955	\$1,127	\$1.18	2,567	424
20	Tomball/Spring	41	8,864	84.1%	921	\$1,041	\$1.13	3,748	293
21	Woodlands/South Conroe	61	17,618	85.9%	944	\$1,149	\$1.22	1,197	185
22	Conroe North/ Montgomery	42	7,422	89.7%	888	\$859	\$0.97	1,375	21
23	Hwy 288/Pearland West	42	10,786	89.9%	963	\$1,066	\$1.11	576	(76)
24	U of H/I-45 South	103	17,014	92.4%	794	\$691	\$0.87	222	122
25	Beltway 8/I-45 South	46	13,004	93.2%	857	\$824	\$0.96	-	(11)
26	Pasadena/Deer Park/La Porte	117	22,646	90.5%	847	\$765	\$0.90	192	93
27	Friendswood/Pearland East	28	5,458	95.6%	857	\$961	\$1.12	-	52
28	Clear Lake/Webster/League City	93	23,345	90.6%	884	\$1,008	\$1.14	347	93
29	Baytown	52	9,397	93.4%	849	\$819	\$0.97	283	61
30	Dickinson/Galveston	73	11,100	93.5%	838	\$806	\$0.96	230	68
31	Alvin/Angleton/Lake Jackson	61	9,609	89.4%	819	\$815	\$1.00	308	179
32	Galleria/Uptown	98	22,983	88.5%	892	\$1,279	\$1.43	1,376	74
33	Woodlake/Westheimer	35	11,513	89.5%	889	\$1,030	\$1.16	725	(40)
34	Energy Corridor/CityCentre/Briar Forest	99	30,848	83.7%	952	\$1,139	\$1.20	1,592	621
35	Westchase	49	14,653	91.1%	838	\$960	\$1.15	266	142
36	Alief	110	26,895	93.4%	873	\$825	\$0.95	-	115
37	Sharpstown/Westwood	106	25,538	93.4%	790	\$670	\$0.85	-	(45)
38	Westpark/Bissonnet	58	16,900	95.0%	811	\$706	\$0.87	-	11
39	Braeswood/Fondren SW	83	21,906	91.3%	839	\$745	\$0.89	-	(170)
40	Alameda/South Main	24	4,438	93.6%	847	\$821	\$0.97	-	(69)
41	Sugar Land/Stafford/Sienna	48	12,217	89.5%	956	\$1,167	\$1.22	200	58
42	Richmond/Rosenberg	29	4,766	93.6%	875	\$954	\$1.09	-	9
	Greater Houston	2,618	610,131	90.3%	879	\$968	\$1.10	27,412	2,803

Source: TransWestern

CMA MULTIFAMILY HOUSING MARKET

Using the previously defined Competitive Market Area (CMA), encompassing zip codes 77033, 77048, 77061, 77075, 77087, 77017, 77587, and a large portion of 77034, and a small portion of 77504. CDS has found that the market includes 23,481 units. There are 3,831 affordable units in the CMA (708 are Senior units). Clearly the CMA is a Class B/C market with 91% of the units in the market this class. Only 3% of the CMA are Class A.

Figure 20: Map of Multifamily Housing Locations in the CMA



Source: CoStar

Table 35: Multifamily Inventory and Trends in the CMA

Category	Class A	Class B	Class C	Class D	Overall
Total # Projects	5	66	75	15	161
Total # Units	952	14,957	11,199	1,434	28,542
Total # Units OBR	N/A	0.40%	0.80%	0.00%	1.20%
Total # Units 1BR	1.80%	25.30%	19.60%	1.40%	48.00%
Total # Units 2BR	1.50%	21.10%	16.50%	2.50%	41.50%
Total # Units 3BR	0.10%	5.30%	1.80%	1.00%	8.20%
Total # Units 4BR	N/A	0.70%	0.20%	0.10%	1.00%
Average Units per Project	190	227	149	96	177
Average SF	927.58	845.03	784.22	841.32	823.74

HOBBY AREA LIVABLE CENTER MARKET ASSESSMENT

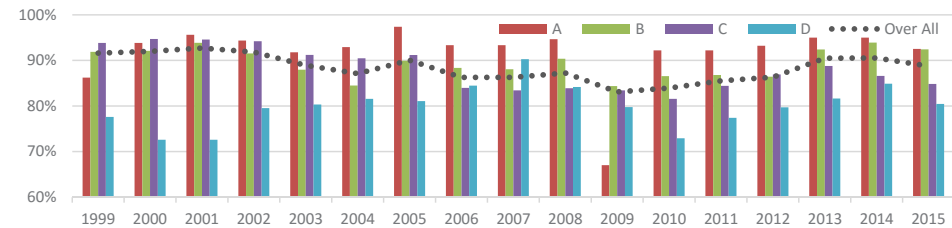
Occupancy					
Average Physical Occupancy	92.53%	92.45%	84.85%	79.96%	88.83%
Rental Rates					
Average Market Rent/SF	\$1.13	\$0.94	\$0.84	\$0.73	\$0.90
Average Market Rent/Unit	\$1,037.15	\$774.66	\$647.62	\$612.00	\$725.54
Absorption (In Units)					
Current Quarter-to-Date	0	-11	-1	-6	-18
Year-to-Date	0	17	3	20	40

Source: Enriched Data

Occupancy

The CMA has experienced overall steady occupancy ranging from 83% to 91%. Currently occupancy is at 88.7% overall. Since 2010, Class A occupancies have been above the overall average; Class B has exceeded it since 2013.

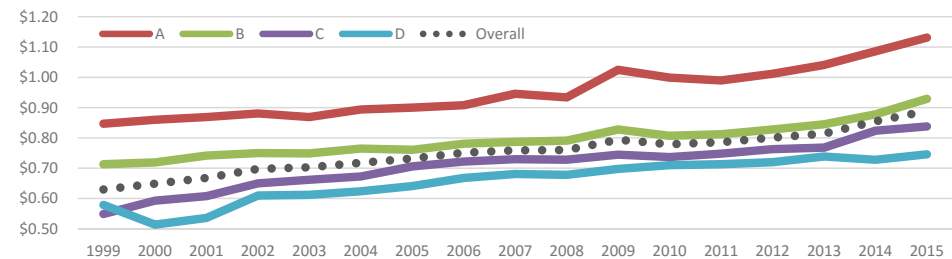
Figure 21: Trend of Occupancy Rates for Multifamily Housing in the CMA by Class



Rental Rates

Rental rates for Class A apartments have been significantly above the overall average. Currently Class A rates are at \$1.13 per square foot.

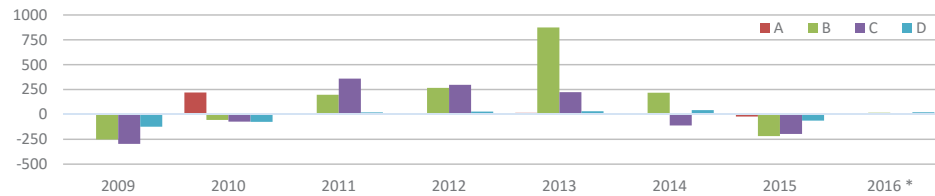
Figure 22: Trend of Rental Rates for Multifamily Housing in the CMA by Class



Absorption

Overall absorption in the CMA has been a positive 1,360. On average 170 units have been absorbed annually since 2009.

Table 36: Trend of Absorption Rates for Multifamily Housing in the CMA by Class



STUDY AREA MULTIFAMILY HOUSING MARKET

The study area is defined largely by zip 77061 with a small portion of 77087 and 77075. According to CoStar there are 8,064 units in 46 properties in the study area. The majority of the units are located in the northern portion of the study area and along I-45. There are 616 affordable units in the study area (340 are Senior units).

Figure 23: Map of Multifamily Housing Locations in the Study Area



Source: CoStar

Table 37: Multifamily Inventory and Trends in the Study Area

	A	B	C	D	Overall
Total # Projects	1	12	42	N/A	55
Total # Units	276	3,866	3,922		8064
Total # Units 1BR		2,689	1,804		4493
Total # Units 2BR	60	1,171	1,671		2902
Total # Units 3BR	138	1	84		223
Average Units per Project	276	322	93		230
Average SF	1214	759	760		911
Vacancy					
Average Physical Occupancy	1.5%	5.75%	6.91%		4.72%
Rental Rates					
Average Market Rent/SF	\$0.69**	\$0.92	\$0.91		\$0.92
Average Market Rent/Unit	\$826**	\$698	\$634		\$666.00

Source: Enriched Data

Market Performance

Vacancy in the study area declined from 2013 to 2015, currently it is at 4.7%. The new year has seen increasing vacancy rates. Much of this is explained by the Savannah and Verdes Apartments new ownership which has released over 500 tenants from their leases due to infractions. Rental rates have continued to increase since 2011 to 2016. The current lease rates are on average at \$0.92psf. Absorption has been fairly positive over the past five years. 2016 is negative in the first quarter thus far.

Figure 24: Multifamily Rental Trends in the Study Area



Figure 25: Images of Multifamily Housing in the Study Area



POTENTIAL DEMAND – MULTIFAMILY HOUSING

Demand for new market rate multifamily apartments is primarily rooted in the need to house additional population in an area. Therefore, we will quantify demand for new apartments within the CMA based on the previously mentioned CDS/HGAC forecasts that have been prepared for the CMA as well as market performance within the CMA.

Table 38: Average CDS and HGAC Projections for the CMA

AVERAGE	2015	2020	2025	2030	2035	2040
Population	240,398	251,114	267,737	277,881	281,888	290,372
Households	74,554	77,744	83,001	86,900	89,494	93,243
Employment	80,530	83,479	87,336	90,259	93,343	95,828

Source: CDS Community Development Strategies, H-GAC

To plan and project new housing units the number of projected housing units is multiplied by the percentage of renters for apartments. As shown below using 35.08 percent of households renting apartments in the CMA (the most current estimate as provided for 2016) there is a potential demand to support 1,119 new homes through 2020.

Table 39: CMA Multifamily Demand Projections Based Forecasts

	2015	2020	2025	2030
Total current and projected CMA households	74,554	77,744	83,001	86,900
Incremental housing unit demand		3,191	5,257	3,899
CMA Multifamily demand (35.08%)		1,119	1,844	1,368
CMA Multifamily Demand Annually		224	369	274

Source: PCensus for Map Info, Copyright 2016 Tetrad Corporation, CDS, HGAC

At 2016 (estimate) Hobby Area Management District included 30.76% of the overall CMA housing units. Application of the capture rate to the CMA multifamily demand results in 344 apartments by 2020 or 69 homes per year.

Table 40: Study Area Multifamily Demand Projections Based on Forecasts

	2020	2025	2030
CMA Projected Multifamily Demand	1,119	1,844	1,368
Study Area Multifamily demand (30.76%)	344	567	421
Study Area Multifamily Annual Demand	69	113	84

Rents are estimated to be \$0.88psf; a developer will probably find this rental rate is not feasible for new construction. Affordable units are achieving higher rents on a per sf basis in this market, however the district is not wanting additional low income units at this time. Given the number of existing apartments in the Study Area and rental rates, CDS does not recommend conventional apartments at this time.

SENIOR HOUSING

CMA Senior Housing Inventory

There are six Senior tax credit (affordable) properties in the CMA with 932 units (3.2% of the overall market). Of these, all are tax credit. Rental rates range from \$0.65 - \$1.15psf with occupancy at 100%. Highlighted properties are located within the study area.

Table 41: Senior Housing in the CMA

Name	Address	Zip	Class	Style	# Of Units	Rent /SF	Rent	Built	Avg SF	Vacancy	Type
El Redentor	8808-8815 Frey Rd	77034	C	Low-Rise	47	1.03	567	1996	550	0%	Tax Credit
Magnolia Place	4647 Wenda	77033	B	Garden	144	0.65	623	2013	962	0%	Tax Credit
Normas Plaza	7526 MLK	77033	B	Garden	80	0.69	713	2004	1032	1%	Tax Credit
Pilgrim Place III	5055 Sunflower St	77033	B	Low-Rise	40	% AMI		2009			Tax Credit
South Houston Vista	7800 Easthaven Blvd	77017	B	Garden	47	% AMI		1985	546	0%	Tax Credit
Sterling Court	9590 Minnesota St	77075	B	Mid-Rise	140	0.74	646	2011	937	1%	Tax Credit
Telephone Road	6000 Telephone Rd	77087	B	Mid-Rise	200	1.15	668	1975	582	0%	Tax Credit
Villas on Winkler	8625 Winkler Dr	77017	B	Garden	234	1.01	692	2006	718	2%	Tax Credit
TOTALS/AVERAGES					932	\$0.88	\$651	2000	796	0.057%	-

Source: CoStar

Senior Apartments with Amenities

Magnolia Place Apartments is a luxury mid-rise community which features, electronic accessible gate entry, built in bookshelves, designer kitchens, extra large 1 & 2 bedroom homes with spacious closets, wood flooring, full size washer & dryer connections. Planned social activities, community room, theatre/media room, country store, fitness center, walking trails, and community garden are also amenities.

Figure 26: Magnolia Place and Sterling Court, Left to Right



Sterling Court features fitness center, pool, theatre room, hair salon, walking path, and business center. The apartments feature spacious floorplans, large closet space, granite countertops, 9 foot ceilings/vaulted ceilings in some, microwave ovens, washer/dryer connections, patios/balconies in some homes and assigned covered parking.

Figure 27: Telephone Road and Villas on Winkler, Left to Right



Telephone Road apartments feature emergency call buttons in units, community room, computer lab, library, resident services manager and laundry facility. Villas on Winkler offers BBQ grill, billiards, business center, club house, gated access, media room, planned activities, shuttle bus, storage facilities, and swimming pool. Certain plans offer balconies, ceiling fans, crown molding, hardwood floors, washer/dryers, and walk-in closets.

Study Area Senior Demographics

- The study area includes 9,319 persons over the age of 55
- 17.9% of the total study area population are over age 55
- By 2021, the population over age 55 is expected to increase by 10,632 or 19.4% of the total population
- 19% of the total female population in the study area are over age 55 and 16% of the male population
- There are 5,590 households with persons age 55 and over; the largest cohort is age 55-64
- 17.2% of the total HH over the age of 55 have incomes between \$50,000 and \$74,999
- 11.5% (613) of the HH over age 55 have incomes of \$100,000 or more
- By 2021, the number of households with income over \$100,000 will increase by 35% to 828 HH

Figure 28: Study Area Senior Population, 2016

2016 Est. Population Study Area	51,917	% of Total Population
Age 55 to 64	4,887	9.41%
Age 65 to 74	2,845	5.48%
Age 75 to 84	1,174	2.26%
Age 85 and over	413	0.80%

Source: US Census, American Community Survey, PCensus

Table 42: Senior Household Income by Age, 2016

Category	55-64	65-74	75-84	85+
Household Totals	2,834	1,732	722	302
% Of Total Study Area HH	17.0%	10.4%	4.3%	1.8%
Income Less than \$15,000	514	332	210	117
Income \$15,000 to \$24,999	436	231	147	74
Income \$25,000 to \$34,999	353	220	103	37
Income \$35,000 to \$49,999	440	319	126	35
Income \$50,000 to \$74,999	529	281	77	23
Income \$75,000 to \$99,999	199	139	28	9
Income \$100,000 to \$124,999	169	116	16	4
Income \$125,000 to \$149,999	67	55	7	2
Income \$150,000 to \$199,999	82	26	7	1
Income \$200,000 or more	47	14	0	0
Median Household Income	\$38,912	\$38,916	\$25,334	\$19,623

Source: US Census, American Community Survey, PCensus

Table 43: Senior Population by Gender, 2016

Total Population, Male	2016 Estimate		2021 Projection	
	26,267		27,613	
Age 55 to 64	2,369	9.02%	2,470	8.95%
Age 65 to 74	1,362	5.19%	1,701	6.16%
Age 75 to 84	530	2.02%	686	2.48%
Age 85 and over	159	0.61%	163	0.59%
Age 65 and over	2,051	7.81%	2,550	9.23%
Total Population, Female	25,650		27,036	
Age 55 to 64	2,518	9.81%	2,628	9.72%
Age 65 to 74	1,483	5.78%	1,909	7.06%
Age 75 to 84	644	2.51%	812	3.00%
Age 85 and over	254	0.99%	263	0.97%
Age 65 and over	2,380	9.28%	2,984	11.04%

Source: US Census, American Community Survey, PCensus

Approximately 22.5% (3,731) of the total 2016 study area households are owner-occupied by persons age 55 and over in the study area; 11.2% (1,859) are renter-occupied by seniors. Comparatively, only 4.5% of the CMA total households are over 55 and owners and 2.2% are renters.

The 2016 median value of owner-occupied housing by seniors is \$111,916. Approximately 8% of the homes owned by seniors are valued at over \$200,000. By 2021, the percentage is expected to increase to 16.2%.

The following table data is from age 45 and above; this cohort includes an additional 3,097 persons with median incomes of \$46,598.

Table 44: Senior Owner Occupied Housing by Units by Value

Total Owner-Occupied Housing Units	2016 Estimate		2021 Projection	
	7,677		8,065	
Value Less than \$20,000	264	3.43%	255	3.16%
Value \$20,000 to \$39,999	268	3.49%	226	2.80%
Value \$40,000 to \$59,999	366	4.77%	314	3.89%
Value \$60,000 to \$79,999	873	11.37%	556	6.90%
Value \$80,000 to \$99,999	1,426	18.58%	1,070	13.26%
Value \$100,000 to \$149,999	2,693	35.08%	2,762	34.24%
Value \$150,000 to \$199,999	1,125	14.66%	1,574	19.51%
Value \$200,000 to \$299,999	427	5.57%	889	11.02%
Value \$300,000 to \$399,999	129	1.68%	205	2.54%
Value \$400,000 to \$499,999	58	0.76%	109	1.35%
Value \$500,000 to \$749,999	34	0.44%	74	0.91%
Value \$750,000 to \$999,999	12	0.16%	25	0.31%
Value \$1,000,000 or more	1	0.02%	8	0.10%
Median All Owner-Occupied Housing Unit Value	\$111,916		\$129,184	

Source: US Census, American Community Survey, PCensus

POTENTIAL DEMAND – SENIOR HOUSING

The total population aged 55 and older represents the primary pool of prospects that would be expected to populate a senior housing project over the near-term forecast window.

Using the same analysis as the market rate illustration, we have derived the demand for basic Age Restricted or Active Adult Apartment units (no medical services) based on household growth in the study area over the next five years. By 2021, there will be an additional 650 households in the study area age 55 or 130 annually.

Although the exact percentage of the population who would live in senior living developments is unknown, 33% of the current householders age 55 and over are renters. Based on this number, 286 additional renter households will be in the study area by 2021 or 57 annually.

CDS estimated that the study area could capture 25.5% of the estimated market growth based on the percentage of households age 55+ currently renting in the study area. The total future Study Area household growth results in 131 additional renters in the next five years (by 2021) age 55+.

Study Area Senior Housing Demand Projections

Category	2016	2021
CMA HH Growth	74,554	77,744
Incremental HH Growth	3,191	5,257
9.8% CMA Households age 55+ Renters	313	515
25.5% Renter HH age 55+ in Study Area	80	131

Conclusions and findings include the following:

- Class B/B+ development
- Tax Credit appears to be the most feasible in this area
- Lease rates between \$0.74psf and \$1.10 (\$0.93 on average) depending on level of amenities and finishes
- Amenities should include access gates, community room, planned activities, BBQ area, walking trails, fitness room, and pool at a minimum.
- Higher rents could be supported by shuttle service, hair salon, coffee bar, etc.
- Unit mix should consist of 55% one bedroom and 40% two bedroom units and 5% three bedrooms
- Average unit size should be consistent with the current market – 796 square feet on average

Using the suggested pricing (average rental rates) of \$0.93psf at 796sf the average rental rate would be \$740/month. If the property required 2X income for income qualifications that would be annual HH income levels of \$17,766; 3x income qualifications would be \$26,640. Currently the median income for persons 55 to 64 in the study area is \$38,912; age 65 to 74 \$38,916; age 75 to 84 \$25,334 and over 85 is \$19,623. Those that could currently qualify for senior housing at the suggested pricing of \$1.30psf to \$1.50psf or \$26,364 to \$45,612. As seen, there are qualified renters in the study area to support the suggested pricing of \$0.93psf for a senior living apartment complex in a good location.

Table 45: Potential HH Renters by Income Qualifications

Category	55-64	65-74	75-84	85+
Income \$15,000 to \$24,999	436	231	147	74
Income \$25,000 to \$34,999	353	220	103	37
Income \$35,000 to \$49,999	440	319	126	35
Income \$50,000 to \$74,999	529	281	77	23
Income \$75,000 to \$99,999	199	139	28	9
Income \$100,000 to \$124,999	169	116	16	4
Income \$125,000 to \$149,999	67	55	7	2
Income \$150,000 to \$199,999	82	26	7	1
Income \$200,000 or more	47	14	0	0
# of Qualified Renter HHs	1886	1170	364	111

Source: US Census, American Community Survey, PCensus

RETAIL SPACE

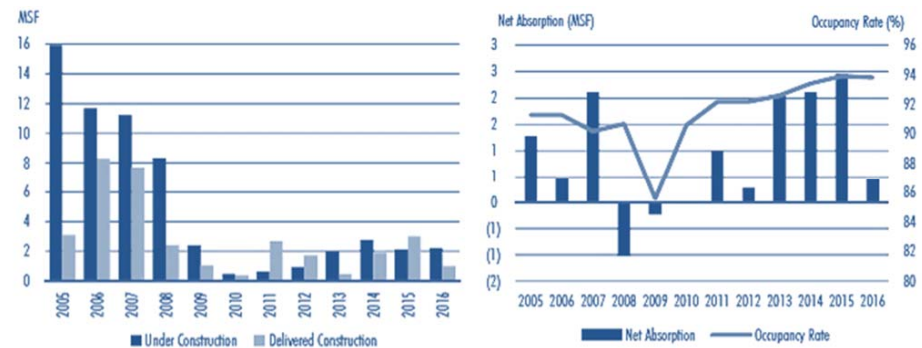
OVERALL HOUSTON MARKET

According to the 1st quarter 2016 Retail Market Report by CBRE, developments are finally moving forward. A full construction pipeline is needed as limited supply continues to constrain leasing. Class A space is 97.7% occupied and tenants looking for quality space have preleased 88.6% of the 2.2 million sq. ft. currently under construction. Construction continues to lag the pace set in the last construction cycle of 2006 and 2007 when 16 million sq. ft. delivered and Class A properties were only 94.6% occupied.

Houston added the most residents of any metro from July 2014 – July 2015 and thus half of Q1 2016 completions were grocery-anchored centers to satisfy changing demographics. Grocery has dominated leasing and construction due the aggressive expansion plans of Kroger and H-E-B as well as national big box grocers and small specialty grocers like Trader Joe's, Sprouts and Aldi. Yet, grocery anchored developments are losing ground in the retail pipeline —65% of construction is mixed-use, neighborhood centers and freestanding retail project including Rooms-to-Go and Showbiz Cinemas.

Despite softening fundamentals in the office and multifamily sectors, more mixed-use developments are underway across the market. Thor's mixed-use project Kirby Collection will add 67,000 sq. ft. of retail and restaurant space to the Inner Loop. As well, Landry's high-rise The Post Oak and multifamily-dominant project, Mid Main are under construction. While these projects are not retail heavy, a varied tenant makeup allows developers to hedge risk from high land and construction costs.

Figure 29: Houston Area Retail Inventory, Absorption, and Occupancy Rate



Source: CBRE Research Q1 2016

Houston absorbed 461,000 sq. ft. in Q1 2016 with the strongest activity in the Far North and Far Northwest submarkets, 120,000 sq. ft. and 108,000 sq. ft. respectively. A large majority of absorption was in newly constructed properties; Party City and Tuesday Morning occupied at the Market at Crenshaw, Mercantile Commerce Bank occupied 38,700 sq. ft. in a new freestanding location, as well as several freestanding grocer locations.

HOBBY AREA LIVABLE CENTER MARKET ASSESSMENT

Landlords continue to achieve high rents while offering fewer leasing concessions. Tenants can expect sustained rents except properties within the Inner Loop and Galleria trade areas which have some of the highest asking rents in the city. Yet, as a swath of new construction emerges in the suburban submarkets like the Far Northwest, rates will naturally increase. Big box spaces are asking between the upper \$20s and low \$30s. The largest rate hikes in Q1 2016 were in the Near West and Far Southwest increasing \$0.50 and \$0.25 respectively.

Depressed oil prices have taken a toll on the overall Houston economy, yet the outlook is tempered with signs of improvement in 12-24 months. The Texas Workforce Commission revised 2015 employment growth down to 15,200 jobs added reflecting steeper losses in the energy sector. However, forecasts for job growth in 2016 haven't changed and indicate a slow, yet still positive, year for job gains in 2016.

Table 46: Houston Area Retail Market Trends

Market	Number of Centers	Net Rentable Area (SF)	Total Vacant (SF)	Vacancy (%)	Asking Rate, NNN Avg. Annual (\$/SF)	Under Construction (SF)	Q1 2016 Net Absorption (SF)
Inner Loop	325	16,354,778	571,796	3.5	32.00	126,012	13,358
Northeast	237	14,867,621	1,029,843	6.9	13.00	582,000	10,959
Near North	109	6,407,526	306,072	4.8	13.75	-	(4,372)
Far North	453	30,671,234	1,991,676	6.5	22.50	227,000	120,382
Near Northwest	192	11,076,021	492,998	4.5	21.50	-	6,250
Far Northwest	465	27,837,284	1,800,400	6.5	33.75	267,658	108,312
Near West	200	13,229,410	643,872	4.9	34.50	20,000	(5,400)
Far West	284	18,305,835	1,005,603	5.5	28.25	382,793	(35,203)
Near Southwest	226	13,060,925	1,138,539	8.7	16.75	-	(2,073)
Far Southwest	350	22,631,116	1,338,944	5.9	22.50	-	87,191
South	158	8,516,856	505,754	5.9	18.25	139,691	63,992
Near Southeast	144	9,487,049	794,994	8.4	22.50	-	21,379
Far Southeast	323	22,476,399	1,648,176	7.3	14.25	445,325	77,020
HOUSTON TOTAL	3,466	214,922,054	13,268,667	6.2	22.80*	2,190,479	461,795

Source: CBRE Research, Q1 2016.

* Market total reflects weighted average asking rate

Near Southeast Sub-market

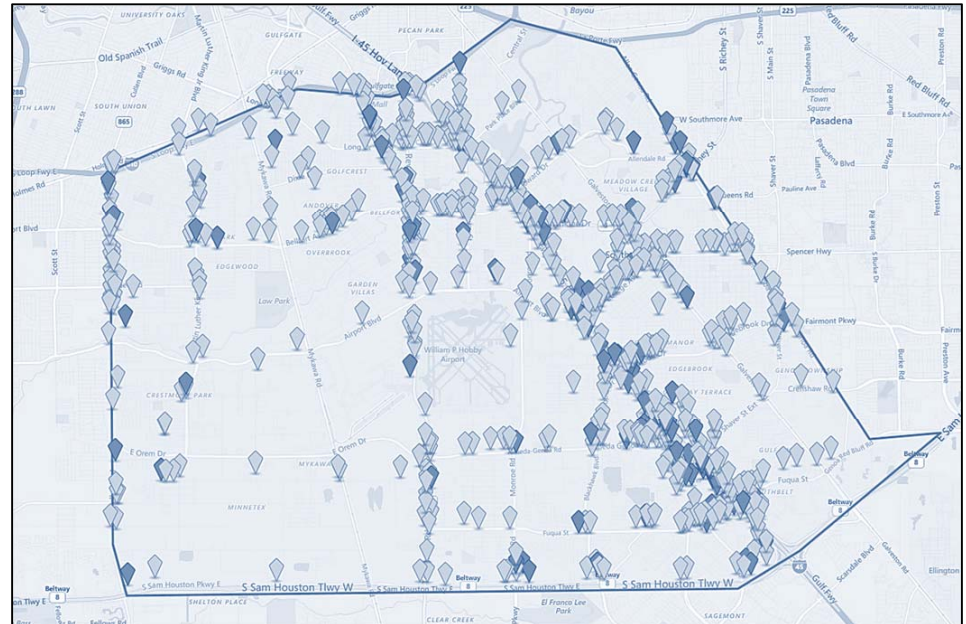
The CMA is located in the Near Southeast and a South sub-markets (CBRE) which encompasses a much larger area as well. The sub-markets include 144 and 158 retail centers respectively (18,003,905 sf combined). The vacancy rate is 8.4% with rental rates at \$22.50psf (NNN) in the Near Southeast. The South sub-market vacancy is much lower at 5.9% and rental rates at \$18.25psf NNN. Comparatively, the overall Houston market is at 6.2% vacancy and \$22.80psf (NNN) rents. The study area mostly falls within the Near Southeast sub-market.

CMA RETAIL MARKET

Inventory

There are 1,046 buildings including 11,926,488 sf in the CMA. The average rental rate is \$13.26psf (NNN) with a vacancy rate of 5.4%. There is 6,000sf currently under construction. In the past 12 months, 60,099square feet has been absorbed in the market.

Figure 30: Map of CMA Retail



Source: CoStar

CMA Performance

- The CMA vacancy rate has continued to decrease over the past 3.5 years. Rates have gone from 7.8% to the current 5.4%.
- Rental rates have steadily increased since 2011 in the CMA. Rates climbed from \$10psf NNN to the current \$13.26psf. A net increase of 32.6% over the past 5.5 years, or approximately 5.9% annually is seen in the market.
- Net absorption has been relatively positive in the market despite a negative in 2012. The leasing outlook over the next 60 months is for continued absorption.

Figure 31: Retail Market Trends in the CMA



Source: CoStar

CMA Consumer Buying Power

A critical factor in consideration for commercial retail development is the buying power of the market area that a potential development site is located in. Buying income can be measured by the level of disposable or expendable income from consumers in a market area. The CMA has an effective buying income of \$45,029 on average per household.

Table 47: Household Effective Buying Income for the CMA

Category	Number	% of Total
Total Households	73,728	100%
EBI Less than \$15,000	12,494	16.93%
EBI \$15,000 to \$24,999	12,057	16.34%
EBI \$25,000 to \$34,999	11,648	15.79%
EBI \$35,000 to \$49,999	13,179	17.86%
EBI \$50,000 to \$74,999	12,576	17.04%
EBI \$75,000 to \$99,999	7,352	9.97%
EBI \$100,000 to \$124,999	2,396	3.25%
EBI \$125,000 to \$149,999	1,033	1.40%
EBI \$150,000 to \$199,999	651	0.88%
EBI \$200,000 to \$249,999	91	0.12%
EBI \$250,000 to \$499,999	249	0.34%

HOBBY AREA LIVABLE CENTER MARKET ASSESSMENT

Category	Number	% of Total
EBI \$500,000 or more	56	0.08%
2016 Average Effective Buying Income	\$45,029	

Source: US Census, American Community Survey, PCensus

CMA Retail Sales Trends

As seen in the table below, Furniture and Home furnishings has shown the greatest increase in sales (up 58.3%) from 2012 to 2014. The only decrease was in Electronics and Appliance Stores, down \$29m (-35%).

Table 48: Actual Retail Sales in the CMA, 2012 to 2015

NAICS Code	NAICS Category	2012	2013	2014	3Q 2015
441	Motor Vehicle & Parts Dealers	940,332,913	1,112,398,350	1,229,796,202	1,742,807,924
442	Furniture & Home Furnishings	74,234,574	107,843,396	117,522,882	75,959,968
443	Electronics and Appliance Stores	84,659,673	57,770,362	54,963,603	30,231,180
444	Building Material & Garden Equipment	262,128,787	339,107,063	352,400,545	247,333,283
445	Food & Beverage Stores	454,194,473	478,460,977	515,050,599	367,496,908
446	Health & Personal Care Stores	91,890,158	90,244,271	92,268,738	99,407,226
447	Gasoline Stations	200,871,426	200,722,251	205,387,193	130,621,744
448	Clothing & Clothing Accessories	83,417,106	84,918,355	107,357,480	61,671,852
451	Sporting Goods, Hobby, Book, & Music	68,827,300	70,321,459	75,790,275	48,695,236
452	General Merchandise	230,105,029	238,086,107	233,362,042	171,296,047
453	Miscellaneous Store Retailers	131,348,585	123,794,271	160,734,170	131,482,795
454	Non-store Retailers	24,516,203	22,712,487	31,451,986	15,118,195
722	Food Services & Drinking Places	311,676,035	333,013,883	347,392,744	275,188,908

Source: Texas Comptroller of Public Accounts for 3Q2015

Retail Surplus/Leakage

The comparison of some categories presents a very superficial look at the potential retail leakages or surpluses. The aggregate expenditure estimates for the CMA are higher in Health and Personal Care, Clothing and Clothing Accessories Stores and General Merchandise Stores. This indicates that residents are shopping outside the CMA, thus there is leakage in the market. The category representing the highest leakage is General Merchandise Stores followed by Health and Personal Care Stores.

Table 49: Comparison of Actual Sales with Expected Household Expenditures for the CMA, 2014

BUSINESS CATEGORY DESCRIPTION	Actual Sales	Total Expenditures	Surplus or (Leakage)
Furniture and Home Furnishings Stores	117,522,882	45,704,125	71,818,757
Electronics and Appliance Stores	54,963,603	34,314,243	20,649,360
Food and Beverage Stores	515,050,599	399,565,703	115,484,896
Health and Personal Care Stores	92,268,738	161,022,094	(68,753,356)
Clothing and Clothing Accessories Stores	107,357,480	146,654,918	(39,297,438)
Sporting Goods, Hobby, Book, and Music Stores	75,790,275	74,154,656	1,635,619

HOBBY AREA LIVABLE CENTER MARKET ASSESSMENT

BUSINESS CATEGORY DESCRIPTION	Actual Sales	Total Expenditures	Surplus or (Leakage)
General Merchandise Stores	233,362,042	342,618,952	(109,256,910)
Food Services and Drinking Places	347,392,744	277,182,983	70,209,761

Source: Texas Comptroller of Public Accounts for 3Q2015

STUDY AREA RETAIL

Psychographic analysis is used to identify consumer segments and match retail demand categories in the trade area(s). CDS has broken down the market area resident populations utilizing a consumer segmentation methodology. This system is used to understand and profile the population in the market area for the purpose of targeting the largest consumer lifestyle segments. Every household is defined in terms of 66 demographically and behaviorally distinct groups. Specific lifestyle segments will be quantified and ranked for the trade area. The top segments, described in this section, are correlated to likes, dislikes and purchase behavior relative to retail goods and services. The largest household segment in the study area is Low Rise Living (32.8%) followed by the Blue Chip Blues (9.2%).

Table 50: Top 10 PRIZM Segments of the Population in the Study Area

Households by PRIZM Segment	Households	% of Total Households
66 Low-Rise Living	5,437	32.81%
The most economically challenged urban segment, Low-Rise Living is known as a transient world for middle-aged, ethnically diverse singles and single parents. Typically, the commercial base of Mom-and-Pop stores is struggling and in need of a renaissance.		
36 Blue-Chip Blues	1,532	9.25%
Blue-Chip Blues is known as a comfortable lifestyle for ethnically-diverse, young, sprawling families with well-paying blue-collar jobs and service jobs. The segment's aging neighborhoods feature compact, modestly priced homes surrounded by commercial centers that cater to child-filled households.		
54 Multi-Culti Mosaic	1,355	8.17%
An immigrant gateway community, Multi-Culti Mosaic is the urban home for a mixed populace of Hispanic, Asian, and African-American singles and families. With nearly a quarter of the residents foreign born, this segment is a mecca for first-generation Americans who are striving to improve their lower-middle-class status.		
29 American Dreams	1,349	8.14%
American Dreams is a living example of how ethnically diverse the nation has become: just under half the residents are Hispanic, Asian, or African-American. In these multilingual neighborhoods—one in three speaks a language other than English—middle-aged immigrants and their children live in upper-middle-class comfort.		
40 Close-In Couples	822	4.96%
Close-In Couples is a group of predominantly older, ethnically diverse couples living in older homes in the urban neighborhoods of mid-sized metros. High school-educated and empty nesting, these mostly older residents typically live in older city neighborhoods, enjoying their retirements.		
59 Urban Elders	775	4.68%
For Urban Elders—a segment located in the downtown neighborhoods of such metros as New York, Chicago, Las Vegas, and Miami—life is often an economic struggle. These communities have high concentrations of Hispanics and African-Americans and tend to be downscale, with singles living in older apartment rentals.		
61 City Roots	757	4.57%
Found in urban neighborhoods, City Roots is a segment of downscale retirees, typically living in older homes and duplexes they've owned for years. In these ethnically diverse neighborhoods—nearly 50 percent are African-American or Hispanic—residents are often widows or widowers living on fixed incomes and maintaining low-key lifestyles.		
18 Kids & Cul-de-Sacs	598	3.61%

HOBBY AREA LIVABLE CENTER MARKET ASSESSMENT

Households by PRIZM Segment	Households	% of Total Households
Upper-middle-class, suburban, married couples with children--that's the skinny on Kids & Cul-de-Sacs, an enviable lifestyle of large families in recently built subdivisions. With a high rate of Hispanic and Asian Americans, this segment is a refuge for college-educated, white-collar professionals with administrative jobs and upper-middle-class incomes. Their nexus of education, affluence, and children translates into large outlays for child-centered products and services.		
52 Suburban Pioneers	598	3.61%
Suburban Pioneers represents one of the nation's eclectic lifestyles, a mix of singles, recent divorcees, and single parents who have moved into older, inner-ring suburbs. They live in aging homes and garden-style apartment buildings, where the jobs are scarce and the money is tight. But what unites these residents--a diverse mix of Whites, Asians, Hispanics, and African-Americans--is a working-class sensibility and an appreciation for their off-the-beaten-track neighborhoods.		
26 The Cosmopolitans	584	3.53%
Educated, upper-midscale, and ethnically diverse, The Cosmopolitans are urbane couples in America's fast-growing cities. Concentrated in a handful of metros--such as Las Vegas, Miami, and Albuquerque--these households feature older, empty-nesting homeowners. A vibrant social scene surrounds their older homes and apartments, and residents love the nightlife and enjoy leisure-intensive lifestyles.		

Source: US Census, American Community Survey, PCensus

Retail Supply

There are 246 retail buildings including 2,965,946 square feet in the study area. The average vacancy is 6.3% with rental rates at \$15.92psf NNN. Retail is located along the main roadways and arteries.

Figure 32: Retail Locations in the Study Area

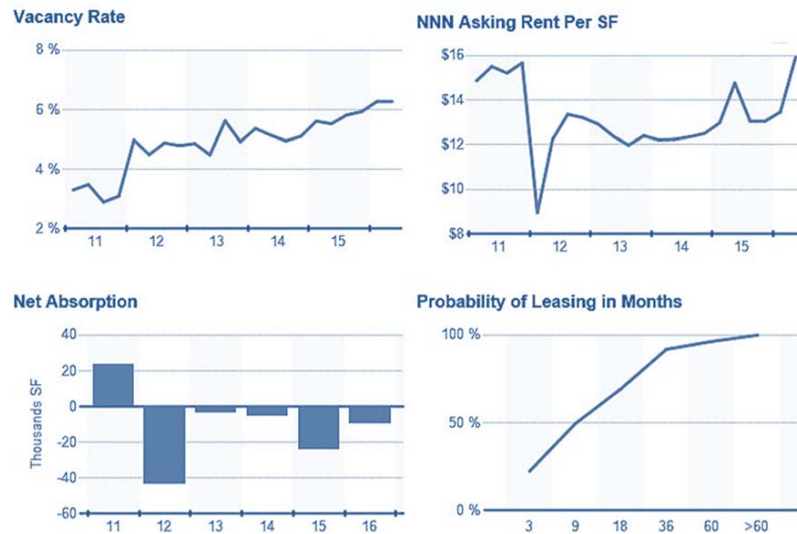


Source: CoStar

Study Area Performance

- Vacancy has been increasing in the study area over the past 5.5 years. Vacancy has increased 8% over the same time period.
- Rents have been somewhat increasing in the study area, from \$12.50 in 2012 to \$16psf in 2016.
- Absorption has been negative since 2012. The last 12 months was recorded at -19,381sf.

Figure 33: Retail Market Trends in the Study Area



Source: CoStar

POTENTIAL DEMAND – RETAIL SPACE

Using a rough “rule of thumb” from the Dollars & Cents of Retail Shopping Centers, published by the Urban Land Institute, it is possible to estimate the net annual increase of retail space. According to that source, the average retail sales per square foot in the CMA is approximately \$300. Therefore a sales growth in retail of \$205 million would equate to a demand, in the CMA, for 685,142 square feet of new retail space of all types over the next 5 years. The following table represents the number of supportable new establishments that could likely succeed if there were no leakage of future expenditures from the CMA.

Table 51: Supportable New Retail Space in the CMA

Retail Store Type	CMA						
	2016 Aggregate Expenditures	2021 Aggregate Expenditures	Total Expected Sales Growth	Sales/SF	Additional SF of Demand	Sf/Store	Total # of New Stores
TOTAL SPECIFIED CONSUMER EXPENDITURES (AREA)	\$2,467,477,437	\$2,814,745,988	\$347,268,551				
All Retail Stores*	\$1,586,446,588	\$1,791,989,051	\$205,542,463	\$300.00	685,142		
Grocery Stores	\$293,570,329	\$321,688,532	\$28,118,203	\$472.63	59,493	44,094	1
Health & Personal Care Stores	\$11,014,850	\$12,251,484	\$1,236,634	\$429.47	2,879	13,078	0
Hardware Stores	\$135,274,880	\$149,443,934	\$14,169,054	\$144.44	98,096	6,561	15
Home Centers	\$8,668,935	\$10,027,927	\$1,358,992	\$388.65	3,497	3,700	1
General Merchandise Stores	\$22,792,353	\$26,709,302	\$3,916,949	\$169.10	23,164	8,000	3
Department Stores (exc. anchors)	\$235,518,121	\$267,919,660	\$32,401,539	\$243.25	133,203	20,000	7
Full-Service Restaurants	\$114,835,042	\$132,068,824	\$17,233,782	\$308.18	55,921	4,416	13
Fast Food Restaurants	\$34,278,571	\$37,859,689	\$3,581,118	\$246.32	14,538	1,710	9
Eating Places	\$38,132,584	\$41,054,810	\$2,922,226	\$289.57	10,092	4,416	2
Drinking Places	\$129,328,702	\$140,928,557	\$11,599,855	\$396.27	29,273	3,196	9
Furniture Stores	\$3,549,536	\$3,909,843	\$360,307	\$263.98	1,365	7,360	0
Other Home Furnishing Stores	\$21,966,791	\$25,559,474	\$3,592,683	\$216.13	16,623	4,854	3
Household Appliance Stores	\$11,333,858	\$13,649,836	\$2,315,978	\$302.00	7,669	1,800	4
Radio/TV/Other Electronics Stores	\$9,466,241	\$11,649,112	\$2,182,871	\$302.20	7,223	3,655	2
Computer & Software Stores	\$57,517,104	\$69,920,030	\$12,402,926	\$335.14	37,008	2,277	16
Camera/Photographic Supply Stores	\$7,074,263	\$9,142,734	\$2,068,471	\$629.81	3,284	3,052	1
Clothing & Clothing Accessory Store	\$712,855	\$982,353	\$269,498	\$268.71	1,003	6,500	0
Clothing Accessory Stores	\$65,515,107	\$74,492,732	\$8,977,625	\$155.59	57,701	2,948	20
Shoe Stores	\$1,023,876	\$1,161,490	\$137,614	\$141.51	972	2,950	0
Jewelry Stores	\$14,277,021	\$16,057,568	\$1,780,547	\$317.37	5,610	1,494	4
Office Supplies & Stationery Stores	\$2,548,951	\$3,440,315	\$891,364	\$219.40	4,063	1,779	2
Gift, Novelty, & Souvenir Shops	\$2,826,201	\$3,436,566	\$610,365	\$145.43	4,197	4,000	1
Hobby, Toy, & Game Shops	\$3,118,467	\$3,644,343	\$525,876	\$194.92	2,698	1,700	2
Sew/Needlework/Piece Goods Stores	\$5,392,092	\$6,430,705	\$1,038,613	\$139.42	7,450	2,262	3
Florists	\$1,439,804	\$1,598,052	\$158,248	\$264.55	598	1,445	0
Book Stores	\$8,546,904	\$9,948,348	\$1,401,444	\$246.02	5,696	4,120	1
Sporting Goods, Hobby, Book & Music Stores	\$4,441,094	\$5,278,662	\$837,568	\$220.60	3,797	4,000	1
Sporting Goods Stores	\$19,365,544	\$23,482,332	\$4,116,788	\$220.87	18,639	3,850	5
Luggage & Leather Goods Stores	\$8,942,809	\$10,471,241	\$1,528,432	\$245.69	6,221	1,485	4
Automotive Part, Accessories, & Tire	\$491,932	\$603,883	\$111,951	\$172.90	647	5,600	0

Source: PCensus, Urban Land Institutes Dollars & Cents of Shopping Centers, CDS Community Development Strategies

* All Retail Stores Total is NOT the sum of the other line items. Some line items are sub-categories of multiple line items and could appear in more than one line item.

As seen, there is an under-supply of 20 an additional clothing accessory stores in the CMA. Additional under supply is also found in Computer and software stores, hardware stores, and full service restaurants. In addition, fast food restaurants are also under supplied.

For the study area, a sales growth in retail of \$41 million would equate to a demand in the study area for 137,388 square feet of new retail space of all types over the next 5 years, or 27,477 sf annually. The following table represents the number of supportable new establishments that could likely succeed if there were no leakage of future expenditures from the study area.

HOBBY AREA LIVABLE CENTER MARKET ASSESSMENT

Table 52: Supportable New Retail Space in the Study Area

Retail Store Type	Study Area						Total # of New Stores
	2016 Aggregate Expenditures	2021 Aggregate Expenditures	Total Expected Sales Growth	Sales/SF	Additional SF of Demand	Sf/Store	
TOTAL SPECIFIED CONSUMER EXPENDITURES (AREA)	\$526,722,833	\$596,292,570	\$69,569,737				
All Retail Stores*	\$339,989,289	\$381,205,601	\$41,216,312	\$300.00	137388		
Grocery Stores	\$63,900,088	\$69,682,204	\$5,782,116	\$472.63	12234	44094	0
Health & Personal Care Stores	\$28,340,109	\$31,331,885	\$2,991,776	\$429.47	6966	13078	1
Hardware Stores	\$1,717,520	\$1,971,358	\$253,838	\$144.44	1757	6561	0
Home Centers	\$4,536,246	\$5,282,399	\$746,153	\$388.65	1920	3700	1
General Merchandise Stores	\$50,546,559	\$57,162,518	\$6,615,959	\$169.10	39125	8000	5
Department Stores (exc. anchors)	\$24,538,021	\$28,044,265	\$3,506,244	\$243.25	14414	20000	1
Full-Service Restaurants	\$7,389,944	\$8,109,309	\$719,365	\$308.18	2334	4416	1
Fast Food Restaurants	\$8,440,977	\$9,008,955	\$567,978	\$246.32	2306	1710	1
Eating Places	\$28,285,253	\$30,589,664	\$2,304,411	\$289.57	7958	4416	2
Drinking Places	\$754,973	\$824,527	\$69,554	\$396.27	176	3196	0
Furniture Stores	\$4,726,751	\$5,448,475	\$721,724	\$263.98	2734	7360	0
Other Home Furnishing Stores	\$2,326,250	\$2,784,202	\$457,952	\$216.13	2119	4854	0
Household Appliance Stores	\$2,000,315	\$2,437,893	\$437,578	\$302.00	1449	1800	1
Radio/TV/Other Electronics Stores	\$12,522,930	\$15,084,953	\$2,562,023	\$302.20	8478	3655	2
Computer & Software Stores	\$1,526,773	\$1,955,190	\$428,417	\$335.14	1278	2277	1
Camera/Photographic Supply Stores	\$151,530	\$206,304	\$54,774	\$629.81	87	3052	0
Clothing & Clothing Accessory Store	\$14,135,605	\$15,922,332	\$1,786,727	\$268.71	6649	6500	1
Clothing Accessory Stores	\$221,311	\$248,332	\$27,021	\$155.59	174	2948	0
Shoe Stores	\$3,123,785	\$3,481,525	\$357,740	\$141.51	2528	2950	1
Jewelry Stores	\$521,799	\$698,992	\$177,193	\$317.37	558	1494	0
Office Supplies & Stationery Stores	\$601,288	\$726,298	\$125,010	\$219.40	570	1779	0
Gift, Novelty, & Souvenir Shops	\$664,380	\$771,641	\$107,261	\$145.43	738	4000	0
Hobby, Toy, & Game Shops	\$1,164,883	\$1,379,190	\$214,307	\$194.92	1099	1700	1
Sew/Needlework/Piece Goods	\$306,990	\$337,837	\$30,847	\$139.42	221	2262	0
Florists	\$1,683,987	\$1,943,599	\$259,612	\$264.55	981	1445	1
Book Stores	\$954,945	\$1,118,020	\$163,075	\$246.02	663	4120	0
Sporting Goods, Hobby, Book & Music Stores	\$4,166,759	\$4,995,650	\$828,891	\$220.60	3757	4000	1
Sporting Goods Stores	\$1,920,403	\$2,219,745	\$299,342	\$220.87	1355	3850	0
Luggage & Leather Goods Stores	\$104,004	\$126,634	\$22,630	\$245.69	92	1485	0
Automotive Part, Accessories & Tire	\$8,020,158	\$8,768,196	\$748,038	\$172.90	4326	5600	1

Source: PCensus, Urban Land Institutes Dollars & Cents of Shopping Centers, CDS Community Development Strategies

* All Retail Stores Total is NOT the sum of the other line items. Some line items are sub-categories of multiple line items and could appear in more than one line item.

As seen, there is an under-supply of 5 additional general merchandise stores in the study area. Additional under-supply is also found in Eating Places and Radio/TV/Other Electronics Stores. The demographics of the market area, while showing some signs of evolving toward a higher income population with more disposable income, may help support a major change in the area's retail profile.

Conclusions and findings include the following:

- Independent local businesses serving the area's moderate income population generally prefer the older, lower rent retail space in the area over more expensive newer space. However regional and national chains with recognizable brands are less likely to be interested in class B and particularly class C retail space. Increasing population growth will help mitigate this situation over time by attracting retail developers who will respond to this demand by proving class A space, through redevelopment of older spaces or adding new development.
- The overall aesthetics of an area are very important to retailers. Making public investments in an area can encourage more retail interest, which can spur retail property owners to renovate properties in order to compete for new tenants. Retail realtors, brokers, and stakeholders in the area who were interviewed mentioned several types of improvements that could be made including landscaping, median improvements, additional sidewalks, and increasing lighting along commercial corridors. A program to discourage graffiti and bandit signs was also requested.
- A major retail hub in the study area (pictured in the lower left of the following figure) is Glenbrook Square located on Telephone Road. This retail center was built in 1970 and contains nearly 70,000 square feet of well maintained class B space. Although the center has experienced some tenant turnover, it has maintained the same anchor since its initial construction (Kroger). The property is currently owned and managed by Weingarten Realty but was listed for sale last year and is reportedly under contract. The potential new owners are reportedly committed to the success of the site, suggesting a renovation of the property may be forthcoming.

Figure 34: Images of Retail Locations in the CMA



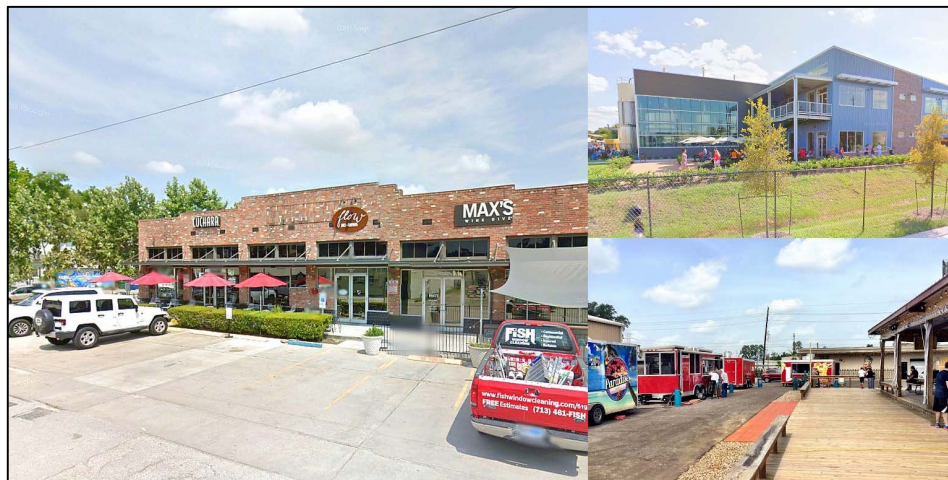
Source: Google Street View

CATALYST PROJECT OPPORTUNITY

As previously noted, additional retail space marketed to restaurants, bars, and entertainment venues would be expected to do well. This is related in part to the relatively high number of people who are employed in the area, as well as to the number of travelers and hotel guests associated with the airport. In addition, new retail space devoted to restaurants, bars, and entertainment can serve as a catalyst for further new development in the area. The key to such a catalyst project would be to provide retail space that is unique and attractive, prioritizing independent retailers (over chains) and providing a neighborhood experience with rear placed parking and patio seating. Experience has shown that this type of retail has a greater chance of attracting those who are visiting the area and looking for a unique dining/entertainment experience.

The following figure depicts three locations in the Houston area that could serve as examples. On the left is a very popular, small retail center in a residential section of Montrose. This retail center has three tenant spaces totaling 6,000 square feet, with minimal but attractive landscaping and space in the front for patio seating. The top right is the Karbach Brewing Co. facility near the Northwest Mall at Hwy 290 and Loop 610. This facility is mostly utilized for brewing and is therefore rightly located among other industrial facilities. But the brewery tours and the restaurant with patio seating attracts many visitors. The bottom right is Bernie's Backyard, located just off I-45 near Hwy 99. This location has an indoor bar and a large outdoor patio area with parking for several mobile eateries. It is known to many as a food truck park. All three of these locations attract many visitors and even host events, both private and public.

Figure 35: Examples of Small Retail / Restaurant Projects



Source: HTownChowDown.com, Google Street View

Beyond the anecdotal reports that a similar kind of establishment would do well, estimates of capturable spending are provided in this section. The estimates presented previously show projected increases in resident spending. These estimates suggest growing demand in the study area for eating/drinking places, as well as other types of

retail establishments. In addition to resident spending, the following table considers spending by employees and visitors. As can be seen, total annual eating and drinking spending is estimated at roughly \$90 million for the study area and \$250 million for the CMA.

Table 53: Estimated Annual Spending on Eating & Drinking by Residents, Employees, and Visitors

Category	Study Area	CMA
Annual Employee Lunch-Out Expense	\$23,349,641	\$63,038,920
Annual Visitor Food and Drink Spending	\$33,058,997	\$52,382,184
Annual Resident Food and Drink Spending Away from Home	\$32,888,767	\$133,631,210
Total Annual Eating & Drinking Spending	\$89,297,405	\$249,052,314
Study Area Market Share %	49%	21%
Study Area Market Share Dollars	\$43,431,403	\$51,419,149

Source: US Census, American Community Survey, PCensus, LEHD, Texas Office of the Governor - Economic Development & Tourism, 2015 Visa Lunch Spending Survey, CDS Community Development Strategies

CDS estimates that establishments located in the study area could potentially capture 49% of the eating and drinking spending by residents/employees/visitors in the study area and an overall 21% of the same type of spending in the CMA, resulting in just over \$50 million dollars of capturable eating and drinking spending. (Note: spending in the CMA includes the spending in the study area. Of the spending in the CMA outside the study area, CDS estimates a 5% capture rate potential for establishments located in the study area.)

The data needed to compare estimates for eating and drinking spending in the study area to actual sales was not readily available. However it is assumed that the study area is experiencing a sales leakage in this area, based on observations, related data, and interviews. With a sales leakage of 10% (a conservative estimate), it is estimated that just over \$5 million dollars of eating and drinking spending is being unrealized in the study area. If recaptured, this spending could potentially support roughly 17,000 additional square feet of eating and drinking retail space.

Table 54: Amount of Supportable Retail Space from 10% of Capturable Eating and Drinking Spending

Total Capturable Annual Eating & Drinking Spending	\$51,419,149
10% of Capturable Annual Eating & Drinking Spending	\$5,141,915
Average Sales per Square Foot for Eating & Drinking Establishments	\$310
Supportable Square Feet	16,587

Source: Urban Land Institutes Dollars & Cents of Shopping Centers, CDS Community Development Strategies

Creative dining/entertainment uses (such as the ones presented in this section) combined with interesting specialty retail stores would be expected to do well. Allowing for a coffee/breakfast location would also be recommended. Integrating these uses with a pleasant public space would add to the attractiveness of this catalyst retail location(s), encouraging patronage by hotel guests, local workers, and area residents.

OFFICE SPACE

OVERALL HOUSTON OFFICE MARKET

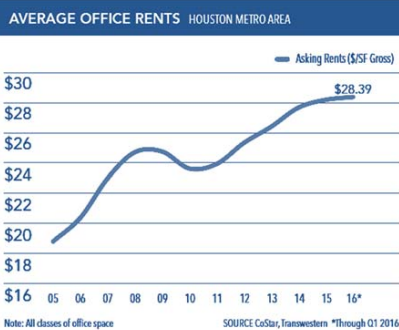
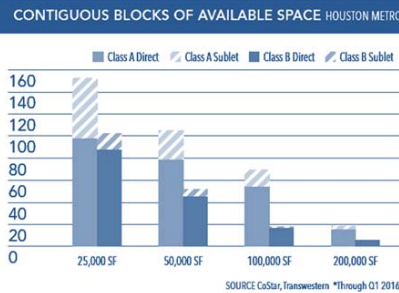
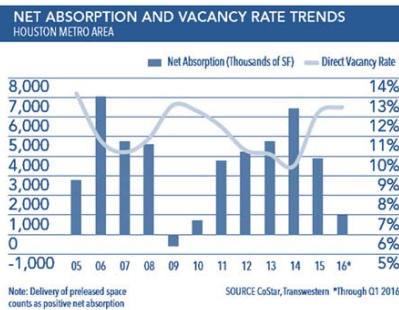
TransWestern 1Q2016 Office report - While the overall Houston economy is adding jobs, major office demand drivers like upstream energy and engineering are accruing further losses. This is in stark contrast to downstream energy which is booming on the east side of the metro with over \$53 billion in construction either underway or planned. Vacancy is on the rise as upstream companies continue to reduce workforces, downsize and cut costs across the board. Net absorption stayed in the black through first quarter as deliveries were largely preleased, but rent growth finally tapered off, and concession packages remain high. Houston has firmly become a tenant's market, and conditions will become even more tenant-favorable as the year progresses.

Net absorption for all classes of space totaled 996,000 SF at first quarter, fueled largely by preleased deliveries. Class A recorded 1.2 million SF of positive absorption for the quarter, and Class B recorded a fourth quarter in a row of negative absorption at 191,000 SF.

The overall office vacancy rate (including sublet) was 13.8% at first quarter, unchanged from year-end. Direct vacancy was 12.5%, up from 12.2% last quarter. Total available sublease space continues to grow, adding more than 940,000 SF this quarter to hit 8.7 million SF on the market. Sublease space is expected to continue rising over the course of 2016 and hit the 10 million SF range by the end of the year. Energy companies comprise the majority of sublease space on the market, accounting for 78% of the total. Total available space for lease in several submarkets is markedly higher than what is reported as vacant in statistics.

Asking rental rates for all classes of office space have increased 0.7% from year-end to \$28.39 per SF gross. Class A rents were down 0.6% to \$35.09 per SF gross, and Class B rents rose 0.1% to \$21.30 per SF gross from the close of the year. Asking rents reached a tipping point at the end of 2015

Figure 36: Houston Office Market Trends



HOBBY AREA LIVABLE CENTER MARKET ASSESSMENT

and should trend downward in the period ahead. Rent declines lagged behind other indicators as landlords worked to maintain face rents as long as possible.

Table 55: Current Office Market Stats for Houston Area Neighborhoods

SUBMARKET	TOTAL BLDGS	INVENTORY	SF AVAILABLE IMMEDIATELY	DIRECT VACANCY 2015	DIRECT VACANCY Q1 2016	VACANCY WITH SUBLET Q1 2016	UNDER CONSTRUCTION	NET ABSORPTION Q1 2016
Central Business District	87	47,919,574	5,625,758	11.3%	11.7%	13.6%	1,056,658	136,000
Midtown	33	5,759,744	851,290	15.0%	14.8%	15.0%	-	13,000
Downtown	120	53,679,318	6,477,048	11.7%	12.1%	13.8%	1,056,658	149,000
FM 1960 / I-45 North	15	1,371,988	215,402	14.2%	15.7%	15.9%	-	(21,000)
FM 1960 / Champions	22	1,850,305	453,325	24.0%	24.5%	24.5%	-	(9,000)
FM 1960 / Highway 249	40	5,305,239	606,919	11.8%	11.4%	14.0%	165,754	19,000
FM 1960	77	8,527,532	1,275,646	14.8%	15.0%	16.6%	165,754	(11,000)
North Belt West / Greenspoint	75	10,105,399	3,096,294	30.6%	30.6%	34.0%	-	(9,000)
Greenspoint / IAH	22	3,076,008	519,845	16.1%	16.9%	17.2%	-	(25,000)
Greenspoint / North Belt	97	13,181,407	3,616,140	27.2%	27.4%	30.1%	-	(34,000)
Greenway Plaza	50	11,064,288	1,349,843	11.3%	12.2%	12.3%	398,696	121,000
Gulf Freeway/Pasadena	34	2,597,502	400,015	14.0%	15.4%	15.4%	102,000	(36,000)
Katy	43	3,259,094	514,937	15.9%	15.8%	15.9%	124,017	3,000
Katy Freeway East	63	9,604,261	835,571	9.1%	8.7%	9.5%	226,511	38,000
Katy Freeway West	142	26,506,699	3,127,790	11.3%	11.8%	14.5%	952,964	(133,000)
Katy Frwy / Energy Corridor	205	36,110,960	3,963,361	10.7%	11.0%	13.2%	1,179,475	(95,000)
Kingwood / Humble	9	1,025,047	84,054	9.3%	8.2%	8.2%	-	11,000
NASA / Clear Lake	63	7,051,599	849,013	13.4%	12.0%	12.4%	-	96,000
Northeast	16	1,665,562	206,530	17.9%	12.4%	12.4%	-	510,000
North Loop West	29	4,133,495	565,049	13.9%	13.7%	14.4%	-	10,000
Northwest Near	13	1,319,023	6,595	0.8%	0.5%	0.8%	-	4,000
Northwest Far	31	3,430,620	864,516	23.8%	25.2%	25.6%	-	(47,000)
Northwest	73	8,883,138	1,436,160	15.8%	16.2%	16.7%	-	(33,000)
South Main / Medical Center	49	10,469,072	975,718	9.2%	9.3%	9.3%	-	(13,000)
Southwest / Hillcroft	35	4,269,911	713,075	17.2%	16.7%	16.9%	-	23,000
Southwest Beltway 8	43	5,620,512	883,544	16.8%	15.7%	15.8%	-	61,000
E Fort Bend Co / Sugar Land	45	6,376,248	418,919	7.1%	6.6%	7.1%	-	31,000
Southwest Fwy / Sugar Land	123	16,266,671	2,015,539	13.1%	12.4%	12.7%	-	115,000
West Belt	37	4,902,573	808,925	16.5%	16.5%	17.8%	-	-
Bellaire	29	4,374,993	320,249	6.4%	7.3%	7.7%	-	(40,000)
Post Oak Park	29	4,294,059	760,048	16.7%	17.7%	18.6%	380,000	(43,000)
Galleria	55	15,804,024	1,408,139	8.6%	8.9%	9.9%	905,000	(54,000)
Riverway	16	2,868,495	332,745	11.2%	11.6%	12.3%	-	(11,000)
Richmond / Fountainview	11	819,689	193,447	22.9%	23.6%	23.6%	-	(6,000)
San Felipe / Voss	33	5,041,885	463,853	9.6%	9.2%	9.4%	-	20,000
West Loop	173	33,203,145	3,478,482	10.1%	10.5%	11.2%	1,285,000	(134,000)
Westchase	88	16,367,349	1,734,939	9.2%	10.6%	13.0%	1,100,000	178,000
The Woodlands	92	15,348,455	1,335,316	8.0%	8.7%	9.3%	511,913	169,000
Conroe	13	903,345	79,494	8.8%	8.8%	8.8%	-	-
TOTAL - Houston	1,362	244,506,057	30,601,159	12.2%	12.5%	13.8%	5,923,513	996,000

Source: TransWestern

Concessions are prevalent, especially in Class A, with free rent and improvement packages dramatically increasing. The office market will likely be extremely challenging for several years, and the full impact will not be realized until oil prices stabilize, and energy companies hit bottom and begin to recover.

Asking rents will fall with better deals coming for tenants in the market. This is not the 1980s, but it is arguably the toughest office market since that time. The overall Houston market includes 244,506,057sf of office space with vacancy at 13.8% (direct and sub-lease space). Rental rates on average are at \$35.09psf (Class A) and \$21.30psf for Class B.

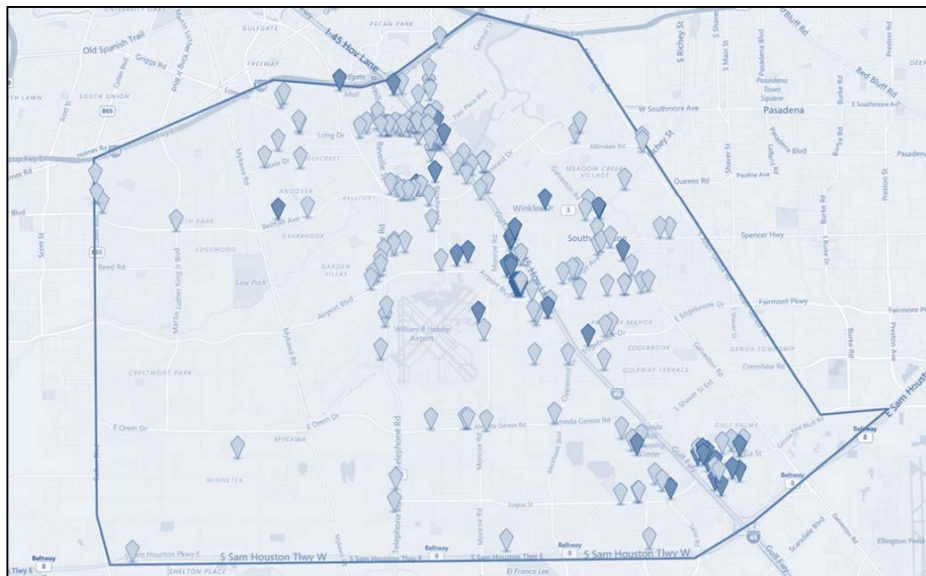
Gulf Freeway/Pasadena Sub-market

The CMA is located within the Gulf Freeway/Pasadena sub-market. The table in this section indicates that the sub-market includes 34 buildings (2,597,502sf). The sub-market has no Class A office space. The vacancy rate is 15.4% with 102,000sf under construction. The rental rates for Class B office were \$22.35psf (2015) but have decreased slightly to \$21.49psf in 1Q2016.

CMA OFFICE MARKET

There are 179 office buildings totaling 2,481,933 square feet in the CMA. The vacancy rate is 8.8% and gross rents are at \$20.01psf. The average year built is 1973. There is one existing Class A building (built 2010 – 22,706sf) and one proposed (82,324sf), both in 77034 zip code. Clearly this is a Class B market.

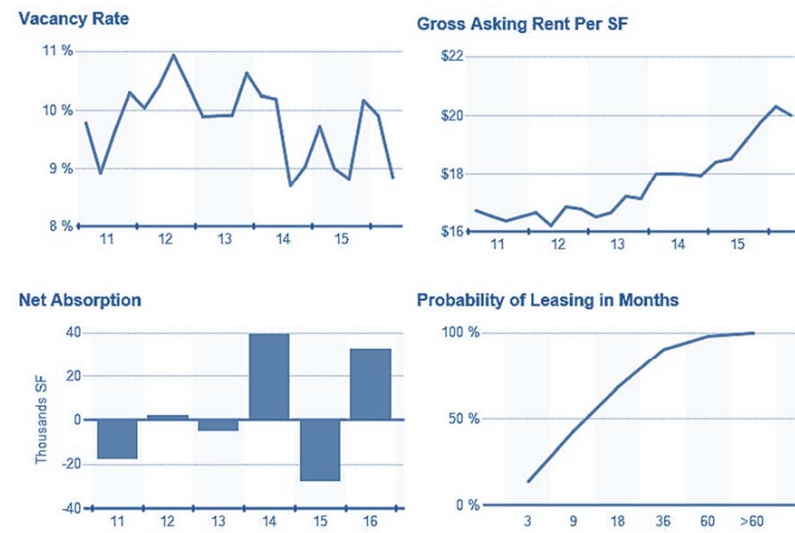
Figure 37: Office Locations in the CMA



CMA Performance

The vacancy rate in the CMA has been somewhat varied, ranging from below 9% to 11%. Most recently vacancy has been below 9%. Gross rents have steadily increased since 2011. The past 12 months saw a positive absorption of 21,701 sf.

Figure 38: Office Market Trends in the CMA



Source: CoStar

STUDY AREA OFFICE MARKET

The study area includes 57 buildings with 899,844 square feet. The average vacancy rate is 11.8% with rental rates at \$19.17psf (gross).

Performance Trends

Vacancy has decreased since 2013. Rents have increased, as much as 36% from \$14 to \$19.17psf. The 12-month absorption was a positive 8,063 sf.

Figure 39: Office Locations in the Study Area



Figure 40: Office Market Trends in the Study Area



Source: CoStar

POTENTIAL DEMAND – OFFICE SPACE

Given the previously described current regional economic trends, office market conditions, realistic potential capture of regional office growth, and competitiveness factors for the CMA, CDS has estimated what might be a realistic expectation of office development based on employment projections by RAZ as illustrated in the tables below.

Table 56: Average CDS and HGAC Projections for the CMA

AVERAGE	2015	2020	2025	2030	2035	2040
Population	240,398	251,114	267,737	277,881	281,888	290,372
Households	74,554	77,744	83,001	86,900	89,494	93,243
Employment	80,530	83,479	87,336	90,259	93,343	95,828

Source: CDS Community Development Strategies, H-GAC

Employment growth in the market area is projected by both CDS/H-GAC to increase at a rate of 3.6% over the next five-year period, 4.6% the following period (2020 to 2025).

In the analysis herein, the CDS estimates which incorporate sources including Dr. Barton Smith, formerly of UH, and H-GAC, will be used. CDS believes Dr. Smith's forecasts are more likely because they allocate more growth to outlying areas than H-GAC.

An office space per office employee factor for the past five years ranged from a low of 325 square feet in 2007 to a high of 365 square feet in 2010. It rebounded to 343 square feet per employee in 2012. In our analysis, we will use 340 square feet.

Figure 41: Employment Forecasts by TAZ for the CMA

	2015	2020	2025	2030
Employment Projections	80,530	83,479	87,336	90,259
39.08% Labor Force/Prof. Jobs	31,471	32,624	34,131	35,273
5 Yr increase		1,152	1,507	1,142
340 SF per Job		391,840	512,487	388,385
Less: CMA pipeline space to 2020		(82,324)		
Total CMA Demand		309,516	512,487	388,385
Annual CMA Demand		61,903	102,497	77,677

Source: CDS Community Development Strategies, HGAC

By 2020, the CMA will only have demand for 309k square feet of office space, including the currently under construction or proposed to accommodate the employment growth in the market area (TAZ) that is expected in the area. Based on the current supply of office space, 38.3% is located in the Hobby Area Management District. CDS will assume that 38 percent will continue thru 2020 in our estimates. Therefore, the study area can expect to absorb 117,616 square feet from 2016 to 2020 or 23,523sf annually based on employment projections.

Figure 42: Study Area Office Demand

	2015	2020	2025	2030
Employment Projections	80,530	83,479	87,336	90,259
39.08% Labor Force/Prof. Jobs	31,471	32,624	34,131	35,273
5 Yr increase		1,152	1,507	1,142
340 SF per Job		391,840	512,487	388,385
Less: CMA pipeline space to 2020		(82,324)		
Total CMA Demand		309,516	512,487	388,385
38% Study Area		117,616	194,745	147,586
Annual Study Area Demand		23,523	38,949	29,517

The study area currently includes approximately 38% of the overall CMA office supply. Rental rates in the study area are at \$19.17psf with an 11.8% vacancy rate. The study area is a Class B/C market. Given the current vacancy of 11.8% and rents of \$19 it is suggested that this development be phased in incrementally. Demand for typical office space will grow as population increases and employment growth continues. Absorption rates are difficult to project for such product, but increments of space in the 10,000 to 20,000 square foot range would likely lease up within 18 to 20 months. Single-tenant office demand will be comprised primarily of tenants that are businesses/suppliers in the area due to the airport. General multi-tenant office demand will be comprised primarily of smaller tenants that are businesses local. These tenants are likely underserved by the existing supply of quality office space, but many will have limited capacity to increase leasing costs.

HOSPITALITY

The Houston MSA includes 87,278 rooms (YE2015) with a 66.2% estimated occupancy and a \$73.71 REVPAR according to Source Strategies, Inc. According to Integra Realty (2016) the Houston hospitality market has a higher ADR than both the South region and the Nation in full-service and Limited Service hotels. At \$175 it is significantly above \$148 in the region (full-service).

In occupancy, Houston is lagging in full service hotels (69.4% vs. 72.8%) however in limited service the difference is not as strong. The following factors and events will help aid the lodging growth in Houston: continued downstream petrochemical plant expansions, 2016 NCAA Final Four, 2017 Super Bowl and continued downtown conventions. A total of 66 hotels are being built between 2015 and 2016, most major brand-name hotels.

The following hotels have experienced either minor or major renovations recently: Hotel Derek, Royal Sonesta, Wyndham Houston West Energy Corridor, Westin Houston Downtown, Lancaster Houston Hotel, and the Sam Houston Hotel. Houston continues to have double-digit RevPAR growth, and this trend will continue further into the future with the expansion of businesses, jobs, and population in the city.

The office of the Governor, Economic Development & Tourism reports that from 2006 to 2015 room revenues increased 58.5% in the overall Houston hotel market. Occupancy rose steadily from 2006 to 2008, fell dramatically from 67.5% (2008) to 57.7% in 2010. From 2011 occupancy increased from 62.1% to 70.8% in 2014 and decreased slightly in 2015 to 67.2%.

CMA HOSPITALITY MARKET

Historical hotel performance statistics for the CMA resemble the same trends for the MSA overall. Performance figures were steady and increasing from 2010 to 2014 but dropped off in 2015 when effects of the oil prices hit Houston and affected both business and leisure travel.

The number of hotels have increased by 13.1% since 2010 along with ADR at 12.8%. Looking at occupancy from the low in 2010, it increased by 37% in 2014. REVPAR has increased by 45% since recession years.

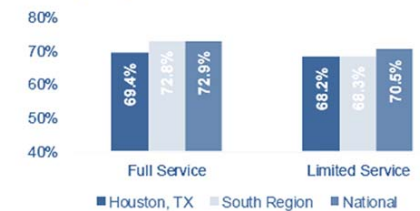
A detailed list of hotels within the CMA is organized by zip code in the table in this section. The CMA contains 2,734 hotel rooms that vary in type, quality, and size. The most recent occupancy figures for the CMA show a range from 58.4% to 68.7% for an average of 64.7%. REVPAR on average is \$43.78.

Figure 43: Hospitality Market Trends

Average Daily Rate (\$/Room)



Occupancy Rates (%)



Source: Integra Realty

HOBBY AREA LIVABLE CENTER MARKET ASSESSMENT

Occupancy is higher and REVPAR is lower in the CMA compared to the MSA. The highlighted zip codes are those which are in the study area. The study area includes 1,718 rooms with occupancy at an average 66.5% and REVPAR at \$44.25. The Study area includes 62.8% of the overall CMA hotel supply. The area near Hobby Airport, has higher occupancies at 68.7% and REVPAR at \$60.43; this is the best performing zip code (77061) in the CMA.

Figure 44: Hospitality Supply and Occupancy in the Bay Area / Hobby Airport Region



Sources: PKF Consulting/CBRE

Table 57: Hotels in the CMA by Zip Code

Zip	Hotel Name	# Rooms	\$ Room Revenues Revenue	Occupancy	REVPAR
77017	Marriott Hobby	287	\$8,998,026	65.60%	\$85.90
	Fairfield Inn	70	\$1,902,725	66.30%	\$74.47
	Courtyard Hobby	153	\$3,962,602	65.70%	\$70.96
	Four Points	79	\$1,870,694	66.30%	\$64.88
	Palace Inn	35	\$526,796	64.20%	\$41.24
	Camelot Inn	30	\$326,722	67.40%	\$29.84
	Ashbury Suites	45	\$474,374	67.50%	\$28.88
	Passport Inn	30	\$260,195	60.50%	\$23.76
	Best Value	46	\$394,997	62.10%	\$23.53
	Travel Inn	50	\$199,484	76.50%	\$21.68
	Smile Inn	35	\$269,688	63.30%	\$21.11
	Sub-total	860	\$19,186,303	65.70%	\$62.94

HOBBY AREA LIVABLE CENTER MARKET ASSESSMENT

Zip	Hotel Name	# Rooms	\$ Room Revenues Revenue	Occupancy	REVPAR
77033	N/A				
77034	Luxury Inn	28	\$317,040	53.20%	\$31.02
	Baymont Inn	128	\$1,004,341	58.40%	\$21.50
	Sub-total	156	\$1,321,381	58.40%	\$23.21
77048	N/A				
77061	Doubletree Hobby	303	\$9,589,808	70.00%	\$86.71
	Hampton Inn	119	\$3,633,372	69.80%	\$83.65
	Days Inn	38	\$1,008,779	70.00%	\$72.73
	Springhill Suites	122	\$3,112,210	67.40%	\$69.89
	Best Western Plus	72	\$1,813,476	71.90%	\$69.01
	Comfort Suites	59	\$1,454,468	66.90%	\$67.54
	La Quinta	73	\$1,695,578	69.70%	\$63.64
	Drury Inn	134	\$3,057,228	70.70%	\$62.51
	Holiday Inn	194	\$4,082,835	66.00%	\$57.66
	Econo Lodge	40	\$504,249	65.80%	\$34.54
	Crown Palace Inn	40	\$401,049	71.20%	\$27.47
	Scottish Inn	38	\$356,485	63.70%	\$25.70
	Downtowner Inn	50	\$466,061	67.00%	\$25.54
	Quality Inn	60	\$128,974	60.10%	\$23.36
	Motel 6	141	\$1,104,762	69.40%	\$21.47
	Hobby Apt Inn	87	\$266,923	66.10%	\$16.89
	Sub-Total	1570	\$32,676,257	68.70%	\$60.43
77075	Super 8	31	\$658,242	68.10%	\$58.17
	Palace Inn	34	\$430,910	66.60%	\$34.72
	Scottish Inn	31	\$301,368	63.00%	\$26.63
	Sub-total	96	\$1,390,520	65.90%	\$39.68
77087	Palace Inn	25	\$313,169	66.60%	\$44.91
	South Loop Inn	27	\$236,028	63.80%	\$23.95
	Sub-total	52	\$549,197	65.00%	\$32.63
77587	N/A				
TOTALS/AVERAGES		2734	\$55,123,658	64.74%	\$43.78

Source: Source Strategies 4Q 2015 - Annual

POTENTIAL DEMAND – HOSPITALITY

Demand for hotel rooms is directly affected by population and employment/jobs in a given area. The table below represents the CMA and two other comparison areas in terms the factors involved in the room density calculation. This calculation takes the total number of rooms and divides it by the resident population combined with the number of jobs located in each geographic area. As mentioned the CMA has the lowest room density at 8.13

HOBBY AREA LIVABLE CENTER MARKET ASSESSMENT

rooms per 1,000 with the average being 9.71 in Texas and Houston. Downtown Houston is second in terms of density due to the large amount of jobs located in the area. The entire State of Texas measures 10.56 rooms per 1,000, which is slightly higher than the Houston MSA at 8.86.

Table 58: Hotel Room Density Comparison for the CMA

Geography	No. of Rooms	Total Population	Total Employment	Average Occupancy	Rooms/1,000 Population and Employment
State of Texas	425,289	27,611,503	12,654,703	64.9%	10.56
Houston MSA	87,278	6,677,340	3,168,192	66.2%	8.86
CMA	2,734	237,434	99,290	64.7%	8.13

Source: Source Strategies, PCensus, CDS

Of all areas compared the CMA is currently faring below the Houston MSA comparison area at 64.7%. Although this may not be considered great performance typically, it is considered positive for the current overall economic climate that certainly affects demand for hotel rooms. While the high density numbers might typically be of concern, the market supports these figures of current hotel development and they have historically performed well. Based on the market supported continuance and potential increase of this ratio CDS has used the expected growth in population and jobs for the area as a determining factor that will spur demand for additional hotel rooms. The tables in this section highlight the forecasted additional growth of population and employment presented previously from CDS/HGAC (p.33).

Table 59: Hotel Demand Projections for the CMA

Category	2015	2016-2020	2021-2025	2026-2030
Total CMA Employment	80,530	83,479	87,336	90,259
Total CMA Population	240,398	251,114	267,737	277,881
Total CMA				
Population + Employment	320,928	334,593	355,073	368,140
Incremental CMA Population and Employment Growth		13,665	20,480	13,067
Incremental CMA Hotel Demand (8.9 Rooms/ 1,000 Pop. and Emp.)		121	181	115
Study Area Share (62.8%) Rooms		76	114	72

Source: Source Strategies, PCensus, CDS

Overall CMA hotel room demand is illustrated in the above table. This is an average of the demand illustrated by the CDS/HGAC forecast method. Based on expected growth illustrated in the forecast and the historical market performance of Hotels in the CMA, CDS conservatively estimates there will be market supported demand of an additional 76 rooms in the market area by 2020 and 114 more in the period of 2021 to 2025.

INDUSTRIAL SPACE

Houston's industrial market continues to weather the effects of low oil prices with positive growth. Demand is strong, particularly in the Southeast submarket, and the flexibility offered in leasing terms and space use has been instrumental in preserving the market's strength (CBRE Q12016). Tenants and landlords in Houston's industrial market have responded to the changing economic environment via two trends: increases in shorter-term leases and an increased availability of sublease space.

Sublease space availability was a defining trend this quarter. Compared to a year ago, total industrial sublease availability surged over 1.6 million sq. ft. to 3.5 million sq. ft. —the largest amount on record and well above the five-year average of 2.4 million sq. ft. Although at an all-time high, current available sublease still represents only a small portion of all available space despite growing by 562,986 sq. ft. this quarter—the largest increase observed since Q2 2009.

Houston's overall vacancy held steady at 4.9% as leasing velocity slowed in select submarkets. Tenants are carrying on with calculated leasing decisions, yet demand is strongest in third party logistics and warehousing demand. Rental rates have remained relatively unchanged in Q1 2016 where the current citywide industrial average asking gross rate per sq. ft. is \$0.70 per month. The average quoted gross monthly rent rates are \$0.55 per sq. ft. for warehouse/distribution space; \$0.88 for flex/service space; and \$0.66 per sq. ft. for manufacturing space.

A 1 million sq. ft. increase in construction starts was observed quarter-over-quarter, as 13 new projects broke ground representing just over 2.1 million sq. ft. of space. Although oil price volatility has heavily impacted demand for office space, overall industrial demand has yet to be derailed despite the rise in sublet availability. The continuing expansion of the downstream petrochemical industry remains a significant driver of area growth. Additionally, strong performance by the retail market and the resulting growth in consumer's disposable income via low gasoline prices has further bolstered demand, keeping distribution users active in the market.

Both the CMA and study area are in the South sub-market. The South includes 43,535,972 square feet with a vacancy rate of 3% and asking rents at \$0.67psf (gross). Comparatively, the overall Houston market includes 496,656,625 square feet with a 4.9% vacancy and rates at \$0.72psf. The South sub-market has the lowest vacancy in Houston and the 3rd lowest rental rates. The South, Southeast and North submarkets all saw modest to moderate negative absorption

CMA INDUSTRIAL MARKET

There are 1,388 buildings including 26,565,705 square feet of industrial space in the CMA. The average vacancy is 2.4% with rental rates at \$6.33psf. Net absorption for the past 12 months was 14,426sf. There is 35,200sf under construction and 116,640sf proposed (2 buildings).

Vacancy in the CMA has been somewhat volatile over the past five years, although they have remained fairly low. Rates have gone from 1.5% to 4% with the largest jump up in 2013. Asking rents have been steadily rising from \$4.75psf up to \$7.00psf. Most recently, rates have decreased to \$6.33psf. Absorption has been relatively positive over the past five years overall. The performance trends of the CMA can be seen in the following figure.

Figure 45: Industrial Market Trends in the CMA



STUDY AREA INDUSTRIAL MARKET

There are a total of 390 industrial buildings in the study area (Hobby Management District boundaries), accounting for nearly 10 million square feet of industrial space. According to data from CoStar, this makes up an estimated 2% of the total industrial space in the Houston Area.

Types of Industrial

In the Houston area, warehouse space makes up an estimated 60% share of total industrial space, followed by manufacturing at around 16% and distribution at around 13%. All others make up around 11% of industrial space. According to brokers interviewed, the tenant mix for industrial space in the hobby area likely follows a similar mix, although perhaps more heavily weighted towards other types of uses not associated with warehouse, manufacturing, or distribution. This is due to the fact that the majority of industrial properties are on smaller lots and made up of less square feet—as compared to other industrial market areas in the Houston area. This results in a more varied mix of tenants, with a high number of smaller companies involved in unique industrial uses.

Industrial Market Performance Trends

The following table provides an overview of the industrial market in the study area. Note that the vacancy rate is particularly low at 1.6%. This compares to an overall vacancy rate of 5.4% for industrial space in the Houston area as of Q1 2016 (up from 4.7% in Q1 2015). According to brokers familiar with the area, although there is demand for industrial space around the Hobby Airport, the real issue here is a lack of supply. Currently, there are no new

properties under construction that have been captured by the CoStar survey or that are currently listed on any industrial space MLS.

Industrial Space Market Overview	INDUSTRIAL	
	Survey	5-Year Average
Inventory		
Existing Buildings	390	-
Existing SF	9,716,169	-
Under Construction	0	-
Availability		
Rent Per SF	\$6.83	\$5.60
Vacancy Rate	1.6%	2.2%
Vacant SF	152,844	205,579
Availability Rate	5.4%	5.2%
Available SF	524,292	500,559
Months on Market	11	12
Demand		
12 Mo. Absorption SF	5,158	101,446
12 Mo. Leasing SF	156,383	133,671

Sources: CoStar Realty Information Inc.; CDS

Currently there are 36 properties for sale or lease; 20 properties for sale, 16 properties for lease. All of these properties are under 100,000 SF and the majority of these properties are under 50,000 SF. Most of these properties are on small lots of only a few acres. According to brokers, this is a representative sampling of the type of industrial space in the area. The following figure provides images of a selected number of these properties.

POTENTIAL DEMAND – INDUSTRIAL SPACE

Using the HGAC trends of Industrial employment in the Houston MSA and the O'Connor and Associates trends on industrial space, CDS has estimated that approximately 825 square feet per employee currently exists in the Houston MSA. Based on 2016 data from PCensus and CDS/HGAC TAZs, 31.5% of CMA labor force growth estimates are in industrial employment. The space per employee of 825sf multiplied by 31.55% of the employees being in industrial or industrial support, annual demand for industrial facilities in the Market Area is 614,931 square feet through 2020. Currently 36.57% of total CMA industrial space is in the study area. CDS estimates that the study area could capture 250,892 square feet thru 2020 and an additional 81,791 thru 2025.

Table 60: Future Industrial Demand

	2015	2020	2025	2030
CMA Employment Projections	80,530	83,479	87,336	90,259
31.5% Labor Force/Industrial Jobs	25,367	26,296	27,511	28,432
5 Yr increase		929	1,215	921
825 SF per Job		766,371	1,002,338	759,615
Less: CMA pipeline space to 2020		-151,440		
Total CMA Demand		614,931	1,002,338	759,615
Study Area 36.57% of CMA		250,892	408,954	309,923
Annual Study Area Demand		50,178	81,791	61,985

Sources: HGAC, CDS, PCensus for MapInfo

Conclusions and findings include the following:

- According to commercial real estate brokers who specialize in the Houston industrial market and are familiar with the Hobby area, the study area has both opportunities and challenges. Currently, there is a very low vacancy rate due mostly to the lack of new supply. However, the area has some inherent benefits. It is located near major transportation corridors, including I-45, 610, and Beltway 8. It is also located near major industrial activity centers including the refinery activity to the south—but especially the port activity to the east in Pasadena and Baytown. The following are a list of observations including, including both challenges and opportunities:
- The area contains a lot of smaller, free standing industrial buildings. This is different than other parts of Houston where large industrial multi-tenant complexes can be subdivided in ways to accommodate larger tenants. These smaller buildings on smaller lots make it challenging to welcome larger companies, but serve smaller companies very well.
- New supply has been lacking in this area for multiple reasons. The perception of this area is that of higher-than-average crime rates; local roads are older, comparatively narrow, and occasionally in disrepair; and a lack of large undeveloped lots with challenges to new construction—such as flood plain restrictions and water retention requirements.
- The Hobby area could be an area that can benefit from the increased port activity. A foreign trade zone (or other special taxing designation), alleviating restrictions, and additional transportation benefit may help to offset the current challenges.
- Well-built public utilities are an essential element to successful industrial activity. Not only transportation, but also water, sewer and other utilities. Reportedly, some industrial development/redevelopment in this area has had challenges with meeting fire safety requirements related to sprinkler systems. Water lines did not have the flow capacity to handle sprinkler systems that met code. An on-site water storage tank had to be built for development to proceed. Not only would this have increased cost but it would have taken up valuable space. This reportedly made the projects in question not viable. Public utilities can be a difficult challenge to solve, but infrastructure improvements will be necessary if industrial reinvestment is to occur in this area on a large scale.
- On that note, the level of industrial activity in the area has made other land uses take notice of the trucking traffic. There has been discussion about restricting traffic on local streets to benefit residential and retail land

uses. Those familiar with the industrial industry have suggested that rather than restricting traffic, if there were optimal routes designating for trucking traffic, most drivers would comply. Especially if these routes could be setup in a way to expedite the permitting process for moving oversized and extra heavy loads.

- An opportunity for this area related to industrial activity involves additional manufacturing. This would increase employment and daytime population, both of which would have a benefit to other land uses in the area. Currently there is a manufacturing base in the area that builds fabricated parts and other supplies for the oil and gas industry in the port area and down south. Several small companies (and large companies with smaller local operations) are in the area and utilize the smaller lot, stand-alone buildings to service their clients. Additional manufacturing companies and start-ups could be added to the area if the challenges are addressed and new industrial space is added.

Figure 46: Properties Currently for Sale or Lease in the Hobby Management District



Source: Commercial Division of the Houston Association of Realtors

APPENDIX:

Table 61: Current Inventory of Multifamily Housing in the Study Area

Building Name	Building Address	Zip	Class	Units	Rent/SF	Avg Rent	Built	Avg SF	Vacancy %	Type
Clearwood Villas	9465 Clearwood St	77075	A	276	\$0.68	\$826	2002	1214	1.5	Aff
Vista Verde	8601 Broadway St	77061	B	1039	\$0.91	\$623	1979	693	7.0	Mkt
Savannah	8800 Broadway St	77061	B	306	\$0.81	\$606	1978	753	0.0	Mkt
Alta Verde	8915 Broadway St	77061	B	1431	\$0.83	\$651	1979	744	6.5	Mkt
Attucks	7342 Brockley Ln	77087	B	1			1953			Mkt
Grahamcrest Manor	7615 Grahamcrest Dr	77061	B	50	\$1.07	\$767	1973	716	16	Aff
Gulfway	8306 Gulf Fwy	77017	B	64	\$0.85	\$675	1955	793	7.8	Mkt
Del Lago	9800 Hollock St	77075	B	162	\$0.99	\$823	1983	833	1.9	Mkt
Glenwood Village	8100 Leonora St	77061	B	8			1966			Mkt
Sterling Court	9590 Minnesota St	77075	B	140	\$0.74	\$681	2010	923	0	Sr Aff
Cabo San Lucas	9220 Nathaniel St	77075	B	405	\$0.78	\$536	1976	709	10.0	Mkt
Bellestone Villas	8271 Stone St	77061	B	60	\$0.69	\$585	1960	860	10.0	Mkt
Telephone Road	6000 Telephone Rd	77087	B	200	\$1.12	\$672	1975	606	0.0	Sr Aff
Bellfort East	7606 Bellfort Ave	77061	C	58	\$0.70	\$744	1973	1069	5.2	Mkt
	7710 Bellfort Ave	77061	C	18			1962			Mkt
Lennox	7711 Bellfort Ave	77061	C	41			1964	1098		Mkt
Bellfort Plaza Apts	7035 Bellfort St	77087	C	154	\$1.02	\$657	1966	674	1.3	Aff
Chez Orleans	7065 Bellfort St	77087	C	23	\$0.74	\$699	1964	885	13	Mkt
Bellfort	7950 Bellfort St	77061	C	552	\$1.12	\$844	1980	754	4	Aff
Las Palmas	7987 Bellfort St	77061	C	204	\$0.81	\$656	1955	808	0.0	Mkt
	7627 Broadview Dr	77061	C	8			1963			Mkt
Pebble Walk	8500 Broadway Blvd	77061	C	228	\$0.66	\$472	1974	714	0.0	Mkt
Esperanza	4410 Broadway St	77087	C	29			1962			Mkt
Thai Xuan Village	8200 Broadway St	77061	C	209			1976			Mkt
Broadway Village	8400 Broadway St	77061	C	210	\$0.87	\$619	1973	724	10.0	Mkt
Broadway Casa	8405 Broadway St	77061	C	150	\$0.76	\$680	1973	836	2	Mkt
Crescent City Apts	8501 Broadway St	77061	C	328	\$0.92	\$638	1975	695	6.0	Mkt
Dover Place	4137 Dover St	77087	C	32	\$0.64	\$575	1963	900	1.0	Mkt
Winston Chase Apts	9410 Edgebrook St	77075	C	22			1984	750		Mkt
Leonora Square Apts	7611 Glenview Dr	77061	C	34	\$0.67	\$693	1960	1055	0	Mkt
Grahamcrest Apts	7515 Grahamcrest Dr	77061	C	50	\$1.07	\$800	1973	748	10	Aff
	7614 Grahamcrest Dr	77061	C	6	\$0.84	\$503	1971	642	0	Mkt
Easthaven	9404-9410 Grannis St	77075	C	24	\$0.96	\$641	1965	713	4.2	Mkt
Casa Grande	8800 Gulf Fwy	77017	C	63	\$0.81	\$651	1963	737	11.1	Mkt
Cabo San Lucas I	10910 Gulf Fwy	77034	C	367	\$0.67	\$652	1972	653	22.0	Mkt
Cabo San Lucas II	10910 Gulf Fwy	77034	C	294	\$0.92	\$670	1976	741	7.0	Mkt
Globe Apartments	6535 Hogue St	77087	C	61	\$0.85	\$374	1962	750	11.5	Mkt
Tropicana Apartments	7367 Kingsway Dr	77087	C	40	\$0.88	\$652	1964	800	10	Mkt
Lenora Apts	7901 Leonora St	77061	C	62	\$0.73	\$730	1965	1013	5.0	Aff
Los Arcos	8101 Leonora St	77061	C	64	\$0.85	\$939	1970	997	4.7	Mkt
	8256 Leonora St	77061	C	10			2007			Mkt
	7323 Lindencrest St	77061	C	12	\$0.69	\$381	1963	589	8.3	Mkt

HOBBY AREA LIVABLE CENTER MARKET ASSESSMENT

Building Name	Building Address	Zip	Class	Units	Rent/SF	Avg Rent	Built	Avg SF	Vacancy %	Type
	7330 Lindencrest St	77061	C	13			1948			Mkt
Lindencrest	7410 Lindencrest St	77061	C	20			1956	442	10	Mkt
	7419 Lindencrest St	77061	C	6						Mkt
	7518 Morley St	77061	C	6			1980			Mkt
Morley Place Apts	7521 Morley St	77061	C	18			1965	783		Mkt
Pecan Villa Apts	7617 Pecan Villas Dr	77061	C	20			1940			Mkt
	7626 Pecan Villas Dr	77061	C	8			1963			Mkt
Los Pinos at Redford	9406 Redford	77075	C	61	\$0.89	\$606	1962	775	11.5	Mkt
Stone Manor	8404 Stone St	77061	C	76	\$0.70	\$451	1972	664	4	Mkt
Garden Oaks	6702 Telephone Rd	77061	C	35			1964			Mkt
Sage Meadows	6727 Telephone Rd	77061	C	262	\$0.72	\$586	1972	819	0.0	Mkt
Hartman Apts	6210 Waltrip St	77087	C	24	\$0.66	\$596	1970	913	4.2	Mkt
		77087	C	20			1955	550		Mkt

Source: CoStar

Table 62: Current Inventory of Retail Locations in the Study Area

Building Address	Building Name	Property Type	Year Built	Rentable Building Area	Average Weighted Rent	% Leased	Anchor Tenants
7115 Airport Blvd	Gunnels Interest, Inc.	General Retail	1970	10415	-	100	
7600 Airport Blvd		General Retail	1999	7884	-	100	
7775 Airport Blvd		General Retail	1989	35367	-	100	
8101 Airport Blvd		General Retail	1981	31000	13.03	65	
8111 Airport Blvd		General Retail	1997	2748	-	100	
8610 Airport Blvd		General Retail	1997	3195	-	100	
8610 Airport Blvd		General Retail	1997	2811	-	100	
8833 Airport Blvd		General Retail	2001	5000	-	100	
8902 Airport Blvd		General Retail	2001	5970	-	100	
8906 Airport Blvd		General Retail	2009	4500	-	100	
9006 Airport Blvd		General Retail	1955	13035	-	100	
9125 Airport Blvd		General Retail	1978	13344	-	100	
9202 Airport Blvd	Nikooi Plaza	General Retail	1973	2144	30	53	
9223 Airport Blvd		General Retail	1986	1473	-	100	
8405 Alameda Genoa Rd	Hobby South Plaza	Neighborhood Center	1984	26000	-	100	
9337 Alameda Genoa Rd		General Retail	1955	3000	8.04	0	
9421 Alameda Genoa Rd		General Retail	2012	4027	-	100	
9505 Alameda Genoa Rd		General Retail	1994	4800	-	100	
9507 Alameda Genoa Rd		General Retail	1994	1920	-	100	
9827 Alameda Genoa Rd		General Retail	1990	13959	-	100	
9837 Alameda Genoa Rd		General Retail	1978	16109	-	100	
9911 Alameda Genoa Rd		General Retail	2007	6483	-	100	
9931 Alameda Genoa Rd		General Retail	2007	1557	-	100	
9997 Alameda Genoa Rd		General Retail	2007	2412	-	100	
10009 Alameda Genoa Rd		Power Center	2007	4079	-	100	
10035 Alameda Genoa Rd		Power Center	2010	8000	-	100	
10039 Alameda Genoa Rd		Power Center	2011	9060	-	100	
10075 Alameda Genoa Rd	Petsmart	Power Center	2006	33084	-	100	Party City
10137 Alameda Genoa Rd		General Retail	1971	2710	-	100	

HOBBY AREA LIVABLE CENTER MARKET ASSESSMENT

Building Address	Building Name	Property Type	Year Built	Rentable Building Area	Average Weighted Rent	% Leased	Anchor Tenants
10235 Alameda Genoa Rd		Community Center	1978	2548	-	100	
7721 Alameda-genoa Rd		Strip Center	2007	8579	-	100	
8243 Alameda-genoa Rd		General Retail	2010	1514	-	100	
8449 Alameda-genoa Rd		General Retail	1983	2365	-	100	
8811 Alameda-genoa Rd		General Retail	1970	773	-	100	
7550 Belfort Rd		Strip Center	1965	5800	-	100	
7828 Belfort	Children's World Learning Center	General Retail	1973	7125	-	100	
7975 Belfort		Strip Center	1982	15000	-	100	
6760 Belfort Ave		General Retail	1970	1300	-	100	
6800 Belfort Ave		Strip Center	1960	5200	-	100	
6811 Belfort Ave	Belfort	General Retail	1970	22261	-	100	
6951 Belfort Ave		General Retail	2010	8327	-	100	
7004 Belfort Ave		General Retail	1960	2033	-	100	
7046 Belfort Ave		General Retail	1965	1239	-	100	
7134 Belfort Ave		Strip Center	1957	4319	-	100	
7137-7151 Belfort Ave		Strip Center	1969	8286	-	100	
7155 Belfort Ave		General Retail	1962	3703	-	100	
7215 Belfort Ave		General Retail	1970	1800	-	100	
7470 Belfort Ave		General Retail	2002	1622	-	100	
7510 Belfort Ave		General Retail	1968	39465	-	100	
7515 Belfort Ave		General Retail	1960	2865	-	100	
7540 Belfort Ave		General Retail	1997	2019	-	100	
7544 Belfort Ave		General Retail	1959	2940	-	100	
7555 Belfort Ave		General Retail	1982	2260	-	100	
7652 Belfort Ave		General Retail	1976	1346	-	100	
7656 Belfort Ave		General Retail	1965	3230	-	100	
7658 Belfort Ave		General Retail	1965	1250	-	100	
7718 Belfort Ave		General Retail	1952	10000	-	100	
7718A Belfort Ave		General Retail	1965	804	-	100	
7722 Belfort Ave		General Retail	1965	5408	-	100	
7806 Belfort Ave		General Retail	1967	2301	-	100	
7808 Belfort Ave		General Retail	1983	6248	-	100	
7815 Belfort Ave		General Retail	1975	2895	-	100	
7953-7959 Belfort Ave		Strip Center	1960	3840	-	100	
7963 Belfort Ave		General Retail	1980	1269	-	100	
7990 Belfort Ave		General Retail	1995	11616	-	100	
7991 Belfort Ave		General Retail	2001	1368	-	100	
7810 Belfort Rd	Former Long John Silver Res	General Retail	1975	2133	-	100	
6518 Belfort St		General Retail	1984	3900	-	100	
6901 Belfort St		General Retail	1970	950	-	100	
6901-6935 Belfort St	Belfort Plaza	Neighborhood Center	1960	77950	-	100	
6920 Belfort St	Shell	General Retail	2002	3689	-	100	
6952 Belfort St		General Retail	1961	5647	-	100	
7006 Belfort St		General Retail	1955	1200	-	100	
7146 Belfort St	Cash America Pawn	General Retail	2003	4000	-	100	
7546 Belfort St		General Retail	1987	4216	-	100	

HOBBY AREA LIVABLE CENTER MARKET ASSESSMENT

Building Address	Building Name	Property Type	Year Built	Rentable Building Area	Average Weighted Rent	% Leased	Anchor Tenants
7640 Belfort St		General Retail	1967	5120	-	100	
7700 Belfort St	Lexington Square Shopping Center	Strip Center	1962	2900	-	100	
7721 Belfort St		Strip Center	1963	7500	-	100	
7773 Belfort St		General Retail	1970	4100	-	100	
7975 Belfort St	Hobby Belfort Center	Neighborhood Center	1982	31800	-	100	
7990 Belfort St	Pep Boys	General Retail	1995	11616	-	100	
7994 W Belfort St		General Retail	1998	26325	-	100	
Broadway @ Broadway & Belfort	Park-Way Service Center	Strip Center	1966	7000	-	100	
8234 Broadway	CVS Pharmacy	General Retail	2002	12036	-	100	
4136 Broadway St	Crespo Funeral Home	General Retail	1967	17444	-	100	
8133 Broadway St		General Retail	1975	4488	-	100	
8201-8235 Broadway St		Neighborhood Center	1971	74942	-	100	Fallas Paredes, Family Dollar
8235 Broadway St		General Retail	1969	2707	-	100	
8300-8326 Broadway St		Strip Center	1977	28292	-	100	
8301 Broadway St	Walgreens	General Retail	1999	14060	-	100	
8325 Broadway St		General Retail	1998	5816	-	100	
8330 Broadway St		General Retail	2008	18125	-	100	
8331 Broadway St	Popeyes	General Retail	1975	1701	-	100	
8385 Broadway St		General Retail	1970	7441	-	100	
8540-8548 Broadway St	EZ Pawn Broadway	Strip Center	1972	6400	16.2	61	
8600-8602 Broadway St		Strip Center	1987	7176	-	100	
8800 1/2 Broadway St		General Retail	1975	5801	-	100	
9333 Bryant St		General Retail		56711	-	100	
8920 Clearwood Dr		General Retail	1999	3724	-	100	
8927 Clearwood Dr		General Retail	1987	2631	-	100	
9020 Clearwood Dr	O'Reilly Auto Parts	General Retail	2011	8870	-	100	
9220 Clearwood Dr		General Retail	2002	6500	-	100	
8925 Clearwood St		General Retail	2000	2908	-	100	
9010 Clearwood St		General Retail	2011	8983	-	100	
9220 Clearwood St		General Retail	2002	6175	-	100	
9430 Clearwood St	Clearwood Plaza	Strip Center		16600	-	100	
9660 Clearwood St		General Retail	2012	2102	-	100	
9042 Dexter St		General Retail	1970	4800	-	100	
6500-6502 Dixie Dr	Former Richey's Country Cookin'	General Retail	1973	8000	-	100	
7565 Drouet St		General Retail	1976	2673		100	
7607 Drouet St		General Retail		1730	-	100	
9607 Easthaven Blvd		General Retail	2002	4893	-	100	
8627 Glenvista St		General Retail	1970	2400	-	100	
8160 Gulf Fwy		General Retail	1960	2340	-	100	
8202 Gulf Fwy		General Retail	1965	4286	-	100	
8222 Gulf Fwy		General Retail	1965	4481	-	100	
8226 Gulf Fwy		General Retail	1961	4750	-	100	
8310-8338 Gulf Fwy	Gulfway Plaza	Neighborhood Center	1967	56302	-	100	
8320 Gulf Fwy		General Retail	1967	56302	-	100	

HOBBY AREA LIVABLE CENTER MARKET ASSESSMENT

Building Address	Building Name	Property Type	Year Built	Rentable Building Area	Average Weighted Rent	% Leased	Anchor Tenants
8440 Gulf Fwy		General Retail	1974	12373	-	100	
8450 Gulf Fwy		General Retail	1953	2030	-	100	
8452 Gulf Fwy		Strip Center	1970	17362	-	100	
8456-8458 Gulf Fwy		Strip Center	1970	15505	14	84	
8460 Gulf Fwy		General Retail	1975	10120	-	100	
8464 Gulf Fwy		General Retail	1986	8036	-	100	
8470 Gulf Fwy		Strip Center	1986	17149	-	100	
8500 Gulf Fwy	Firestone Tire & Auto	General Retail	1983	8166	-	100	
8520 Gulf Fwy		General Retail	1973	6772	-	100	
8524 Gulf Fwy		General Retail	1987	2111	-	100	
8534 Gulf Fwy		General Retail	2000	4000		0	
8550 Gulf Fwy		General Retail	1977	9170	-	100	
8560 Gulf Fwy		General Retail	1976	6645	-	100	
8650 Gulf Fwy	Ferstl Suzuki	General Retail	1985	7850	-	100	
8888 Gulf Fwy		General Retail	1995	17100	-	100	
8926 Gulf Fwy		General Retail	1983	4723	-	100	
9014 Gulf Fwy		General Retail	2001	8988	-	100	
9220 Gulf Fwy		General Retail	1987	3681	-	100	
9802 Gulf Fwy	Shell	General Retail	1974	1958	-	100	
9810 Gulf Fwy		General Retail	1972	3528	-	100	
9820 Gulf Fwy	Building A	Community Center	1976	103611	18	86	
9820 Gulf Fwy	Building C	Community Center	1976	11686	18	47	
9820 Gulf Fwy	Building B	Community Center	1976	9600	-	100	
9900 Gulf Fwy	Building A	General Retail	1978	11050	-	100	
9900 Gulf Fwy	Bldg 2	General Retail	1980	10725	-	100	
9902 Gulf Fwy		General Retail	1984	4192	-	100	
10000-10008 Gulf Fwy	Gulf Freeway Plaza	Strip Center	1979	12710	12	88	
10102 Gulf Fwy	Cavenders Boot City	General Retail	1976	22847	-	100	
10222 Gulf Fwy		Strip Center	2005	3000	-	100	
10222 Gulf Fwy	Edgebrook Crossing Center	Strip Center	2005	12300	21	67	
10222 Gulf Fwy	Building B	Strip Center		9800	-	100	
10402 Gulf Fwy		General Retail	2010	6269	-	100	
10414 Gulf Fwy	Academy Sports & Outdoors	General Retail	2000	52861	-	100	
10530 Gulf Fwy		General Retail	1978	1995	-	100	
10540 Gulf Fwy		General Retail	2004	3614	-	100	
10700 Gulf Fwy		General Retail	1979	38400	-	100	
10900 Gulf Fwy		Strip Center	2002	23500	21	88	
10900 Gulf Fwy	Bldg B - Conn's	General Retail	1985	23000	-	100	
10950 Gulf Fwy		General Retail	1996	11885	-	100	
11130 Gulf Fwy	Alameda Crossing	Neighborhood Center	2006	39230	21	55	
11200 Gulf Fwy		Community Center	1984	45928	-	100	
11400-11404 Gulf Fwy	Rowlett Retail Center	Strip Center	2008	14725	25	69	
11404 Gulf Fwy	Starbucks	General Retail	2008	1750	-	100	
11408 Gulf Fwy	Capital One	General Retail	2008	4000	-	100	

HOBBY AREA LIVABLE CENTER MARKET ASSESSMENT

Building Address	Building Name	Property Type	Year Built	Rentable Building Area	Average Weighted Rent	% Leased	Anchor Tenants
11410 Gulf Fwy	Rowlett Retail Center	General Retail	2010	2800	-	100	
11414 Gulf Fwy		General Retail	1957	1011	-	100	
11542-11546 Gulf Fwy	Orange Grove	Community Center	1970	119341	-	100	FAMSA
11550 Gulf Fwy	Alameda Place	Neighborhood Center	2005	12140	15	82	
I-45 & Clearwood St	Clearwood Crossings	Strip Center	2016	15800	30	43	
7326 Lindencrest St		General Retail		1993	-	100	
7424 Lindencrest St		General Retail	1922	5778	-	100	
7428 Lindencrest St		General Retail	1922	2100	-	100	
7020 Monroe Rd	Monroe Center	Strip Center	1971	3787	16	100	
7051 Monroe Rd		General Retail	1976	3478	-	100	
7511 Monroe Rd	Pet Paradise Resort	General Retail	2009	3000	-	100	
8521 W Monroe Rd		General Retail	1974	19320	-	100	
7930 Mosley Rd		General Retail	2003	5000	-	100	
6105 Nunn St		General Retail		43549	-	100	
8601 Panair St	Enterprise Rent-A-Car Company	General Retail	2001	3612	-	100	
8620 Panair St		General Retail	1994	7320	-	100	
7614 Pecan Villas Dr		Strip Center	1965	4176	-	100	
7820 Rockhill St		General Retail	1978	21920	-	100	
9598 Rowlett Rd	Wal-Mart Supercenter	Community Center	2006	211253	-	100	
9434 Scranton St		General Retail		12000	-	100	
5920 Telephone	Family Dollar	General Retail	1960	13520	-	100	
6714 Telephone		General Retail	1950	2506	-	0	
5802 Telephone Rd		General Retail	1950	4931	-	100	
6106 Telephone Rd		General Retail	1977	3500	-	100	
6113-6137 Telephone Rd	Bldg 3	Neighborhood Center	1965	8203	-	100	
6115-6135 Telephone Rd	Bldg 2	Neighborhood Center	2002	17423	14	73	
6161 Telephone Rd	Bldg 1	Neighborhood Center	2001	10908	-	100	CVS
6200 Telephone Rd		General Retail	1980	17537	-	100	
6220 Telephone Rd		General Retail	1990	12000	-	100	
6333 Telephone Rd	Chevron	General Retail	1984	2336	-	100	
6348 Telephone Rd		Neighborhood Center	1970	5001	-	100	
6400 Telephone Rd		General Retail	1966	1639	-	100	
6402 Telephone Rd	Whataburger	General Retail	1985	2860	-	100	
6404 Telephone Rd		General Retail	1998	1524	-	100	
6405 Telephone Rd	Church's Chicken	General Retail	1980	1176	-	100	
6409 Telephone Rd		General Retail	1980	1500	-	100	
6411 Telephone Rd		General Retail	1983	2962	-	100	
6420 Telephone Rd		General Retail	1990	1000	-	100	
6500 Telephone Rd		General Retail	1955	4272	-	100	
6504 Telephone Rd		General Retail	1955	1431	-	100	
6511 Telephone Rd		General Retail	1980	7756	-	100	
6515 Telephone Rd		General Retail	2009	1705	-	100	
6520 Telephone Rd		General Retail	2006	2216	-	100	

HOBBY AREA LIVABLE CENTER MARKET ASSESSMENT

Building Address	Building Name	Property Type	Year Built	Rentable Building Area	Average Weighted Rent	% Leased	Anchor Tenants
6601 Telephone Rd		General Retail		11050	-	100	
6629 Telephone Rd		General Retail	2005	15320	-	100	
6660 Telephone Rd		General Retail	2002	7700	-	100	
6703 Telephone Rd		General Retail	2006	8856	12.19	0	
6716 Telephone Rd		General Retail	1974	6300	-	100	
6721 Telephone Rd		General Retail	1975	2283	-	100	
6726 Telephone Rd		General Retail	1984	1236	-	100	
6730 Telephone Rd		General Retail	1955	1944	-	100	
6736 Telephone Rd		General Retail	1973	1231	-	100	
6743 Telephone Rd		General Retail	1970	2583	-	100	
6750 Telephone Rd		General Retail	1997	2492	-	100	
6762-6768 Telephone Rd		General Retail	1960	7947	-	100	
6790 Telephone Rd		Strip Center	1984	17064	-	100	
6802-6820 Telephone Rd	Telephone Road Shopping Center	Strip Center	1965	7810	12	73	
6819 Telephone Rd		General Retail	1962	4884	-	100	
6855 Telephone Rd		General Retail	2004	3200	-	100	
6880 Telephone Rd	Piazza Puebla	Strip Center	1958	15000	-	100	
6898 Telephone Rd		General Retail	1951	2339	-	100	
6903 Telephone Rd	Good Care Automotive Service	General Retail	1969	14800		100	
6905 Telephone Rd		General Retail	1965	1951	-	100	
6909 Telephone Rd		General Retail	1965	3619	-	100	
6915 Telephone Rd		General Retail	2003	5342	-	100	
7050 Telephone Rd		General Retail	2001	3404	-	100	
8129 Telephone Rd		General Retail	1955	1702	-	100	
8240 Telephone Rd		General Retail		3000	-	100	
8250 Telephone Rd		General Retail	1998	3500	-	100	
8311 Telephone Rd		General Retail	1959	596	-	100	
8433 Telephone Rd		General Retail	1970	1196	-	100	
8451 Telephone Rd		General Retail	1948	1173	-	100	
8800 Telephone Rd		General Retail	1965	4400	13.2	75	
9105 Telephone Rd		General Retail	1976	876	-	100	
9514 Telephone Rd		General Retail	1950	2851	-	100	
9637 Telephone Rd		Strip Center	2007	3596	-	100	
6401 Telephone Rd		General Retail	1955	4114	-	100	
10001 Alameda Genoa Rd		Power Center	2005	71275		89	Marshalls, Ross
10013 Alameda Genoa Rd		Power Center	2005	36060		92	
10025 Alameda Genoa Rd		Power Center	2006	62625		94	Conn's, Staples
10225 Alameda Genoa Rd		Community Center	1970	9497		0	
9920 Gulf Fwy		General Retail	1975	48000		0	
11510-11528 Gulf Fwy		Community Center	2005	45000		96	24 Hour Fitness
11558-11570 Gulf Fwy		Community Center	1970	12815		85	
6310-6342 Telephone Rd	Glenbrook Square	Neighborhood Center	1974	76446		97	Kroger

Source: CoStar

Table 63: Current Inventory of Office Locations in the Study Area

Building Address	Building Name	Zip	Building Class	Rentable Building Area	Year Built	Percent Leased	Average Weighted Rent
7800 Airport Blvd	7800 Airport B	77061	B	2845		100	-
8031 Airport Blvd	Airport Business Center	77061	B	34115	1980	51.26	19.8
9100 Airport Blvd	Comerica Bank South	77061	B	19400	1982	100	-
7545 Belfort St	Chase Bank Southeast	77061	B	24000	1978	100	-
7995 Belfort St	Longhorn Dental	77061	B	6500	2004	100	-
9333 Bryant St	Gulf Freeway Plaza	77075	B	30300	1971	90.1	18
10002 Clearwood St		77075	B	5803	2012	100	-
6300 Dixie Dr		77087	B	4500	1979	100	-
8208 Gulf Fwy		77017	B	10099	2002	100	-
8866 Gulf Fwy		77017	B	89364	1983	78.26	17.5
8876 Gulf Fwy	Gulf Towers	77017	B	89046	1984	89.9	17.5
6826 Lindbergh St		77087	B	500	1961	100	-
8951 Ruthby Rd	Southeast Professional & Medical Center	77061	B	24470	1980	88.86	13.68
8787 Tallyho Rd	Building One	77061	B	32500	1973	100	19
8880 Telephone Rd		77061	B	26578	1986	100	-
8405 Wynbrook St		77061	B	10125	2004	100	-
Sub-total				410,145			
7353 Airport Blvd		77061	C	1814	2002	100	-
7415 Airport Blvd		77061	C	1027	1989	100	-
7438 Airport Blvd		77061	C	4554	2007	100	-
9001 Airport Blvd	Building 100	77061	C	10000	1981	39.38	12.6
9001 Airport Blvd	Building 200	77061	C	10000	1981	50	12.6
9001 Airport Blvd	Building 300	77061	C	10000	1981	80	12.6
9001 Airport Blvd	Building 400	77061	C	10000	1981	65.5	12.6
9001 Airport Blvd	Building 500	77061	C	11250	1981	76.44	12.6
9001 Airport Blvd	Building 600	77061	C	10000	1981	40	12.6
9001 Airport Blvd	Building 700	77061	C	5625	1981	76.89	13.92
9001 Airport Blvd	Building 800	77061	C	5000	1981	100	-
7620 Belfort Ave		77061	C	2838	1965	100	-
7644 Belfort Ave		77061	C	2920	1966	100	-
7660 Belfort Ave		77061	C	2058	1965	100	-
7603 Belfort St	Valley Towers Office Bldg	77061	C	45426	1971	100	-
7630 Belfort St		77061	C	7600	1965	100	-
7701 Belfort St	Belfort Plaza	77061	C	20000	1962	0	9.6
8550 Broadway		77061	C	15646	1973	100	-
7714 Broadway St		77087	C	7125		100	-
8243 Colgate St		77061	C	2353	1965	100	-
9125 Grannis St		77075	C	4394	1960	100	-
9000 Gulf Fwy		77017	C	51000	1983	100	-
9906 Gulf Fwy	Parsons Energy & Chemicals Bldg I	77034	C	29300	1977	100	-
9920 Gulf Fwy	Building 1	77034	C	40588	1971	100	-
8244 Lockheed Ave		77061	C	3760	1948	100	-
8560 Monroe Rd	Davita Lone Star Dialysis Center	77061	C	16800	2002	100	-
8401 W Monroe Rd	Bldg 1	77061	C	5841	1975	0	7.8
7554 Morley St		77061	C	4200	1975	100	-
7555 Morley St		77061	C	7231	1980	100	-
8406 Mosley Rd		77075	C	10186	1957	100	-

HOBBY AREA LIVABLE CENTER MARKET ASSESSMENT

Building Address	Building Name	Zip	Building Class	Rentable Building Area	Year Built	Percent Leased	Average Weighted Rent
8431 Mosley Rd		77075	C	4338	1970	100	-
6547 Northdale St		77087	C	800	1960	0	
8787 Tallyho Rd	Building Three	77061	C	35035	2000	100	19
8787 Tallyho Rd	Building Two	77061	C	17995		100	19
6869 Telephone Rd		77061	C	920	1977	100	-
6902 Telephone Rd		77061	C	1136		100	-
7000 Telephone Rd		77061	C	1038	1991	100	-
8345 Telephone Rd	Hobby Office Bldg	77061	C	28648	1955	100	-
6820 Tipperary Ln		77061	C	6400	1975	100	-
6958-6862 Westover St		77087	C	5042		100	-
8121 Broadway St	Broadway Plaza	77061	C	29811	1978	91.28	
Sub-total				541,645			
Totals/Averages				951,790	1979	88.03%	\$14.73

Source: CoStar

CDS Community Development Strategies

1001 S. Dairy Ashford, Suite 450

Houston, TX 77077

281-582-0855

www.cdsmr.com

APPENDIX F

H-GAC TEMPORARY PEDESTRIAN/BICYCLE COUNT DATA SUMMARY

HOUSTON-GALVESTON AREA COUNCIL



Temporary Pedestrian/Bicycle Counters Data Summary

Deployment Summary	
Sponsoring Agency	Houston-Galveston Area Council Texas Transportation Institute
Deployment Period	Saturday, August 6, 2016 – Monday, August 22, 2016
Number of Counters Deployed	20
Facility Description	Shared-Use Paths, Sidewalks, and Informal Pathways near Hobby Airport (City of Houston)
Locations Deployed (Houston-Galveston Area Council and Texas Transportation Institute)	
Counter H1	Airport Boulevard Westbound West of Broadway Street
Counter H2	Airport Boulevard Eastbound West of Broadway Street
Counter H3	Airport Boulevard Westbound East of Broadway Street
Counter H4	Airport Boulevard Eastbound East of Broadway Street
Counter H5	Sims Bayou Trail at Broadway Street
Counter H6	Sims Bayou Trail at Reveille Park
Counter H7	Telephone Road Northbound at Oak Vista Street
Counter T1	Telephone Road Southbound at Oak Vista Street
Counter T2	Telephone Road Southbound at Sims Bayou
Counter T3	Telephone Road Northbound at Sims Bayou
Counter T4	Bellfort Street Westbound at Plainview Street
Counter T5	Bellfort Street Eastbound at Plainview Street
Counter T7	Bellfort Street Westbound at Sims Bayou
Counter T8	Bellfort Street Eastbound at Sims Bayou
Counter T9	Bellfort Street Westbound at Leonard Street
Counter T10	Bellfort Street Eastbound at Leonard Street
Counter T11	Bellfort Street Westbound West of Broadway Street
Counter T12	Bellfort Street Eastbound West of Broadway Street
Counter T13	Bellfort Street Westbound East of Broadway Street
Counter T14	Bellfort Street Eastbound East of Broadway Street

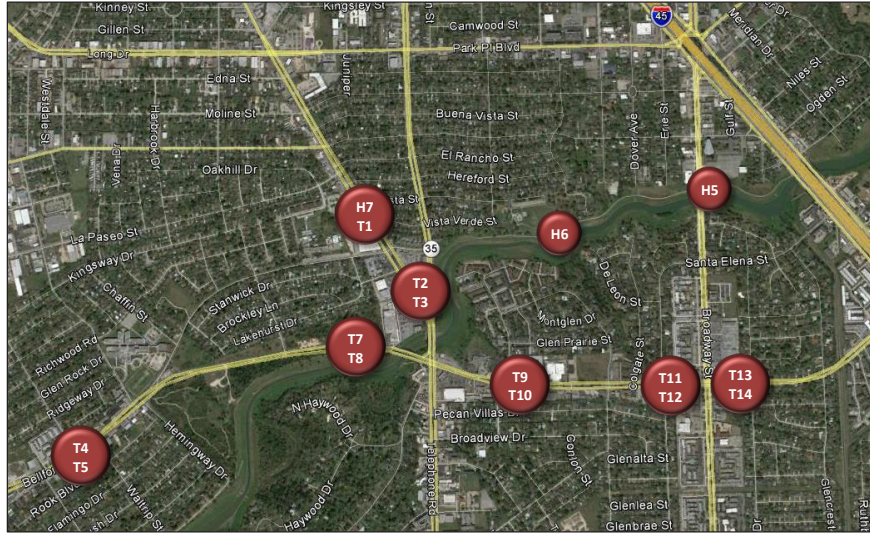
About the Temporary Pedestrian/Bicycle Counters

The Houston-Galveston Area Council (H-GAC) has temporary counters (TRAFx Infrared Trail Counters: Generation III) that can be borrowed by local governments and transportation agencies to count the number of people using off-street pedestrian and bicycle facilities. Infrared technology is used to count the number of people passing the counter. The counters do not differentiate between pedestrians and bicyclists, but count the total number of users.

The Texas Transportation Institute (TTI) owns additional temporary counters that it deploys along off-street pedestrian and bicycle facilities statewide.

Counter Locations

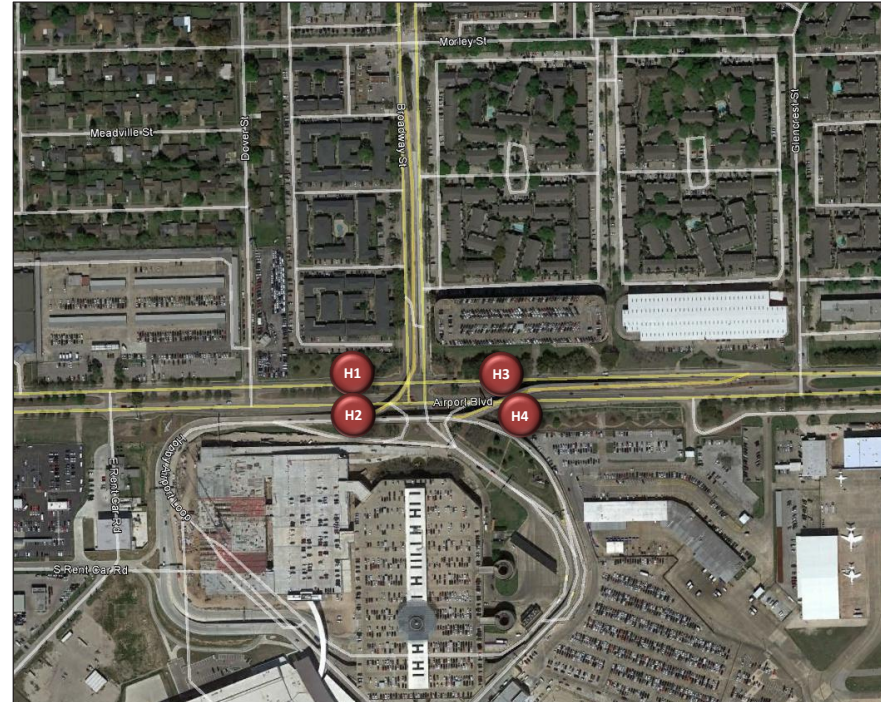
Shared-Use Paths, Sidewalks, and Informal Pathways along Bellfort Street Corridor



Counter	Location	Total Users	Average Daily Usage	Report Page Num.
H5	Sims Bayou Trail at Broadway Street	1,135	67	22
H6	Sims Bayou Trail at Reveille Park	1,629	96	26
H7	Telephone Road Northbound at Oak Vista Street	281	17	30
T1	Telephone Road Southbound at Oak Vista Street	1,481	87	34
T2	Telephone Road Southbound at Sims Bayou	806	47	38
T3	Telephone Road Northbound at Sims Bayou	732	43	42
T4	Bellfort Street Westbound at Plainview Street	1,085	64	46
T5	Bellfort Street Eastbound at Plainview Street	644	38	50
T7	Bellfort Street Westbound at Sims Bayou	283	17	54
T8	Bellfort Street Eastbound at Sims Bayou	36	2	58
T9	Bellfort Street Westbound at Leonard Street	593	35	62
T10	Bellfort Street Eastbound at Leonard Street	1,230	72	66
T11	Bellfort Street Westbound West of Broadway Street	1,002	59	70
T12	Bellfort Street Eastbound West of Broadway Street	3,075	181	74
T13	Bellfort Street Westbound East of Broadway Street	1,112	65	78
T14	Bellfort Street Eastbound East of Broadway Street	2,567	151	82

Counter Locations

Sidewalks at Broadway Street/Airport Boulevard Intersection



Counter	Location	Total Users	Average Daily Usage	Report Page Num.
H1	Airport Boulevard Westbound West of Broadway Street	395	23	6
H2	Airport Boulevard Eastbound West of Broadway Street	140*	16*	10
H3	Airport Boulevard Westbound East of Broadway Street	411	24	14
H4	Airport Boulevard Eastbound East of Broadway Street	258**	22**	18

*Counter H2 stopped collecting accurate data after Sunday, August 14, 2016.

**Counter H4 stopped collecting accurate data after Wednesday, August 17, 2016.

Hobby Area Livable Centers Study

The Houston-Galveston Area Council, Hobby Area Management District, City of Houston, and Texas Department of Transportation (TxDOT) are working together to develop a plan for the area surrounding William P. Hobby Airport that will identify ways to improve pedestrian accessibility, increase access to transit, promote a range of high-quality housing options, and increase opportunities for private investment. The temporary pedestrian/bicycle counters were deployed within the study area while the plan was being developed.

Pedestrian/Bicycle Activity along Bellfort Street

Pedestrian/bicycle activity was measured along Bellfort Street near Plainview Street, Sims Bayou, Leonard Street, and Broadway Street. Temporary pedestrian/bicycle counters were placed along both sides of Bellfort Street to determine the usage of sidewalks and informal dirt pathways that parallel the eastbound and westbound travel lanes.

Bellfort Street at Plainview Street

Counter	Facility Type	Total Users	Avg. Daily Usage	Avg. Daily Usage (Weekdays)	Avg. Daily Usage (Weekends)
T4	Sidewalk (Adj. to Westbound Lanes)	1,085	64	67	57
T5	Sidewalk (Adj. to Eastbound Lanes)	644	38	37	40

Bellfort Street at Sims Bayou

Counter	Facility Type	Total Users	Avg. Daily Usage	Avg. Daily Usage (Weekdays)	Avg. Daily Usage (Weekends)
T7	Sidewalk (Adj. to Westbound Lanes)	283	17	18	14
T8	Informal Dirt Path (Adj. to Eastbound Lanes)	36	2	2	2

Bellfort Street at Leonard Street

Counter	Facility Type	Total Users	Avg. Daily Usage	Avg. Daily Usage (Weekdays)	Avg. Daily Usage (Weekends)
T9	Sidewalk (Adj. to Westbound Lanes)	593	35	39	28
T10	Sidewalk (Adj. to Eastbound Lanes)	1,230	72	70	76

Bellfort Street West of Broadway Street

Counter	Facility Type	Total Users	Avg. Daily Usage	Avg. Daily Usage (Weekdays)	Avg. Daily Usage (Weekends)
T11	Sidewalk (Adj. to Westbound Lanes)	1,002	59	57	63
T12	Sidewalk (Adj. to Eastbound Lanes)	3,075	181	174	194

Bellfort Street East of Broadway Street

Counter	Facility Type	Total Users	Avg. Daily Usage	Avg. Daily Usage (Weekdays)	Avg. Daily Usage (Weekends)
T13	Sidewalk (Adj. to Westbound Lanes)	1,112	65	67	63
T14	Sidewalk (Adj. to Eastbound Lanes)	2,567	151	162	132

Pedestrian/Bicycle Activity along Telephone Road

Pedestrian/bicycle activity was measured along Telephone Road near Oak Vista Street and Sims Bayou. Temporary pedestrian/bicycle counters were placed along both sides of Telephone Road to determine the usage of sidewalks that parallel the northbound and southbound travel lanes.

Telephone Road at Oak Vista Street

Counter	Facility Type	Total Users	Avg. Daily Usage	Avg. Daily Usage (Weekdays)	Avg. Daily Usage (Weekends)
H7	Sidewalk (Adj. to Northbound Lanes)	281	17	18	15
T1	Sidewalk (Adj. to Southbound Lanes)	1,481	87	94	75

Telephone Road at Sims Bayou

Counter	Facility Type	Total Users	Avg. Daily Usage	Avg. Daily Usage (Weekdays)	Avg. Daily Usage (Weekends)
T3	Sidewalk (Adj. to Northbound Lanes)	732	43	43	44
T2	Sidewalk (Adj. to Southbound Lanes)	806	47	52	40

Pedestrian/Bicycle Activity along Airport Boulevard at Broadway Street

Pedestrian/bicycle activity was measured along Airport Boulevard near Broadway Street. Temporary pedestrian/bicycle counters were placed along both sides of Airport Boulevard east and west of Broadway Street to determine the usage of sidewalks that parallel the eastbound and westbound travel lanes.

Airport Boulevard West of Broadway Street

Counter	Facility Type	Total Users	Avg. Daily Usage	Avg. Daily Usage (Weekdays)	Avg. Daily Usage (Weekends)
H1	Sidewalk (Adj. to Westbound Lanes)	395	23	25	21
H2	Sidewalk (Adj. to Eastbound Lanes)	140*	16*	20*	10*
*Note: Counter H2 stopped collecting accurate data after Sunday, August 14, 2016.					

Airport Boulevard East of Broadway Street

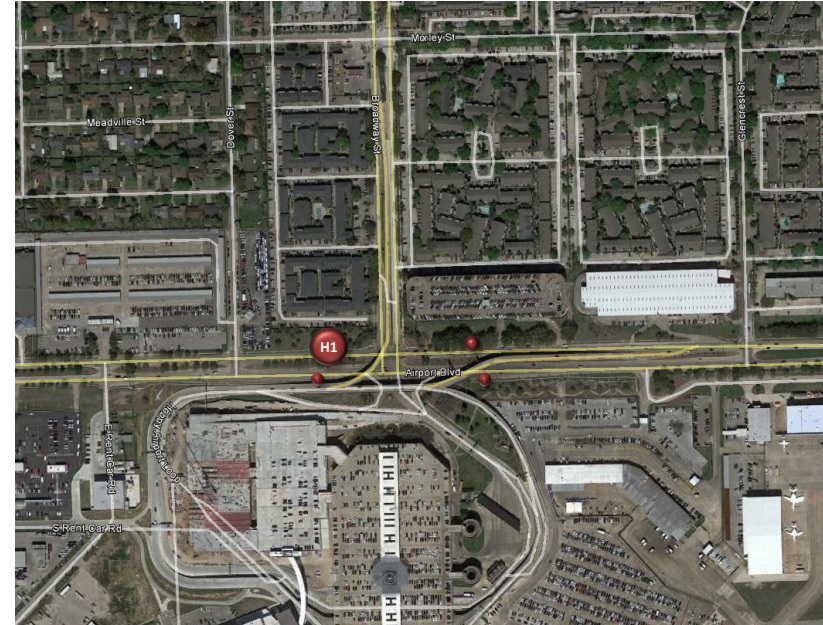
Counter	Facility Type	Total Users	Avg. Daily Usage	Avg. Daily Usage (Weekdays)	Avg. Daily Usage (Weekends)
H3	Sidewalk (Adj. to Westbound Lanes)	411	24	27	19
H4	Sidewalk (Adj. to Eastbound Lanes)	258*	22*	22*	21*
*Note: Counter H4 stopped collecting accurate data after Wednesday, August 17, 2016.					

Counter H1

Airport Boulevard Westbound West of Broadway Street

Location Information		
Location Name	Airport Boulevard Westbound West of Broadway Street	
Location Description	Sidewalk along Airport Boulevard Westbound West of Broadway Street near Hobby Airport	
Jurisdiction	City of Houston	
Agency Deployed	Houston-Galveston Area Council/Texas Transportation Institute	
GPS Coordinates	29°39'28.73"N, 95°16'38.55"W	
Surrounding Land Uses	North	Multi-Family Residential, Single-Family Residential
	South	Hobby Airport
	East	Multi-Family Residential, Parking Lots/Garages, Hobby Airport
	West	Parking Lots/Garages, Single-Family Residential, Hobby Airport
What object was device secured to?	Light Post (#710119)	
Sidewalk Width	4'	
Buffer Width	6.5'	
Street Width	Six-Lane Divided Roadway	
Parallel Parking	No	
Landscaping or Trees	Yes	
Sidewalk Pavement Type	Concrete	
ADA Ramps	Yes	
Sidewalk Condition	Good (Some Overgrown Vegetation)	
Speed Limit	40 miles per hour	
Street Lighting	Yes	
Street Traffic Volume	28,100 (7800 Airport Boulevard: TxDOT – 2012)	
Transit	No	
Shade	No	
Have counts been collected by H-GAC at this location before?	No	
Trends		
<ul style="list-style-type: none">• Usage tends to be higher on weekdays (25 users/day) than during weekends (21 users/day).• On weekdays, usage is highest in the morning (7:00 a.m. – 10:00 a.m.) and midday (12:00 p.m. – 1:00 p.m.).• During weekends, usage is highest in the morning (9:00 a.m. – 10:00 a.m.) and evening (7:00 p.m. – 8:00 p.m.).		

Location Information: Map



Location Information: Photos



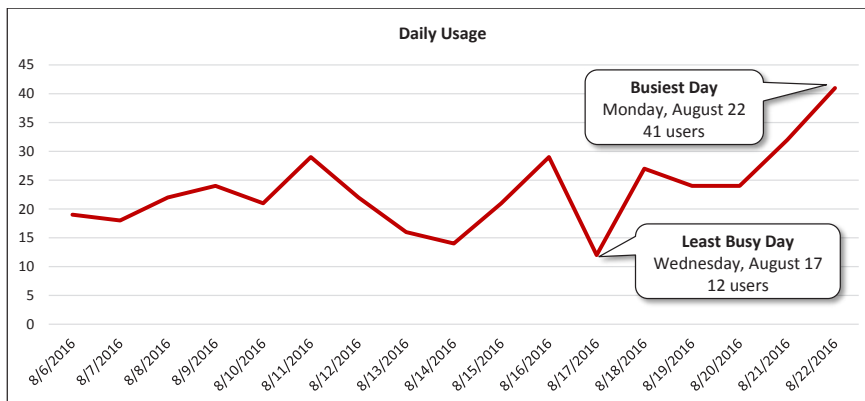
Image 1: Airport Boulevard Westbound West of Broadway Street Facing East



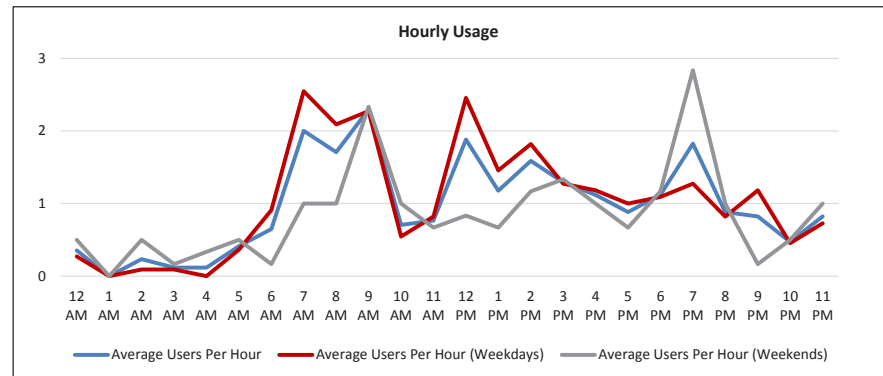
Image 2: Airport Boulevard Westbound West of Broadway Street Facing West

Daily Usage				
Airport Boulevard Westbound West of Broadway Street				
Date	Users	Select Weather Data*		
		High Temperature (°F)	Low Temperature (°F)	Precipitation (inches)
Saturday, August 6, 2016	19	98	77	0
Sunday, August 7, 2016	18	100	78	0
Monday, August 8, 2016	22	100	77	0
Tuesday, August 9, 2016	24	101	77	0
Wednesday, August 10, 2016	21	100	79	0
Thursday, August 11, 2016	29	101	82	0
Friday, August 12, 2016	22	99	82	0
Saturday, August 13, 2016	16	97	76	0.83
Sunday, August 14, 2016	14	89	72	1.66
Monday, August 15, 2016	21	86	75	1.43
Tuesday, August 16, 2016	29	82	74	2.05
Wednesday, August 17, 2016	12	83	73	1.73
Thursday, August 18, 2016	27	88	74	0.19
Friday, August 19, 2016	24	92	75	0.39
Saturday, August 20, 2016	24	91	75	0.53
Sunday, August 21, 2016	32	87	76	T
Monday, August 22, 2016	41	89	73	0.33
Total	395			
Average Daily Usage	23			
Average Daily Usage (Weekday)	25			
Average Daily Usage (Weekend)	21			

*Weather conditions recorded at KHOU.



Hourly Usage Airport Boulevard Westbound West of Broadway Street			
Time of Day	Average Users Per Hour	Average Users Per Hour (Weekdays)	Average Users Per Hour (Weekends)
12:00 a.m.	0.4	0.3	0.5
1:00 a.m.	0.0	0.0	0.0
2:00 a.m.	0.2	0.1	0.5
3:00 a.m.	0.1	0.1	0.2
4:00 a.m.	0.1	0.0	0.3
5:00 a.m.	0.4	0.4	0.5
6:00 a.m.	0.6	0.9	0.2
7:00 a.m.	2.0	2.5	1.0
8:00 a.m.	1.7	2.1	1.0
9:00 a.m.	2.3	2.3	2.3
10:00 a.m.	0.7	0.5	1.0
11:00 a.m.	0.8	0.8	0.7
12:00 p.m.	1.9	2.5	0.8
1:00 p.m.	1.2	1.5	0.7
2:00 p.m.	1.6	1.8	1.2
3:00 p.m.	1.3	1.3	1.3
4:00 p.m.	1.1	1.2	1.0
5:00 p.m.	0.9	1.0	0.7
6:00 p.m.	1.1	1.1	1.2
7:00 p.m.	1.8	1.3	2.8
8:00 p.m.	0.9	0.8	1.0
9:00 p.m.	0.8	1.2	0.2
10:00 p.m.	0.5	0.5	0.5
11:00 p.m.	0.8	0.7	1.0



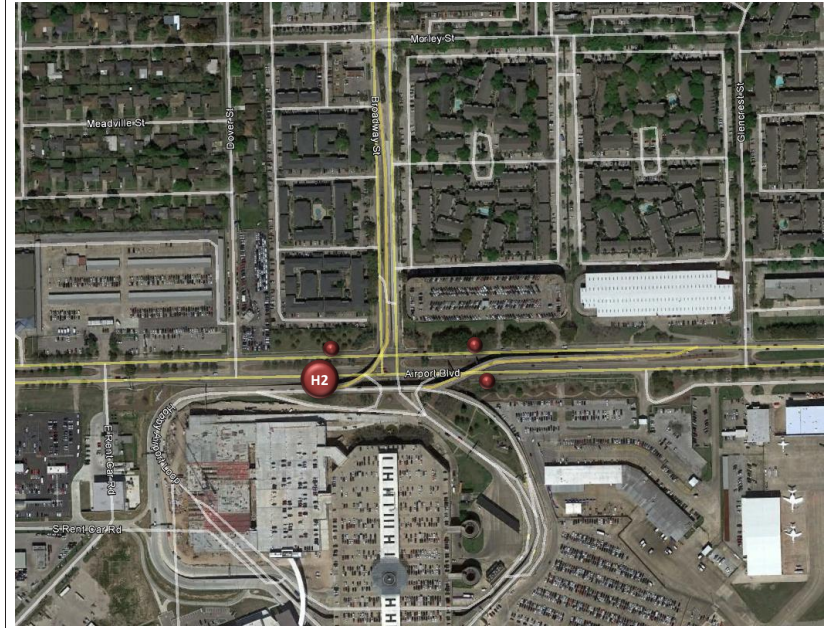
Counter H2

Airport Boulevard Eastbound West of Broadway Street

Location Information		
Location Name	Airport Boulevard Eastbound West of Broadway Street	
Location Description	Sidewalk along Airport Boulevard Eastbound West of Broadway Street near Hobby Airport	
Jurisdiction	City of Houston	
Agency Deployed	Houston-Galveston Area Council/Texas Transportation Institute	
GPS Coordinates	29°39'27.86"N, 95°16'38.95"W	
Surrounding Land Uses	North	Multi-Family Residential, Single-Family Residential
	South	Hobby Airport
	East	Multi-Family Residential, Parking Lots/Garages, Hobby Airport
	West	Parking Lots/Garages, Single-Family Residential, Hobby Airport
What object was device secured to?	Light Post (#710118)	
Sidewalk Width	4'	
Buffer Width	4.5' (Varies)	
Street Width	Six-Lane Divided Roadway	
Parallel Parking	No	
Landscaping or Trees	Yes	
Sidewalk Pavement Type	Concrete	
ADA Ramps	Yes	
Sidewalk Condition	Excellent	
Speed Limit	40 miles per hour	
Street Lighting	Yes	
Street Traffic Volume	28,100 (7800 Airport Boulevard: TxDOT – 2012)	
Transit	No	
Shade	No	
Have counts been collected by H-GAC at this location before?	No	
Notes	Counter H2 stopped collecting accurate data after Sunday, August 14, 2016. A spider web and dead insects were found in Counter H2 when it was retrieved; insects likely affected the accuracy of data collected after August 14, 2016.	

Trends
<ul style="list-style-type: none"> • Usage tends to be higher on weekdays (20 users/day) than during weekends (10 users/day). • On weekdays, usage is highest in the morning (8:00 a.m. – 10:00 a.m.). • During weekends, usage remains low throughout the day. There are slight increases in usage in the early afternoon (1:00 p.m. – 2:00 p.m.) and late afternoon (4:00 p.m. – 5:00 p.m.).

Location Information: Map



Location Information: Photos



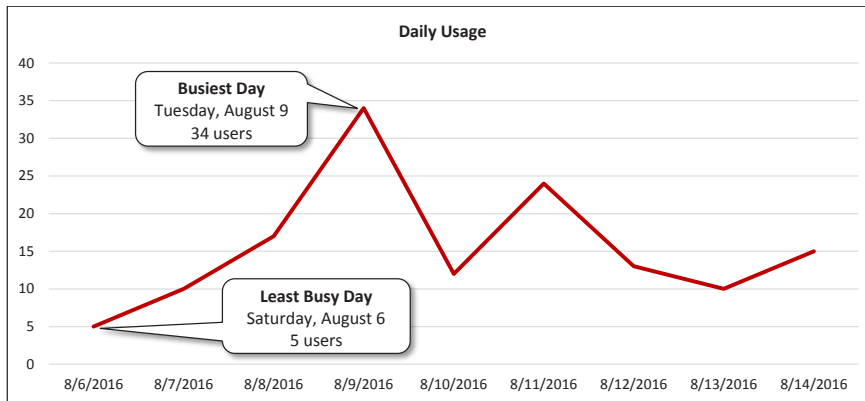
Image 3: Airport Boulevard Eastbound West of Broadway Street Facing East



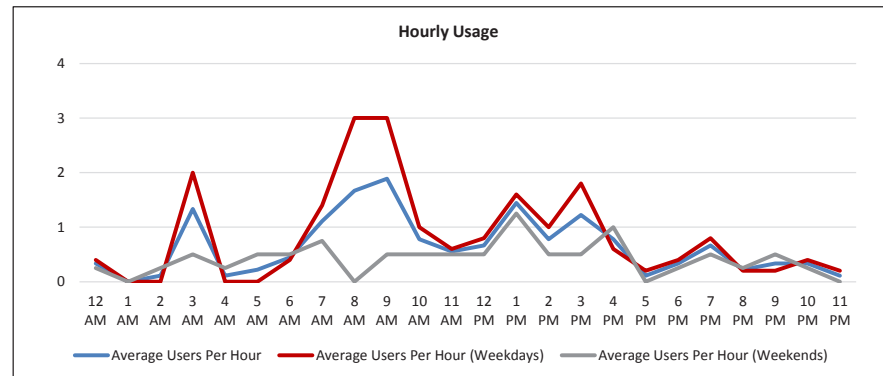
Image 4: Airport Boulevard Eastbound West of Broadway Street Facing West

Daily Usage				
Airport Boulevard Eastbound West of Broadway Street				
Date	Users	Select Weather Data*		
		High Temperature (°F)	Low Temperature (°F)	Precipitation (inches)
Saturday, August 6, 2016	5	98	77	0
Sunday, August 7, 2016	10	100	78	0
Monday, August 8, 2016	17	100	77	0
Tuesday, August 9, 2016	34	101	77	0
Wednesday, August 10, 2016	12	100	79	0
Thursday, August 11, 2016	24	101	82	0
Friday, August 12, 2016	13	99	82	0
Saturday, August 13, 2016	10	97	76	0.83
Sunday, August 14, 2016	15	89	72	1.66
Total	140	Notes Counter H2 stopped collecting accurate data after Sunday, August 14, 2016. A spider web and dead insects were found in Counter H2 when it was retrieved; insects likely affected the accuracy of the data collected after August 14, 2016.		
Average Daily Usage	16			
Average Daily Usage (Weekday)	20			
Average Daily Usage (Weekend)	10			

*Weather conditions recorded at KHOU.



Hourly Usage Airport Boulevard Eastbound West of Broadway Street			
Time of Day	Average Users Per Hour	Average Users Per Hour (Weekdays)	Average Users Per Hour (Weekends)
12:00 a.m.	0.3	0.4	0.3
1:00 a.m.	0.0	0.0	0.0
2:00 a.m.	0.1	0.0	0.3
3:00 a.m.	1.3	2.0	0.5
4:00 a.m.	0.1	0.0	0.3
5:00 a.m.	0.2	0.0	0.5
6:00 a.m.	0.4	0.4	0.5
7:00 a.m.	1.1	1.4	0.8
8:00 a.m.	1.7	3.0	0.0
9:00 a.m.	1.9	3.0	0.5
10:00 a.m.	0.8	1.0	0.5
11:00 a.m.	0.6	0.6	0.5
12:00 p.m.	0.7	0.8	0.5
1:00 p.m.	1.4	1.6	1.3
2:00 p.m.	0.8	1.0	0.5
3:00 p.m.	1.2	1.8	0.5
4:00 p.m.	0.8	0.6	1.0
5:00 p.m.	0.1	0.2	0.0
6:00 p.m.	0.3	0.4	0.3
7:00 p.m.	0.7	0.8	0.5
8:00 p.m.	0.2	0.2	0.3
9:00 p.m.	0.3	0.2	0.5
10:00 p.m.	0.3	0.4	0.3
11:00 p.m.	0.1	0.2	0.0

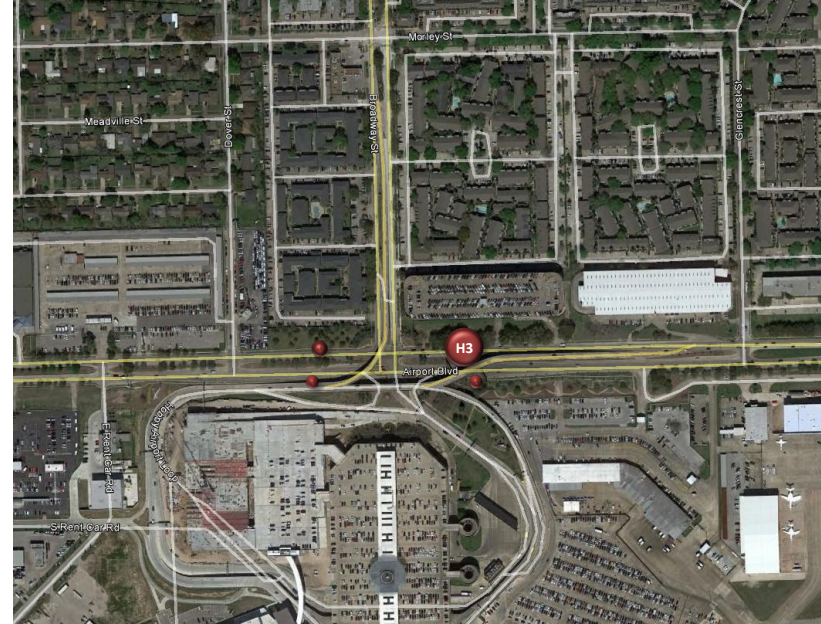


Counter H3

Airport Boulevard Westbound East of Broadway Street

Location Information		
Location Name	Airport Boulevard Westbound East of Broadway Street	
Location Description	Sidewalk along Airport Boulevard Westbound East of Broadway Street near Hobby Airport	
Jurisdiction	City of Houston	
Agency Deployed	Houston-Galveston Area Council/Texas Transportation Institute	
GPS Coordinates	29°39'28.89"N, 95°16'32.75"W	
Surrounding Land Uses	North	Parking Lots/Garage, Multi-Family Residential
	South	Hobby Airport
	East	Parking Lots/Garage, Hobby Airport, Multi-Family Residential
	West	Parking Lots/Garage, Multi-Family Residential, Hobby Airport
What object was device secured to?	Sign Post (Warning: Underground Cable)	
Sidewalk Width	4'	
Buffer Width	8'	
Street Width	Six-Lane Divided Roadway	
Parallel Parking	No	
Landscaping or Trees	Yes	
Sidewalk Pavement Type	Concrete	
ADA Ramps	Yes	
Sidewalk Condition	Fair (Debris/Mud Covering Sidewalk)	
Speed Limit	40 miles per hour	
Street Lighting	Yes	
Street Traffic Volume	28,100 (7800 Airport Boulevard: TxDOT - 2012)	
Transit	No	
Shade	Yes	
Have counts been collected by H-GAC at this location before?	No	
Trends		
<ul style="list-style-type: none">• Usage tends to be higher on weekdays (27 users/day) than during weekends (19 users/day).• On weekdays, usage is highest in the late afternoon (4:00 p.m. – 5:00 p.m.).• During weekends, usage is highest in the evening (5:00 p.m. – 7:00 p.m.).		

Location Information: Map



Location Information: Photos



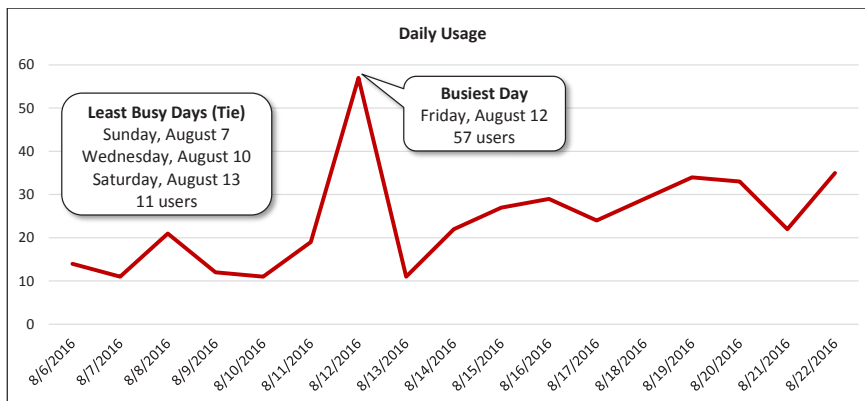
Image 5: Airport Boulevard Westbound East of Broadway Street Facing East



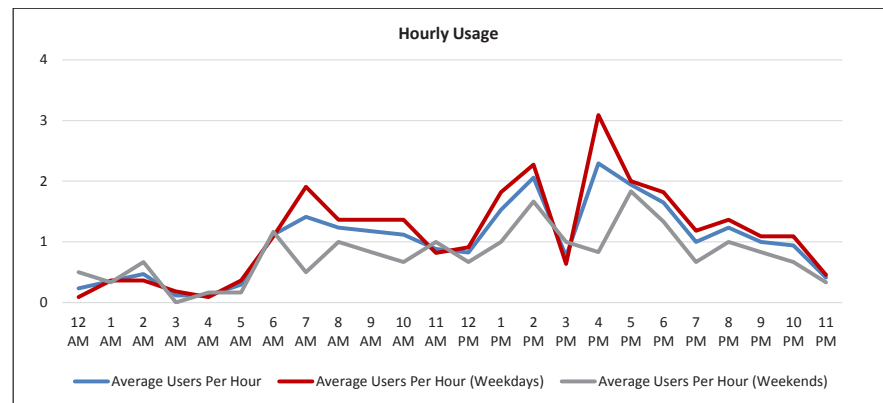
Image 6: Airport Boulevard Westbound East of Broadway Street Facing West

Daily Usage				
Airport Boulevard Westbound East of Broadway Street				
Date	Users	Select Weather Data*		
		High Temperature (°F)	Low Temperature (°F)	Precipitation (inches)
Saturday, August 6, 2016	14	98	77	0
Sunday, August 7, 2016	11	100	78	0
Monday, August 8, 2016	21	100	77	0
Tuesday, August 9, 2016	12	101	77	0
Wednesday, August 10, 2016	11	100	79	0
Thursday, August 11, 2016	19	101	82	0
Friday, August 12, 2016	57	99	82	0
Saturday, August 13, 2016	11	97	76	0.83
Sunday, August 14, 2016	22	89	72	1.66
Monday, August 15, 2016	27	86	75	1.43
Tuesday, August 16, 2016	29	82	74	2.05
Wednesday, August 17, 2016	24	83	73	1.73
Thursday, August 18, 2016	29	88	74	0.19
Friday, August 19, 2016	34	92	75	0.39
Saturday, August 20, 2016	33	91	75	0.53
Sunday, August 21, 2016	22	87	76	T
Monday, August 22, 2016	35	89	73	0.33
Total	411			
Average Daily Usage	24			
Average Daily Usage (Weekday)	27			
Average Daily Usage (Weekend)	19			

*Weather conditions recorded at KHOU.



Hourly Usage Airport Boulevard Westbound East of Broadway Street			
Time of Day	Average Users Per Hour	Average Users Per Hour (Weekdays)	Average Users Per Hour (Weekends)
12:00 a.m.	0.2	0.1	0.5
1:00 a.m.	0.4	0.4	0.3
2:00 a.m.	0.5	0.4	0.7
3:00 a.m.	0.1	0.2	0.0
4:00 a.m.	0.1	0.1	0.2
5:00 a.m.	0.3	0.4	0.2
6:00 a.m.	1.1	1.1	1.2
7:00 a.m.	1.4	1.9	0.5
8:00 a.m.	1.2	1.4	1.0
9:00 a.m.	1.2	1.4	0.8
10:00 a.m.	1.1	1.4	0.7
11:00 a.m.	0.9	0.8	1.0
12:00 p.m.	0.8	0.9	0.7
1:00 p.m.	1.5	1.8	1.0
2:00 p.m.	2.1	2.3	1.7
3:00 p.m.	0.8	0.6	1.0
4:00 p.m.	2.3	3.1	0.8
5:00 p.m.	1.9	2.0	1.8
6:00 p.m.	1.6	1.8	1.3
7:00 p.m.	1.0	1.2	0.7
8:00 p.m.	1.2	1.4	1.0
9:00 p.m.	1.0	1.1	0.8
10:00 p.m.	0.9	1.1	0.7
11:00 p.m.	0.4	0.5	0.3



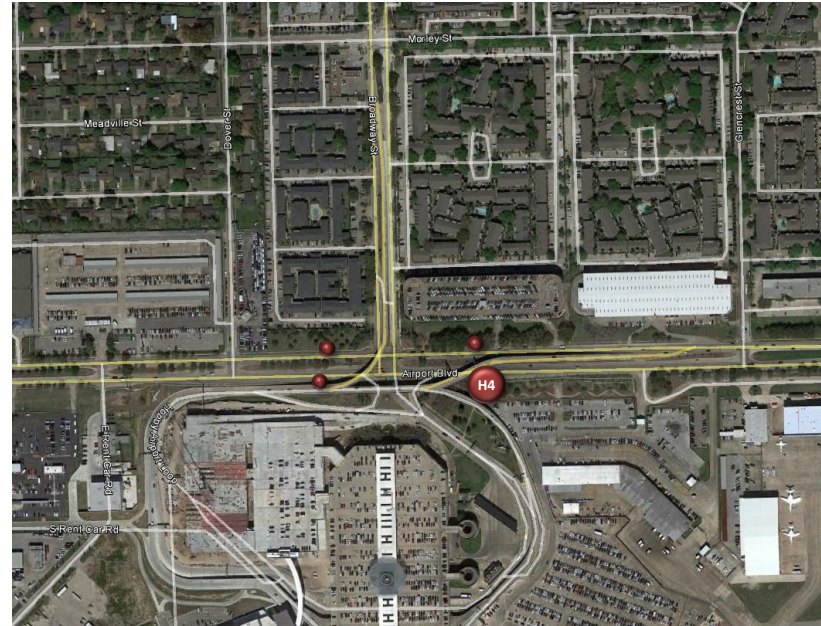
Counter H4

Airport Boulevard Eastbound East of Broadway Street

Location Information		
Location Name	Airport Boulevard Eastbound East of Broadway Street	
Location Description	Sidewalk along Airport Boulevard Eastbound East of Broadway Street near Hobby Airport	
Jurisdiction	City of Houston	
Agency Deployed	Houston-Galveston Area Council/Texas Transportation Institute	
GPS Coordinates	29°39'27.76"N, 95°16'32.50"W	
Surrounding Land Uses	North	Parking Lots/Garage, Multi-Family Residential
	South	Hobby Airport
	East	Parking Lots/Garage, Hobby Airport, Multi-Family Residential
	West	Parking Lots/Garage, Multi-Family Residential, Hobby Airport
What object was device secured to?	Sign Post (Merge Left)	
Sidewalk Width	4'	
Buffer Width	6'	
Street Width	Six-Lane Divided Roadway	
Parallel Parking	No	
Landscaping or Trees	Yes	
Sidewalk Pavement Type	Concrete	
ADA Ramps	Yes	
Sidewalk Condition	Good	
Speed Limit	40 miles per hour	
Street Lighting	Yes	
Street Traffic Volume	28,100 (7800 Airport Boulevard: TxDOT - 2012)	
Transit	No	
Shade	No	
Have counts been collected by H-GAC at this location before?	No	
Notes	Counter H4 stopped collecting accurate data after Wednesday, August 17, 2016. Counter H4 did not collect accurate data on Thursday, August 18, 2016 or Friday, August 19, 2016. It stopped collecting data at 6:00 a.m. on Friday, August 19, 2016.	

Trends
<ul style="list-style-type: none"> Daily usage tends to be similar throughout the week (Weekdays: 22 users/day; Weekends: 21 users/day). On weekdays, usage is highest in the late afternoon (3:00 p.m. – 4:00 p.m.). During weekends, usage is highest in the morning (9:00 a.m. – 10:00 a.m.).

Location Information: Map



Location Information: Photos



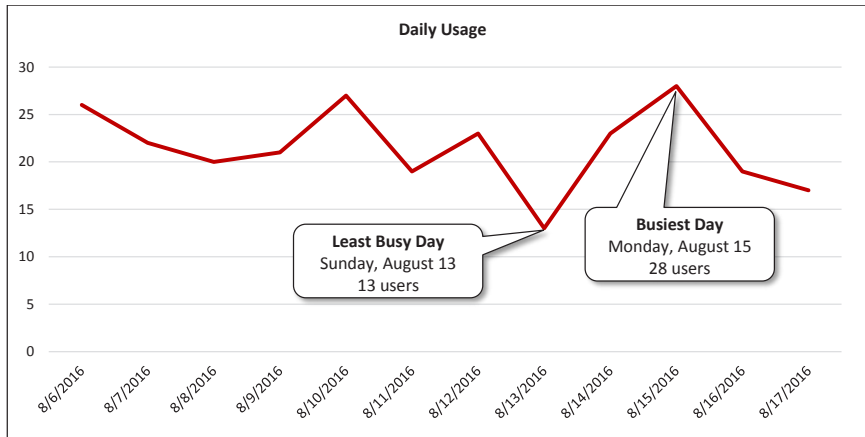
Image 7: Airport Boulevard Eastbound East of Broadway Street Facing East



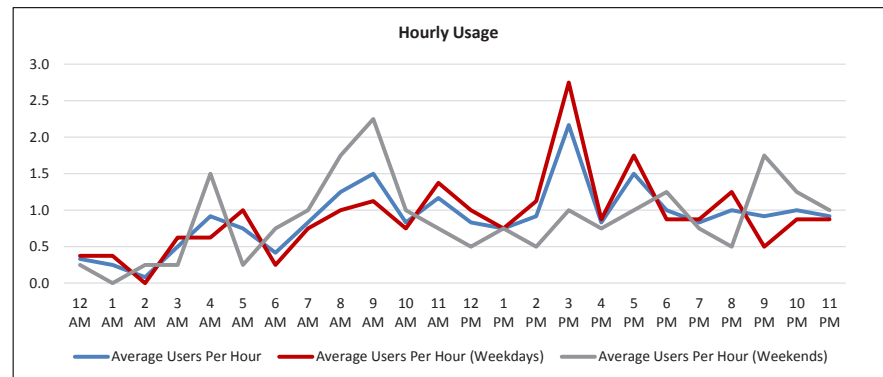
Image 8: Airport Boulevard Eastbound East of Broadway Street Facing West

Daily Usage				
Airport Boulevard Eastbound East of Broadway Street				
Date	Users	Select Weather Data*		
		High Temperature (°F)	Low Temperature (°F)	Precipitation (inches)
Saturday, August 6, 2016	26	98	77	0
Sunday, August 7, 2016	22	100	78	0
Monday, August 8, 2016	20	100	77	0
Tuesday, August 9, 2016	21	101	77	0
Wednesday, August 10, 2016	27	100	79	0
Thursday, August 11, 2016	19	101	82	0
Friday, August 12, 2016	23	99	82	0
Saturday, August 13, 2016	13	97	76	0.83
Sunday, August 14, 2016	23	89	72	1.66
Monday, August 15, 2016	28	86	75	1.43
Tuesday, August 16, 2016	19	82	74	2.05
Wednesday, August 17, 2016	17	83	73	1.73
Total	258	Notes Counter H4 stopped collecting accurate data after Wednesday, August 17, 2016. Counter H4 did not collect accurate data on Thursday, August 18, 2016 or Friday, August 19, 2016. It stopped collecting data at 6:00 a.m. on Friday, August 19, 2016.		
Average Daily Usage	22			
Average Daily Usage (Weekday)	22			
Average Daily Usage (Weekend)	21			

*Weather conditions recorded at KHOU.



Hourly Usage Airport Boulevard Eastbound East of Broadway Street			
Time of Day	Average Users Per Hour	Average Users Per Hour (Weekdays)	Average Users Per Hour (Weekends)
12:00 a.m.	0.3	0.4	0.3
1:00 a.m.	0.3	0.4	0.0
2:00 a.m.	0.1	0.0	0.3
3:00 a.m.	0.5	0.6	0.3
4:00 a.m.	0.9	0.6	1.5
5:00 a.m.	0.8	1.0	0.3
6:00 a.m.	0.4	0.3	0.8
7:00 a.m.	0.8	0.8	1.0
8:00 a.m.	1.3	1.0	1.8
9:00 a.m.	1.5	1.1	2.3
10:00 a.m.	0.8	0.8	1.0
11:00 a.m.	1.2	1.4	0.8
12:00 p.m.	0.8	1.0	0.5
1:00 p.m.	0.8	0.8	0.8
2:00 p.m.	0.9	1.1	0.5
3:00 p.m.	2.2	2.8	1.0
4:00 p.m.	0.8	0.9	0.8
5:00 p.m.	1.5	1.8	1.0
6:00 p.m.	1.0	0.9	1.3
7:00 p.m.	0.8	0.9	0.8
8:00 p.m.	1.0	1.3	0.5
9:00 p.m.	0.9	0.5	1.8
10:00 p.m.	1.0	0.9	1.3
11:00 p.m.	0.9	0.9	1.0



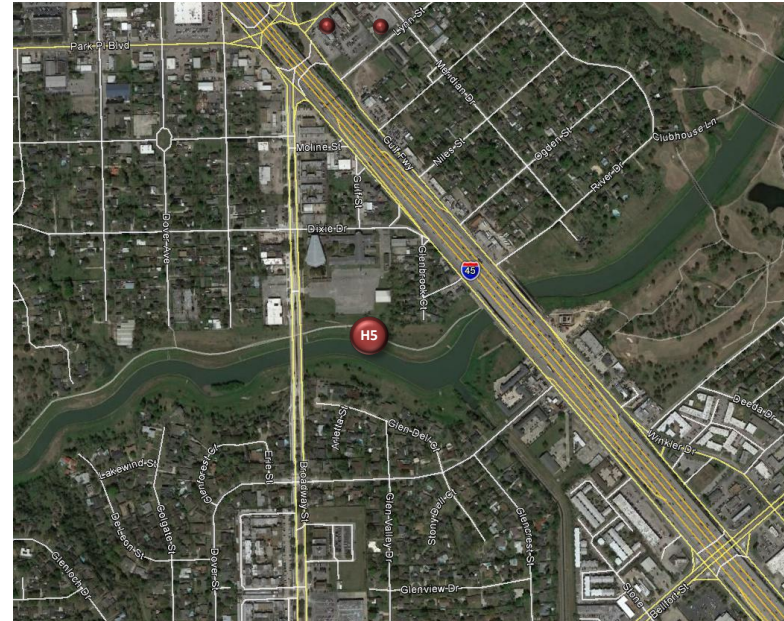
Counter H5

Sims Bayou Trail at Broadway Street

Location Information		
Location Name	Sims Bayou Trail at Broadway Street	
Location Description	Shared-Use Path along Sims Bayou East of Broadway Street	
Jurisdiction	City of Houston	
Agency Deployed	Houston-Galveston Area Council/Texas Transportation Institute	
GPS Coordinates	29°40'48.07"N, 95°16'34.28"W	
Surrounding Land Uses	North	Institutional (Church), Commercial/Retail, Multi-Family Residential
	South	Sims Bayou, Single-Family Residential
	East	Single-Family Residential, Interstate 45
	West	Single-Family Residential, Multi-Family Residential
What object was device secured to?	Tree	
Sidewalk Width	10'	
Buffer Width	N/A (Off-Road Shared-Use Path)	
Street Width	N/A (Off-Road Shared-Use Path)	
Parallel Parking	N/A (Off-Road Shared-Use Path)	
Landscaping or Trees	No	
Sidewalk Pavement Type	Asphalt (Changes to Concrete West of Counter H5)	
ADA Ramps	N/A (Off-Road Shared-Use Path)	
Sidewalk Condition	Good	
Speed Limit	N/A (Off-Road Shared-Use Path)	
Street Lighting	No	
Street Traffic Volume	N/A (Off-Road Shared-Use Path)	
Transit	No	
Shade	No	
Have counts been collected by H-GAC at this location before?	No	
Notes	There is currently no access from Sims Bayou Trail to Broadway Street. Sims Bayou Trail passes under the bridge carrying Broadway Street over Sims Bayou.	

Trends
<ul style="list-style-type: none"> Usage tends to be much higher on weekdays (77 users/day) than during weekends (48 users/day). On weekdays, usage is highest in the evening (6:00 p.m. – 9:00 p.m.). During weekends, usage is highest in the evening (6:00 p.m. – 8:00 p.m.).

Location Information: Map



Location Information: Photos



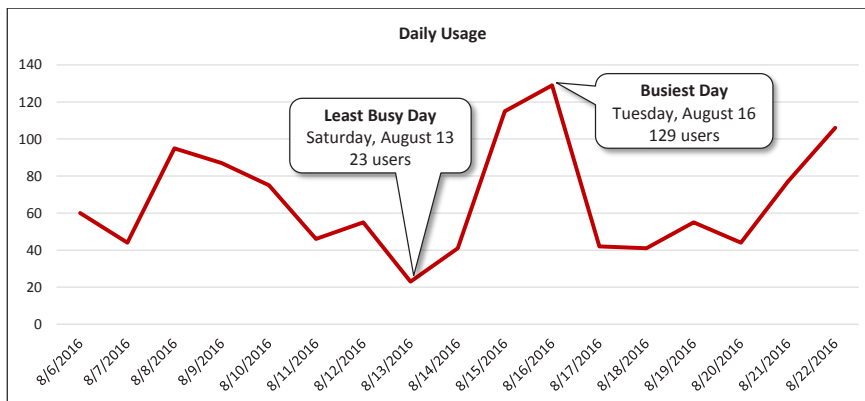
Image 9: Sims Bayou Trail at Broadway Street
Facing East



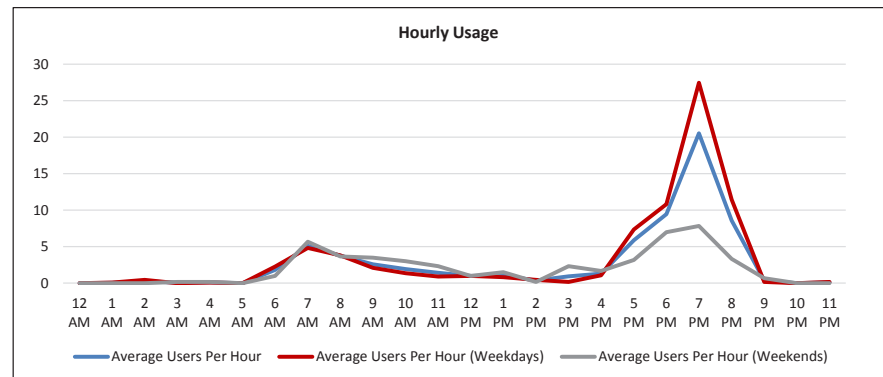
Image 10: Sims Bayou Trail at Broadway Street
Facing West

Daily Usage Sims Bayou Trail at Broadway Street				
Date	Users	Select Weather Data*		
		High Temperature (°F)	Low Temperature (°F)	Precipitation (inches)
Saturday, August 6, 2016	60	98	77	0
Sunday, August 7, 2016	44	100	78	0
Monday, August 8, 2016	95	100	77	0
Tuesday, August 9, 2016	87	101	77	0
Wednesday, August 10, 2016	75	100	79	0
Thursday, August 11, 2016	46	101	82	0
Friday, August 12, 2016	55	99	82	0
Saturday, August 13, 2016	23	97	76	0.83
Sunday, August 14, 2016	41	89	72	1.66
Monday, August 15, 2016	115	86	75	1.43
Tuesday, August 16, 2016	129	82	74	2.05
Wednesday, August 17, 2016	42	83	73	1.73
Thursday, August 18, 2016	41	88	74	0.19
Friday, August 19, 2016	55	92	75	0.39
Saturday, August 20, 2016	44	91	75	0.53
Sunday, August 21, 2016	77	87	76	T
Monday, August 22, 2016	106	89	73	0.33
Total	1,135			
Average Daily Usage	67			
Average Daily Usage (Weekday)	77			
Average Daily Usage (Weekend)	48			

*Weather conditions recorded at KHOU.



Hourly Usage Sims Bayou Trail at Broadway Street			
Time of Day	Average Users Per Hour	Average Users Per Hour (Weekdays)	Average Users Per Hour (Weekends)
12:00 a.m.	0.0	0.0	0.0
1:00 a.m.	0.1	0.1	0.0
2:00 a.m.	0.3	0.5	0.0
3:00 a.m.	0.1	0.0	0.2
4:00 a.m.	0.1	0.1	0.2
5:00 a.m.	0.0	0.0	0.0
6:00 a.m.	1.8	2.3	1.0
7:00 a.m.	5.1	4.8	5.7
8:00 a.m.	3.8	3.8	3.7
9:00 a.m.	2.6	2.1	3.5
10:00 a.m.	1.9	1.4	3.0
11:00 a.m.	1.4	0.9	2.3
12:00 p.m.	1.0	1.0	1.0
1:00 p.m.	1.1	0.8	1.5
2:00 p.m.	0.4	0.5	0.2
3:00 p.m.	0.9	0.2	2.3
4:00 p.m.	1.3	1.1	1.7
5:00 p.m.	5.9	7.4	3.2
6:00 p.m.	9.5	10.8	7.0
7:00 p.m.	20.5	27.5	7.8
8:00 p.m.	8.6	11.5	3.3
9:00 p.m.	0.4	0.2	0.7
10:00 p.m.	0.0	0.0	0.0
11:00 p.m.	0.1	0.2	0.0

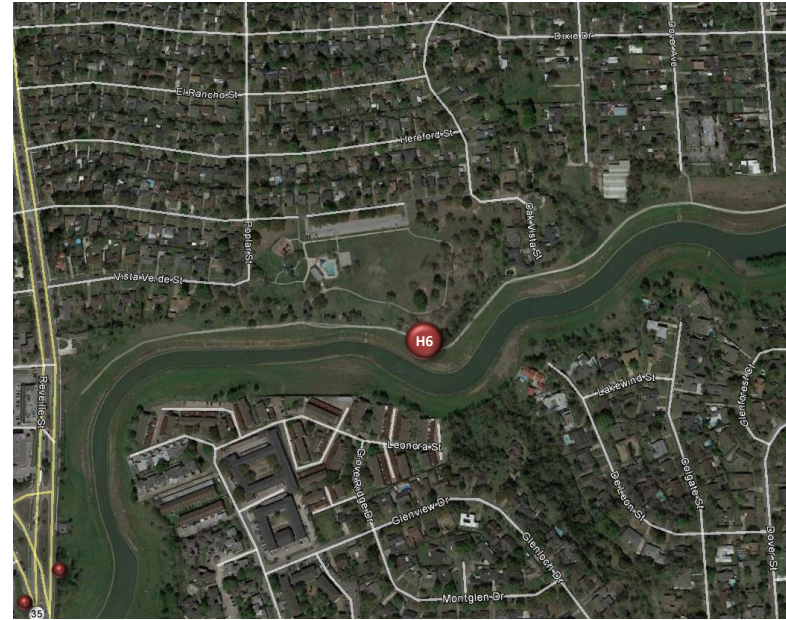


Counter H6

Sims Bayou Trail at Reveille Park

Location Information		
Location Name	Sims Bayou Trail at Reveille Park	
Location Description	Shared-Use Path along Sims Bayou Trail at Southeast Corner of Reveille Park	
Jurisdiction	City of Houston	
Agency Deployed	Houston-Galveston Area Council/Texas Transportation Institute	
GPS Coordinates	29°40'40.25"N, 95°17'2.50"W	
Surrounding Land Uses	North	Reveille Park, Single-Family Residential
	South	Sims Bayou, Multi-Family Residential, Single-Family Residential
	East	Reveille Park, Single-Family Residential
	West	Reveille Park, Single-Family Residential
What object was device secured to?	Tree	
Sidewalk Width	10'	
Buffer Width	N/A (Off-Road Shared-Use Path)	
Street Width	N/A (Off-Road Shared-Use Path)	
Parallel Parking	N/A (Off-Road Shared-Use Path)	
Landscaping or Trees	Yes	
Sidewalk Pavement Type	Asphalt	
ADA Ramps	Yes	
Sidewalk Condition	Fair (Minor Cracking and Edge Deterioration)	
Speed Limit	N/A (Off-Road Shared-Use Path)	
Street Lighting	No	
Street Traffic Volume	N/A (Off-Road Shared-Use Path)	
Transit	No	
Shade	No	
Have counts been collected by H-GAC at this location before?	No	
Trends		
<ul style="list-style-type: none">Usage tends to be much higher on weekdays (117 users/day) than during weekends (58 users/day).On weekdays, usage is highest in the evening (6:00 p.m. – 9:00 p.m.).During weekends, usage is highest in the evening (7:00 p.m. – 8:00 p.m.).		

Location Information: Map



Location Information: Photos



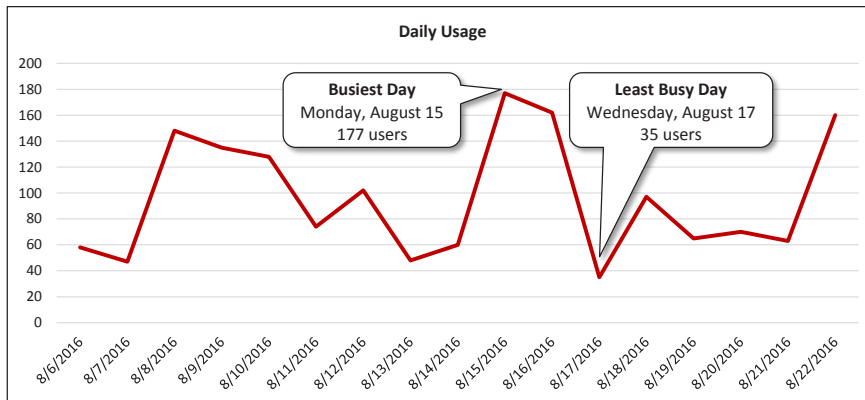
Image 11: Sims Bayou Trail at Reveille Park Facing East



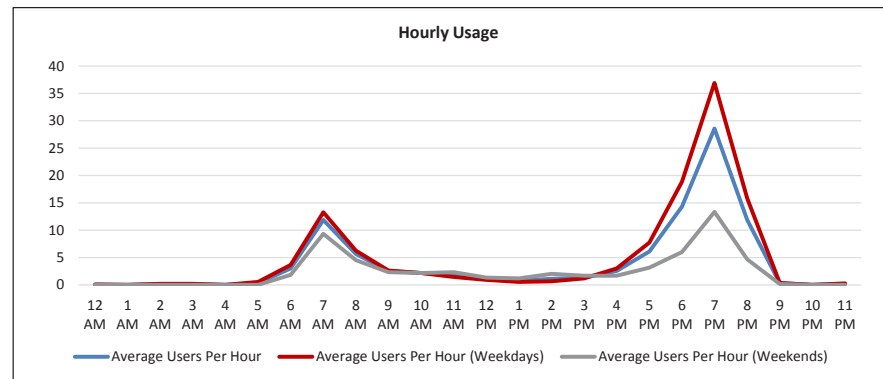
Image 12: Sims Bayou Trail at Reveille Park Facing West

Daily Usage Sims Bayou Trail at Reveille Park				
Date	Users	Select Weather Data*		
		High Temperature (°F)	Low Temperature (°F)	Precipitation (inches)
Saturday, August 6, 2016	58	98	77	0
Sunday, August 7, 2016	47	100	78	0
Monday, August 8, 2016	148	100	77	0
Tuesday, August 9, 2016	135	101	77	0
Wednesday, August 10, 2016	128	100	79	0
Thursday, August 11, 2016	74	101	82	0
Friday, August 12, 2016	102	99	82	0
Saturday, August 13, 2016	48	97	76	0.83
Sunday, August 14, 2016	60	89	72	1.66
Monday, August 15, 2016	177	86	75	1.43
Tuesday, August 16, 2016	162	82	74	2.05
Wednesday, August 17, 2016	35	83	73	1.73
Thursday, August 18, 2016	97	88	74	0.19
Friday, August 19, 2016	65	92	75	0.39
Saturday, August 20, 2016	70	91	75	0.53
Sunday, August 21, 2016	63	87	76	T
Monday, August 22, 2016	160	89	73	0.33
Total	1,629			
Average Daily Usage	96			
Average Daily Usage (Weekday)	117			
Average Daily Usage (Weekend)	58			

*Weather conditions recorded at KHOU.



Hourly Usage Sims Bayou Trail at Reveille Park			
Time of Day	Average Users Per Hour	Average Users Per Hour (Weekdays)	Average Users Per Hour (Weekends)
12:00 a.m.	0.1	0.1	0.0
1:00 a.m.	0.0	0.0	0.0
2:00 a.m.	0.1	0.2	0.0
3:00 a.m.	0.1	0.2	0.0
4:00 a.m.	0.0	0.0	0.0
5:00 a.m.	0.4	0.5	0.0
6:00 a.m.	3.0	3.6	1.8
7:00 a.m.	11.9	13.3	9.3
8:00 a.m.	5.6	6.3	4.5
9:00 a.m.	2.5	2.6	2.3
10:00 a.m.	2.2	2.2	2.2
11:00 a.m.	1.8	1.5	2.3
12:00 p.m.	1.1	0.9	1.3
1:00 p.m.	0.8	0.5	1.2
2:00 p.m.	1.1	0.6	2.0
3:00 p.m.	1.4	1.2	1.7
4:00 p.m.	2.5	3.0	1.7
5:00 p.m.	6.1	7.7	3.2
6:00 p.m.	14.3	18.8	6.0
7:00 p.m.	28.6	36.9	13.3
8:00 p.m.	11.9	15.8	4.7
9:00 p.m.	0.3	0.4	0.2
10:00 p.m.	0.0	0.0	0.0
11:00 p.m.	0.2	0.3	0.0

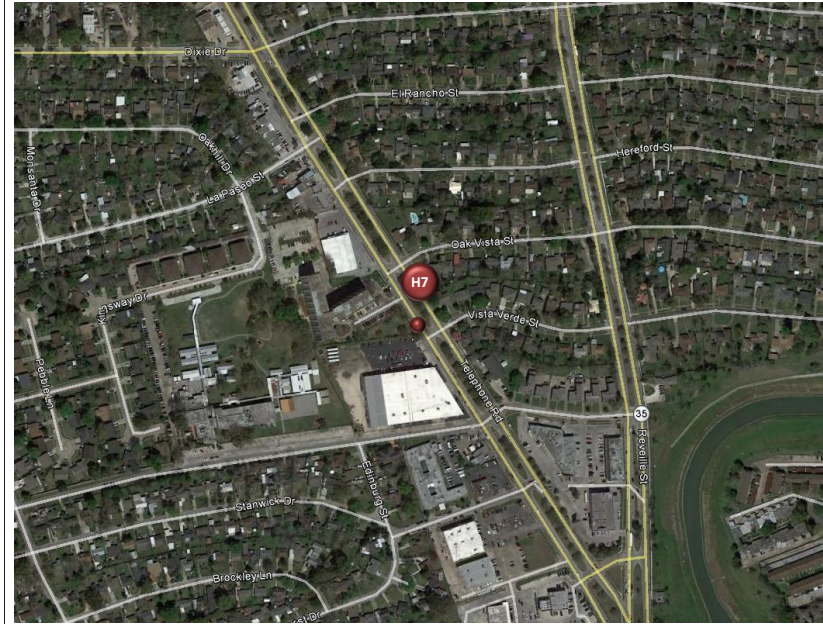


Counter H7

Telephone Road Northbound at Oak Vista Street

Location Information		
Location Name	Telephone Road Northbound at Oak Vista Street	
Location Description	Sidewalk along Telephone Road Northbound between Oak Vista Street and Vista Verde Street	
Jurisdiction	City of Houston	
Agency Deployed	Houston-Galveston Area Council/Texas Transportation Institute	
GPS Coordinates	29°40'44.13"N, 95°17'31.24"W	
Surrounding Land Uses	North	Single-Family Residential, Commercial/Retail
	South	Single-Family Residential, Industrial, Commercial/Retail
	East	Single-Family Residential
	West	Multi-Family Residential, Commercial/Retail, JP Cornelius Elementary School, Single-Family Residential
What object was device secured to?	Light Post (#490367)	
Sidewalk Width	4'	
Buffer Width	4'	
Street Width	Six-Lane Divided Roadway	
Parallel Parking	No	
Landscaping or Trees	No	
Sidewalk Pavement Type	Concrete	
ADA Ramps	Yes	
Sidewalk Condition	Fair (Overgrown Vegetation)	
Speed Limit	35 miles per hour	
Street Lighting	Yes	
Street Traffic Volume	26,629 (5906 Telephone Road: City of Houston – 2009)	
Transit	Yes (METRO Bus Stop 30' North at Telephone Road Northbound/Oak Vista Street)	
Shade	No	
Have counts been collected by H-GAC at this location before?	No	
Trends		
<ul style="list-style-type: none">• Usage tends to be slightly higher on weekdays (18 users/day) than during weekends (15 users/day).• On weekdays, usage stays relatively steady throughout daylight hours.• During weekends, usage increases slightly in the late afternoon (3:00 p.m. – 5:00 p.m.).		

Location Information: Map



Location Information: Photos



Image 13: Telephone Road Northbound near Oak Vista Street Facing North

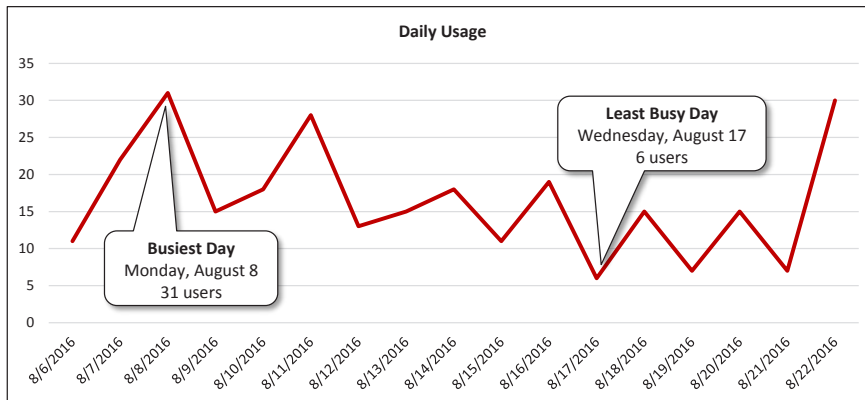


Image 14: Telephone Road Northbound near Oak Vista Street Facing South

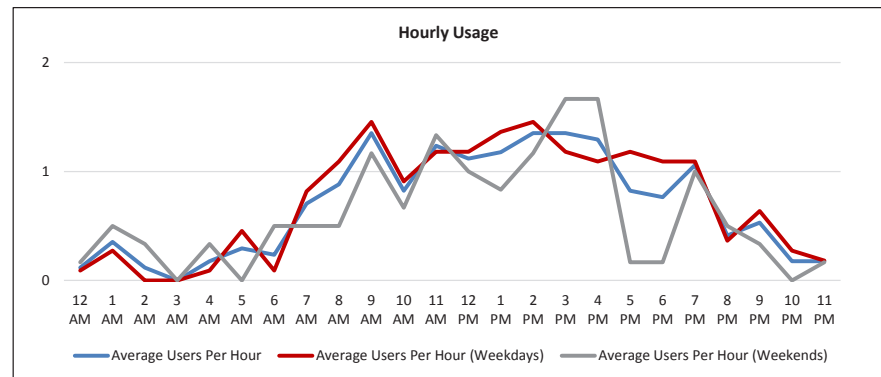
Daily Usage Telephone Road Northbound at Oak Vista Street				
Date	Users	Select Weather Data*		
		High Temperature (°F)	Low Temperature (°F)	Precipitation (inches)
Saturday, August 6, 2016	11	98	77	0
Sunday, August 7, 2016	22	100	78	0
Monday, August 8, 2016	31	100	77	0
Tuesday, August 9, 2016	15	101	77	0
Wednesday, August 10, 2016	18	100	79	0
Thursday, August 11, 2016	28	101	82	0
Friday, August 12, 2016	13	99	82	0
Saturday, August 13, 2016	15	97	76	0.83
Sunday, August 14, 2016	18	89	72	1.66
Monday, August 15, 2016	11	86	75	1.43
Tuesday, August 16, 2016	19	82	74	2.05
Wednesday, August 17, 2016	6	83	73	1.73
Thursday, August 18, 2016	15	88	74	0.19
Friday, August 19, 2016	7	92	75	0.39
Saturday, August 20, 2016	15	91	75	0.53
Sunday, August 21, 2016	7	87	76	T
Monday, August 22, 2016	30	89	73	0.33

Total	281
Average Daily Usage	17
Average Daily Usage (Weekday)	18
Average Daily Usage (Weekend)	15

*Weather conditions recorded at KHOU.



Hourly Usage Telephone Road Northbound at Oak Vista Street			
Time of Day	Average Users Per Hour	Average Users Per Hour (Weekdays)	Average Users Per Hour (Weekends)
12:00 a.m.	0.1	0.1	0.2
1:00 a.m.	0.4	0.3	0.5
2:00 a.m.	0.1	0.0	0.3
3:00 a.m.	0.0	0.0	0.0
4:00 a.m.	0.2	0.1	0.3
5:00 a.m.	0.3	0.5	0.0
6:00 a.m.	0.2	0.1	0.5
7:00 a.m.	0.7	0.8	0.5
8:00 a.m.	0.9	1.1	0.5
9:00 a.m.	1.4	1.5	1.2
10:00 a.m.	0.8	0.9	0.7
11:00 a.m.	1.2	1.2	1.3
12:00 p.m.	1.1	1.2	1.0
1:00 p.m.	1.2	1.4	0.8
2:00 p.m.	1.4	1.5	1.2
3:00 p.m.	1.4	1.2	1.7
4:00 p.m.	1.3	1.1	1.7
5:00 p.m.	0.8	1.2	0.2
6:00 p.m.	0.8	1.1	0.2
7:00 p.m.	1.1	1.1	1.0
8:00 p.m.	0.4	0.4	0.5
9:00 p.m.	0.5	0.6	0.3
10:00 p.m.	0.2	0.3	0.0
11:00 p.m.	0.2	0.2	0.2



Counter T1

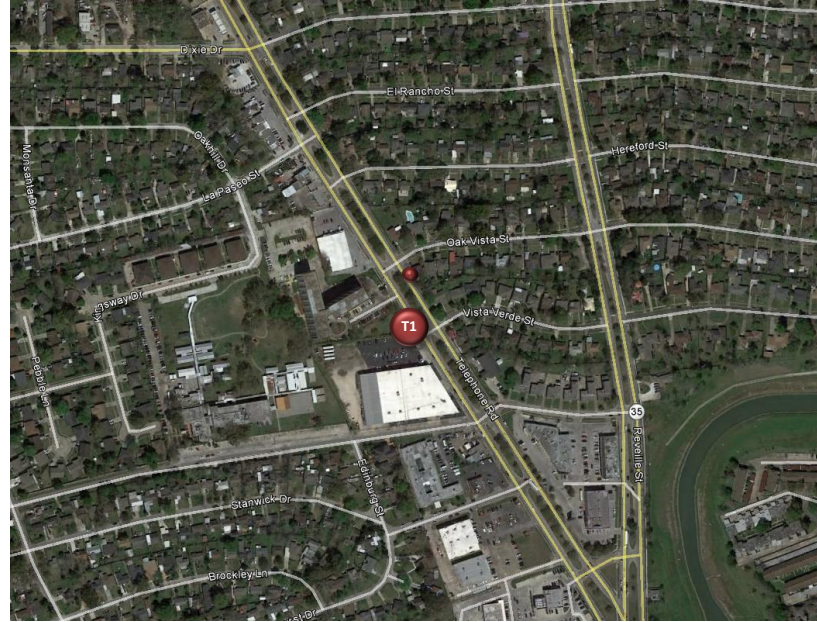
Telephone Road Southbound at Oak Vista Street

Location Information		
Location Name	Telephone Road Southbound at Oak Vista Street	
Location Description	Sidewalk along Telephone Road Southbound between Oak Vista Street and Vista Verde Street	
Jurisdiction	City of Houston	
Agency Deployed	Houston-Galveston Area Council/Texas Transportation Institute	
GPS Coordinates	29°40'42.47"N, 95°17'31.33"W	
Surrounding Land Uses	North	Multi-Family Residential, Single-Family Residential, Commercial/Retail
	South	Industrial, Commercial/Retail, Single-Family Residential
	East	Single-Family Residential
	West	Multi-Family Residential, Industrial, JP Cornelius Elementary School
What object was device secured to?	Sign Post (School Zone: Flashing Sign)	
Sidewalk Width	4'	
Buffer Width	4.5'	
Street Width	Six-Lane Divided Roadway	
Parallel Parking	No	
Landscaping or Trees	No	
Sidewalk Pavement Type	Concrete	
ADA Ramps	Yes	
Sidewalk Condition	Good	
Speed Limit	35 miles per hour	
Street Lighting	Yes	
Street Traffic Volume	26,629 (5906 Telephone Road: City of Houston – 2009)	
Transit	Yes (METRO Bus Stop 180' North at Telephone Road Southbound/Oak Vista Street)	
Shade	No	
Have counts been collected by H-GAC at this location before?	No	

Trends

- Usage tends to be higher on weekdays (94 users/day) than during weekends (75 users/day).
- On weekdays, usage is highest in the late morning (10:00 a.m. – 12:00 p.m.).
- During weekends, usage is highest in the early afternoon (1:00 p.m. – 2:00 p.m.).

Location Information: Map



Location Information: Photos



Image 15: Telephone Road Southbound near Oak Vista Street Facing North

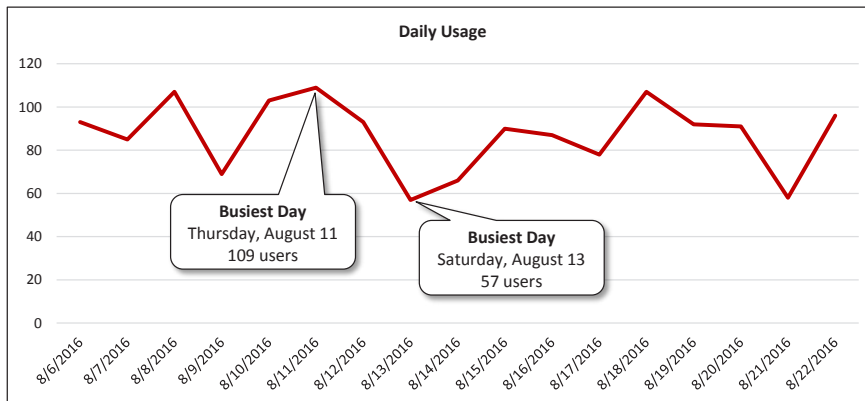


Image 16: Telephone Road Southbound near Oak Vista Street Facing South

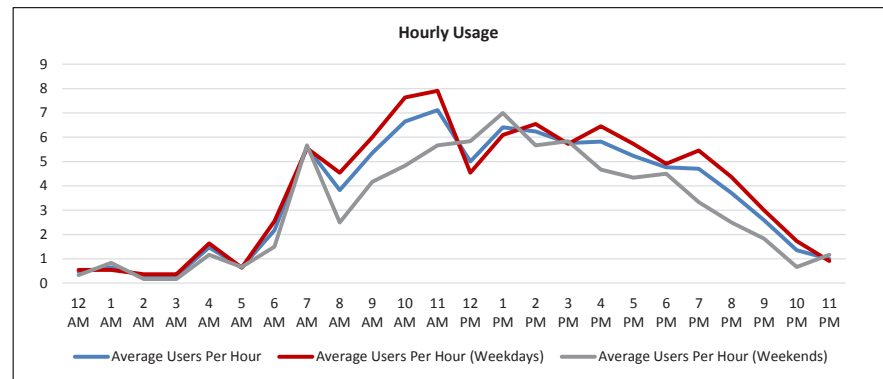
Daily Usage Telephone Road Southbound at Oak Vista Street				
Date	Users	Select Weather Data*		
		High Temperature (°F)	Low Temperature (°F)	Precipitation (inches)
Saturday, August 6, 2016	93	98	77	0
Sunday, August 7, 2016	85	100	78	0
Monday, August 8, 2016	107	100	77	0
Tuesday, August 9, 2016	69	101	77	0
Wednesday, August 10, 2016	103	100	79	0
Thursday, August 11, 2016	109	101	82	0
Friday, August 12, 2016	93	99	82	0
Saturday, August 13, 2016	57	97	76	0.83
Sunday, August 14, 2016	66	89	72	1.66
Monday, August 15, 2016	90	86	75	1.43
Tuesday, August 16, 2016	87	82	74	2.05
Wednesday, August 17, 2016	78	83	73	1.73
Thursday, August 18, 2016	107	88	74	0.19
Friday, August 19, 2016	92	92	75	0.39
Saturday, August 20, 2016	91	91	75	0.53
Sunday, August 21, 2016	58	87	76	T
Monday, August 22, 2016	96	89	73	0.33

Total	1,481
Average Daily Usage	87
Average Daily Usage (Weekday)	94
Average Daily Usage (Weekend)	75

*Weather conditions recorded at KHOU.



Hourly Usage Telephone Road Southbound at Oak Vista Street			
Time of Day	Average Users Per Hour	Average Users Per Hour (Weekdays)	Average Users Per Hour (Weekends)
12:00 a.m.	0.5	0.5	0.3
1:00 a.m.	0.6	0.5	0.8
2:00 a.m.	0.3	0.4	0.2
3:00 a.m.	0.3	0.4	0.2
4:00 a.m.	1.5	1.6	1.2
5:00 a.m.	0.6	0.6	0.7
6:00 a.m.	2.2	2.5	1.5
7:00 a.m.	5.6	5.5	5.7
8:00 a.m.	3.8	4.5	2.5
9:00 a.m.	5.4	6.0	4.2
10:00 a.m.	6.6	7.6	4.8
11:00 a.m.	7.1	7.9	5.7
12:00 p.m.	5.0	4.5	5.8
1:00 p.m.	6.4	6.1	7.0
2:00 p.m.	6.2	6.5	5.7
3:00 p.m.	5.8	5.7	5.8
4:00 p.m.	5.8	6.5	4.7
5:00 p.m.	5.2	5.7	4.3
6:00 p.m.	4.8	4.9	4.5
7:00 p.m.	4.7	5.5	3.3
8:00 p.m.	3.7	4.4	2.5
9:00 p.m.	2.6	3.0	1.8
10:00 p.m.	1.4	1.7	0.7
11:00 p.m.	1.0	0.9	1.2



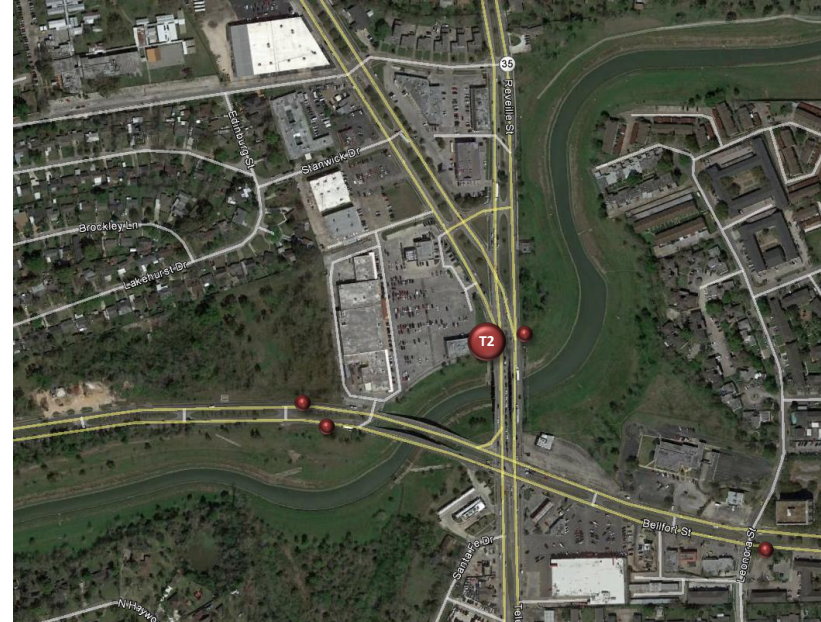
Counter T2

Telephone Road Southbound at Sims Bayou

Location Information	
Location Name	Telephone Road Southbound at Sims Bayou
Location Description	Sidewalk along Telephone Road Southbound North of Sims Bayou Bridge
Jurisdiction	City of Houston
Agency Deployed	Houston-Galveston Area Council/Texas Transportation Institute
GPS Coordinates	29°40'28.80"N, 95°17'21.97"W
Surrounding Land Uses	North Commercial/Retail
	South Sims Bayou, Commercial/Retail
	East Vacant Land, Sims Bayou
	West Commercial/Retail, Vacant Land, Single-Family Residential
What object was device secured to?	Sign Post (Monroe Park and Ride and I-45 Express Lane)
Sidewalk Width	4'
Buffer Width	4'
Street Width	Six- to Eight-Lane Roadway (Multiple Roads Intersect near Counter T2)
Parallel Parking	No
Landscaping or Trees	No
Sidewalk Pavement Type	Concrete
ADA Ramps	Yes
Sidewalk Condition	Good
Speed Limit	35 miles per hour
Street Lighting	Yes
Street Traffic Volume	22,090 (6300 Telephone Road: TxDOT – 2012)
Transit	Yes (METRO Bus Stop 350' North at Telephone Road Southbound/Glenbrook Square Shopping Center Entrance)
Shade	No
Have counts been collected by H-GAC at this location before?	No

Trends
<ul style="list-style-type: none"> Usage tends to be higher on weekdays (52 users/day) than during weekends (40 users/day). On weekdays, usage is highest in the morning (8:00 a.m. – 9:00 a.m.) and mid-afternoon (2:00 p.m. – 3:00 p.m.). On several weekdays (especially Mondays), there were spikes in usage: <ul style="list-style-type: none"> Monday, August 8, 2016 (8:00 a.m. – 9:00 a.m.): 20 users Monday, August 15, 2016 (8:00 a.m. – 9:00 a.m.): 19 users Tuesday, August 16, 2016 (2:00 p.m. – 3:00 p.m.): 28 users Monday, August 22, 2016 (10:00 a.m. – 11:00 a.m.): 27 users During weekends, usage is highest midday (11:00 a.m. – 12:00 p.m.).

Location Information: Map



Location Information: Photos



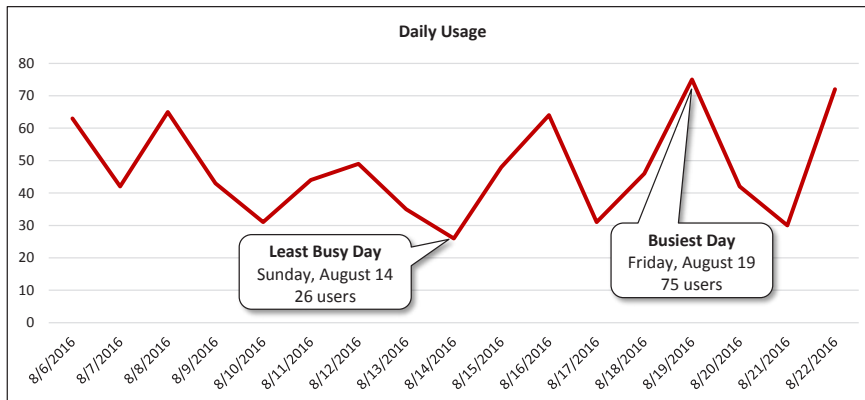
Image 17: Telephone Road Southbound at Sims Bayou Facing North



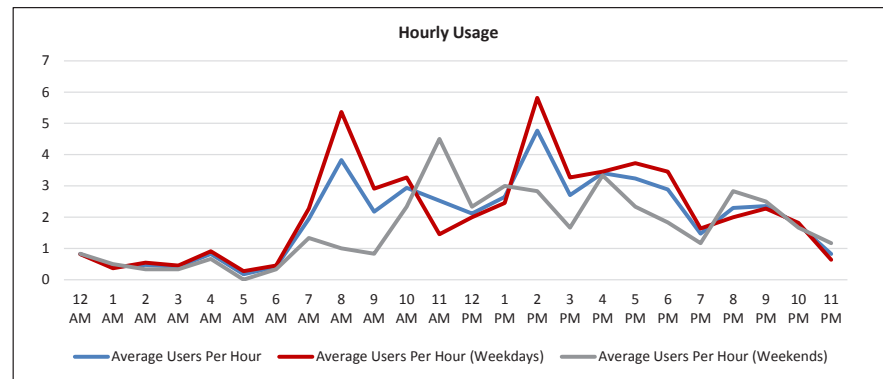
Image 18: Telephone Road Southbound at Sims Bayou Facing South

Daily Usage				
Telephone Road Southbound at Sims Bayou				
Date	Users	Select Weather Data*		
		High Temperature (°F)	Low Temperature (°F)	Precipitation (inches)
Saturday, August 6, 2016	63	98	77	0
Sunday, August 7, 2016	42	100	78	0
Monday, August 8, 2016	65	100	77	0
Tuesday, August 9, 2016	43	101	77	0
Wednesday, August 10, 2016	31	100	79	0
Thursday, August 11, 2016	44	101	82	0
Friday, August 12, 2016	49	99	82	0
Saturday, August 13, 2016	35	97	76	0.83
Sunday, August 14, 2016	26	89	72	1.66
Monday, August 15, 2016	48	86	75	1.43
Tuesday, August 16, 2016	64	82	74	2.05
Wednesday, August 17, 2016	31	83	73	1.73
Thursday, August 18, 2016	46	88	74	0.19
Friday, August 19, 2016	75	92	75	0.39
Saturday, August 20, 2016	42	91	75	0.53
Sunday, August 21, 2016	30	87	76	T
Monday, August 22, 2016	72	89	73	0.33
Total	806			
Average Daily Usage	47			
Average Daily Usage (Weekday)	52			
Average Daily Usage (Weekend)	40			

*Weather conditions recorded at KHOU.



Hourly Usage Telephone Road Southbound at Sims Bayou			
Time of Day	Average Users Per Hour	Average Users Per Hour (Weekdays)	Average Users Per Hour (Weekends)
12:00 a.m.	0.8	0.8	0.8
1:00 a.m.	0.4	0.4	0.5
2:00 a.m.	0.5	0.5	0.3
3:00 a.m.	0.4	0.5	0.3
4:00 a.m.	0.8	0.9	0.7
5:00 a.m.	0.2	0.3	0.0
6:00 a.m.	0.4	0.5	0.3
7:00 a.m.	1.9	2.3	1.3
8:00 a.m.	3.8	5.4	1.0
9:00 a.m.	2.2	2.9	0.8
10:00 a.m.	2.9	3.3	2.3
11:00 a.m.	2.5	1.5	4.5
12:00 p.m.	2.1	2.0	2.3
1:00 p.m.	2.6	2.5	3.0
2:00 p.m.	4.8	5.8	2.8
3:00 p.m.	2.7	3.3	1.7
4:00 p.m.	3.4	3.5	3.3
5:00 p.m.	3.2	3.7	2.3
6:00 p.m.	2.9	3.5	1.8
7:00 p.m.	1.5	1.6	1.2
8:00 p.m.	2.3	2.0	2.8
9:00 p.m.	2.4	2.3	2.5
10:00 p.m.	1.8	1.8	1.7
11:00 p.m.	0.8	0.6	1.2

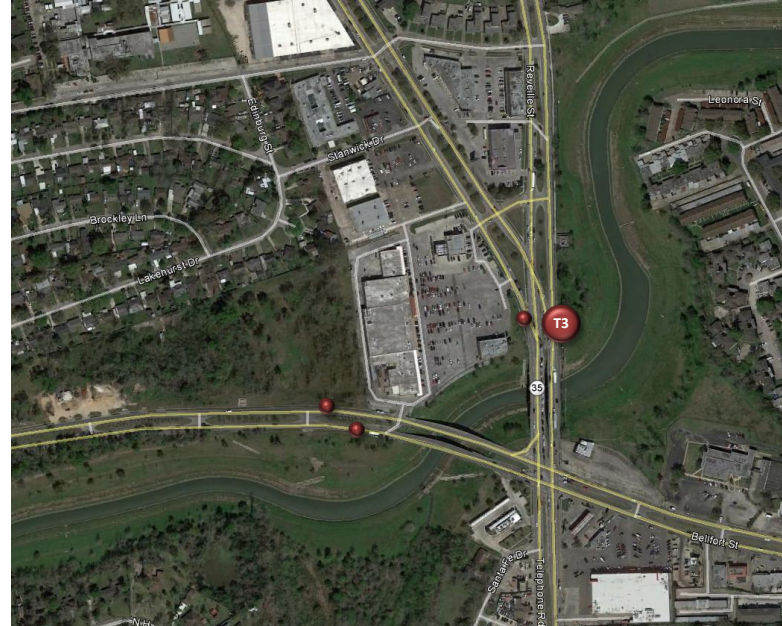


Counter T3

Telephone Road Northbound at Sims Bayou

Location Information	
Location Name	Telephone Road Northbound at Sims Bayou
Location Description	Sidewalk along Telephone Road Northbound North of Sims Bayou Bridge
Jurisdiction	City of Houston
Agency Deployed	Houston-Galveston Area Council/Texas Transportation Institute
GPS Coordinates	29°40'29.85"N, 95°17'20.69"W
Surrounding Land Uses	North Commercial/Retail, Open Space, Sims Bayou
	South Sims Bayou, Commercial/Retail
	East Vacant Land, Sims Bayou
	West Commercial/Retail, Vacant Land, Single-Family Residential
What object was device secured to?	Utility Pole
Sidewalk Width	4'
Buffer Width	4'
Street Width	Six- to Eight-Lane Roadway (Multiple Roads Intersect near Counter T2)
Parallel Parking	No
Landscaping or Trees	Yes
Sidewalk Pavement Type	Concrete
ADA Ramps	Yes
Sidewalk Condition	Fair (Some Unevenness)
Speed Limit	35 miles per hour
Street Lighting	Yes
Street Traffic Volume	22,090 (6300 Telephone Road: TxDOT - 2012)
Transit	Yes (METRO Bus Stop 250' North along Reveille Street Northbound)
Shade	Intermittent
Have counts been collected by H-GAC at this location before?	No
Trends	
<ul style="list-style-type: none"> Daily usage tends to be similar throughout the week (Weekdays: 43 users/day; Weekends: 44 users/day). On weekdays, usage is highest in the early afternoon (1:00 p.m. – 2:00 p.m.) and late afternoon (4:00 p.m. – 5:00 p.m.). During weekends, usage is highest in the mid-afternoon (2:00 p.m. – 4:00 p.m.). 	

Location Information: Map



Location Information: Photos



Image 19: Telephone Road Northbound at Sims Bayou
Facing North

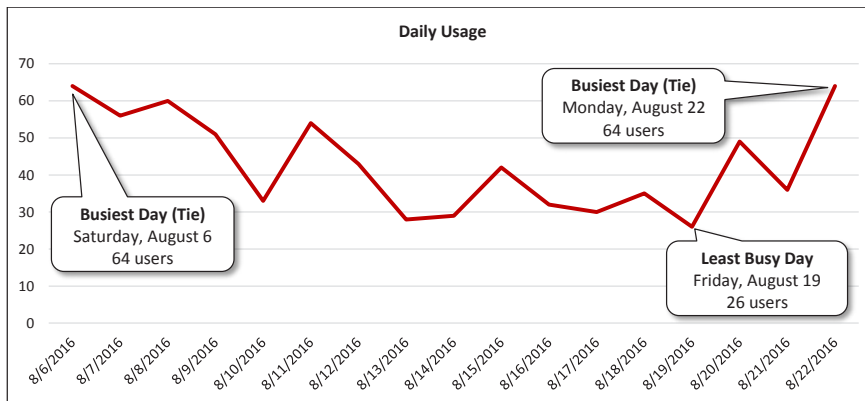


Image 20: Telephone Road Northbound at Sims Bayou
Facing South

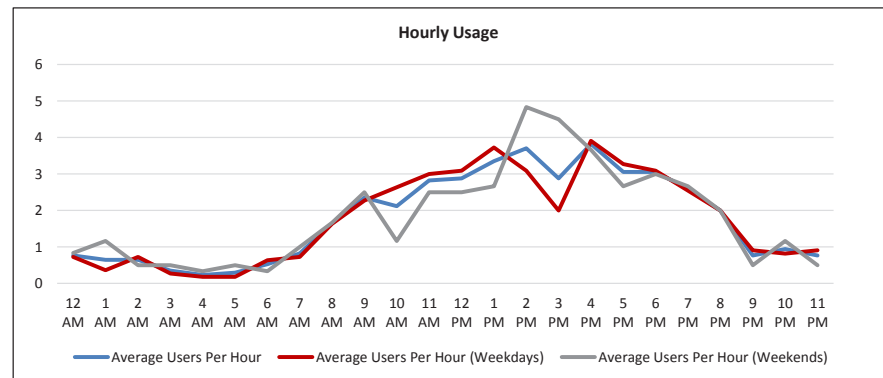
Daily Usage Telephone Road Northbound at Sims Bayou				
Date	Users	Select Weather Data*		
		High Temperature (°F)	Low Temperature (°F)	Precipitation (inches)
Saturday, August 6, 2016	64	98	77	0
Sunday, August 7, 2016	56	100	78	0
Monday, August 8, 2016	60	100	77	0
Tuesday, August 9, 2016	51	101	77	0
Wednesday, August 10, 2016	33	100	79	0
Thursday, August 11, 2016	54	101	82	0
Friday, August 12, 2016	43	99	82	0
Saturday, August 13, 2016	28	97	76	0.83
Sunday, August 14, 2016	29	89	72	1.66
Monday, August 15, 2016	42	86	75	1.43
Tuesday, August 16, 2016	32	82	74	2.05
Wednesday, August 17, 2016	30	83	73	1.73
Thursday, August 18, 2016	35	88	74	0.19
Friday, August 19, 2016	26	92	75	0.39
Saturday, August 20, 2016	49	91	75	0.53
Sunday, August 21, 2016	36	87	76	T
Monday, August 22, 2016	64	89	73	0.33

Total	732
Average Daily Usage	43
Average Daily Usage (Weekday)	43
Average Daily Usage (Weekend)	44

*Weather conditions recorded at KHOU.



Hourly Usage Telephone Road Northbound at Sims Bayou			
Time of Day	Average Users Per Hour	Average Users Per Hour (Weekdays)	Average Users Per Hour (Weekends)
12:00 a.m.	0.8	0.7	0.8
1:00 a.m.	0.6	0.4	1.2
2:00 a.m.	0.6	0.7	0.5
3:00 a.m.	0.4	0.3	0.5
4:00 a.m.	0.2	0.2	0.3
5:00 a.m.	0.3	0.2	0.5
6:00 a.m.	0.5	0.6	0.3
7:00 a.m.	0.8	0.7	1.0
8:00 a.m.	1.6	1.6	1.7
9:00 a.m.	2.4	2.3	2.5
10:00 a.m.	2.1	2.6	1.2
11:00 a.m.	2.8	3.0	2.5
12:00 p.m.	2.9	3.1	2.5
1:00 p.m.	3.4	3.7	2.7
2:00 p.m.	3.7	3.1	4.8
3:00 p.m.	2.9	2.0	4.5
4:00 p.m.	3.8	3.9	3.7
5:00 p.m.	3.1	3.3	2.7
6:00 p.m.	3.1	3.1	3.0
7:00 p.m.	2.6	2.5	2.7
8:00 p.m.	2.0	2.0	2.0
9:00 p.m.	0.8	0.9	0.5
10:00 p.m.	0.9	0.8	1.2
11:00 p.m.	0.8	0.9	0.5

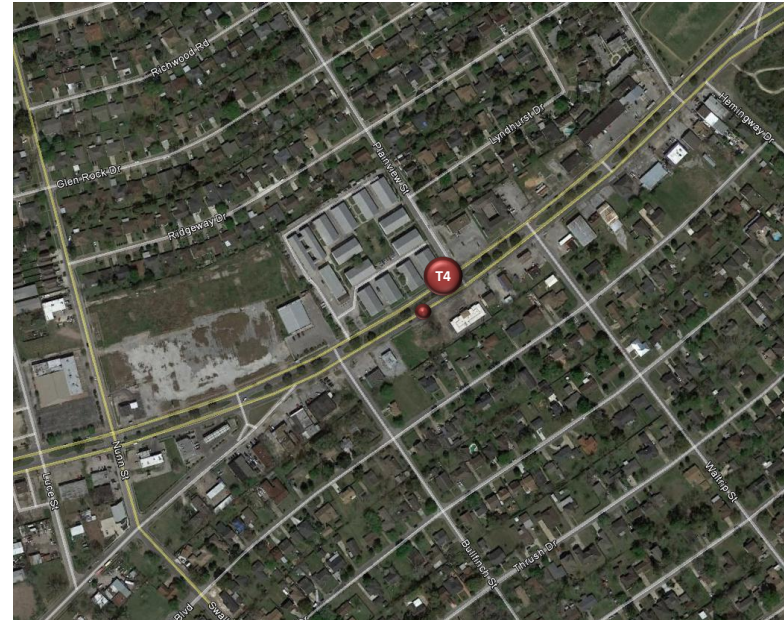


Counter T4

Bellfort Street Westbound at Plainview Street

Location Information	
Location Name	Bellfort Street Westbound at Plainview Street
Location Description	Sidewalk along Bellfort Street Westbound West of Plainview Street
Jurisdiction	City of Houston
Agency Deployed	Houston-Galveston Area Council/Texas Transportation Institute
GPS Coordinates	29°40'11.01"N, 95°18'17.86"W
Surrounding Land Uses	North Multi-Family Residential, Commercial/Retail, Single-Family Residential
	South Commercial/Retail, Single-Family Residential
	East Commercial/Retail, Single-Family Residential
	West Multi-Family Residential, Commercial/Retail, Vacant Land, Single-Family Residential
What object was device secured to?	Sign Post (Bicycles: Share the Road)
Sidewalk Width	4'
Buffer Width	5'
Street Width	Four-Lane Divided Roadway
Parallel Parking	No
Landscaping or Trees	No
Sidewalk Pavement Type	Concrete
ADA Ramps	Yes
Sidewalk Condition	Good
Speed Limit	35 miles per hour
Street Lighting	Yes
Street Traffic Volume	13,762 (7065 Bellfort Street: City of Houston – 2009)
Transit	Yes (METRO Bus Stop 100' East at Bellfort Street Westbound/Plainview Street)
Shade	No
Have counts been collected by H-GAC at this location before?	No
Trends	
<ul style="list-style-type: none"> Usage tends to be higher on weekdays (67 users/day) than during weekends (57 users/day). On weekdays, usage is highest in the morning (8:00 a.m. – 9:00 a.m.) and evening (5:00 p.m. – 6:00 p.m.). During weekends, usage tends to be highest in the early afternoon (1:00 p.m. – 2:00 p.m.). 	

Location Information: Map



Location Information: Photos



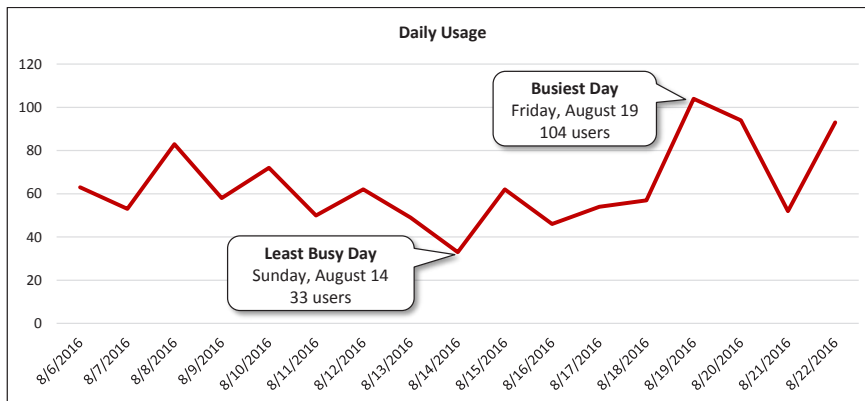
Image 21: Bellfort Street Westbound at Plainview Street Facing East



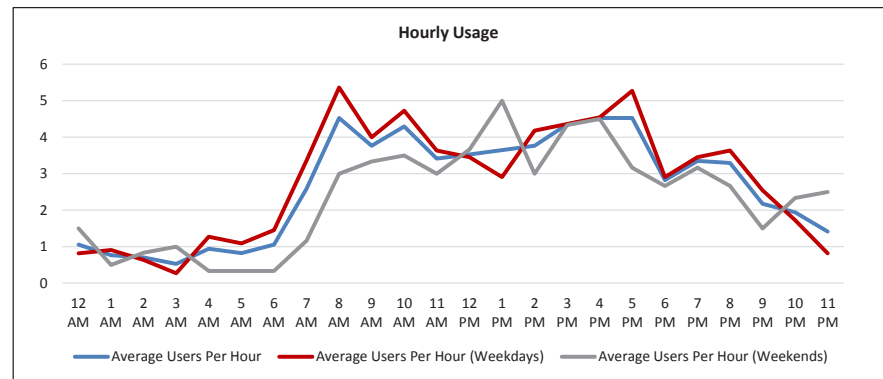
Image 22: Bellfort Street Westbound at Plainview Street Facing West

Daily Usage Bellfort Street Westbound at Plainview Street				
Date	Users	Select Weather Data*		
		High Temperature (°F)	Low Temperature (°F)	Precipitation (inches)
Saturday, August 6, 2016	63	98	77	0
Sunday, August 7, 2016	53	100	78	0
Monday, August 8, 2016	83	100	77	0
Tuesday, August 9, 2016	58	101	77	0
Wednesday, August 10, 2016	72	100	79	0
Thursday, August 11, 2016	50	101	82	0
Friday, August 12, 2016	62	99	82	0
Saturday, August 13, 2016	49	97	76	0.83
Sunday, August 14, 2016	33	89	72	1.66
Monday, August 15, 2016	62	86	75	1.43
Tuesday, August 16, 2016	46	82	74	2.05
Wednesday, August 17, 2016	54	83	73	1.73
Thursday, August 18, 2016	57	88	74	0.19
Friday, August 19, 2016	104	92	75	0.39
Saturday, August 20, 2016	94	91	75	0.53
Sunday, August 21, 2016	52	87	76	T
Monday, August 22, 2016	93	89	73	0.33
Total	1,085			
Average Daily Usage	64			
Average Daily Usage (Weekday)	67			
Average Daily Usage (Weekend)	57			

*Weather conditions recorded at KHOU.



Hourly Usage Bellfort Street Westbound at Plainview Street			
Time of Day	Average Users Per Hour	Average Users Per Hour (Weekdays)	Average Users Per Hour (Weekends)
12:00 a.m.	1.1	0.8	1.5
1:00 a.m.	0.8	0.9	0.5
2:00 a.m.	0.7	0.6	0.8
3:00 a.m.	0.5	0.3	1.0
4:00 a.m.	0.9	1.3	0.3
5:00 a.m.	0.8	1.1	0.3
6:00 a.m.	1.1	1.5	0.3
7:00 a.m.	2.6	3.4	1.2
8:00 a.m.	4.5	5.4	3.0
9:00 a.m.	3.8	4.0	3.3
10:00 a.m.	4.3	4.7	3.5
11:00 a.m.	3.4	3.6	3.0
12:00 p.m.	3.5	3.5	3.7
1:00 p.m.	3.6	2.9	5.0
2:00 p.m.	3.8	4.2	3.0
3:00 p.m.	4.4	4.4	4.3
4:00 p.m.	4.5	4.5	4.5
5:00 p.m.	4.5	5.3	3.2
6:00 p.m.	2.8	2.9	2.7
7:00 p.m.	3.4	3.5	3.2
8:00 p.m.	3.3	3.6	2.7
9:00 p.m.	2.2	2.5	1.5
10:00 p.m.	1.9	1.7	2.3
11:00 p.m.	1.4	0.8	2.5



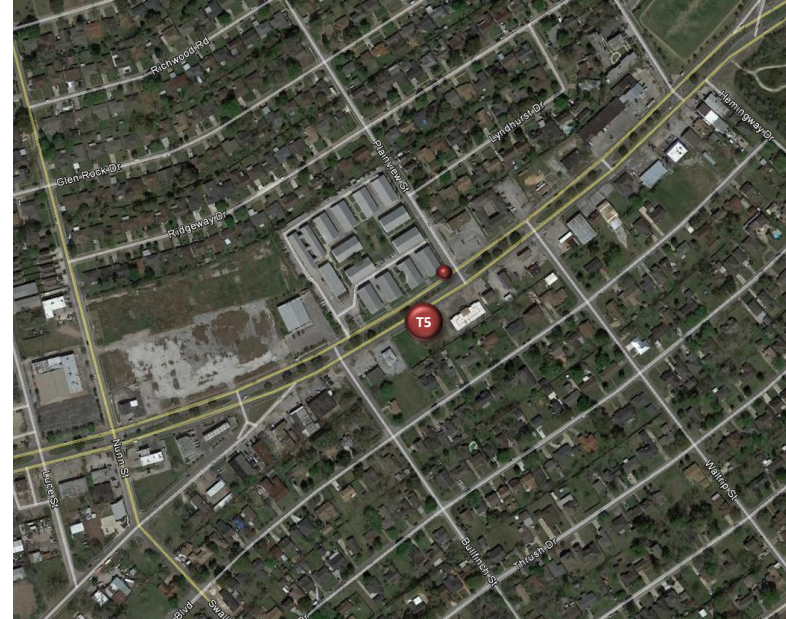
Counter T5

Bellfort Street Eastbound at Plainview Street

Location Information	
Location Name	Bellfort Street Eastbound at Plainview Street
Location Description	Sidewalk along Bellfort Street Eastbound West of Plainview Street
Jurisdiction	City of Houston
Agency Deployed	Houston-Galveston Area Council/Texas Transportation Institute
GPS Coordinates	29°40'9.49"N, 95°18'18.70"W
Surrounding Land Uses	North Multi-Family Residential, Single-Family Residential
	South Vacant Land, Single-Family Residential
	East Commercial/Retail, Single-Family Residential
	West Vacant Land, Multi-Family Residential
What object was device secured to?	Light Post (#226629)
Sidewalk Width	4' (Varies)
Buffer Width	4' (Varies)
Street Width	Four-Lane Divided Roadway
Parallel Parking	No
Landscaping or Trees	No
Sidewalk Pavement Type	Asphalt and Concrete (Varies along Block)
ADA Ramps	No
Sidewalk Condition	Poor (No Clear Pedestrian Facilities; Inconsistent Facilities on Block; Trash, Debris, and Overgrown Vegetation on Pedestrian Facility)
Speed Limit	35 miles per hour
Street Lighting	Yes
Street Traffic Volume	13,762 (7065 Bellfort Street: City of Houston – 2009)
Transit	Yes (METRO Bus Stop 330' West at Bellfort Street Eastbound/Bullfinch Street)
Shade	No
Have counts been collected by H-GAC at this location before?	No

Trends	
<ul style="list-style-type: none"> Usage tends to be slightly higher during weekends (40 users/day) than on weekdays (37 users/day). On weekdays, usage is highest in the evening (6:00 p.m. – 7:00 p.m.). During weekends, usage is highest in the mid-afternoon (2:00 p.m. – 3:00 p.m.). 	

Location Information: Map



Location Information: Photos



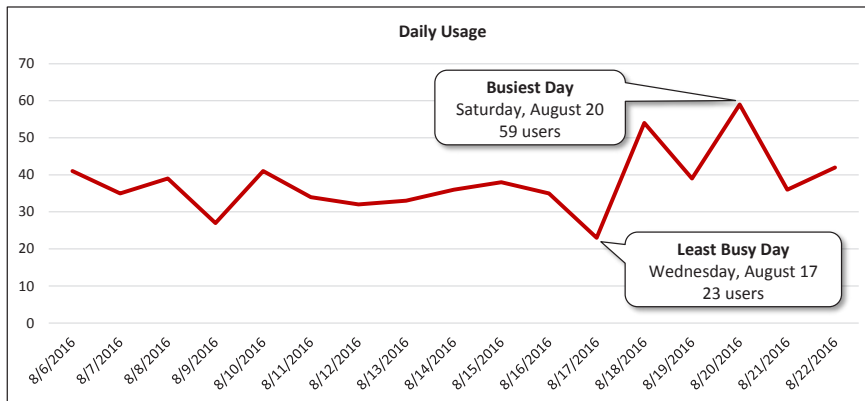
Image 23: Telephone Road Eastbound at Plainview Street
Facing East



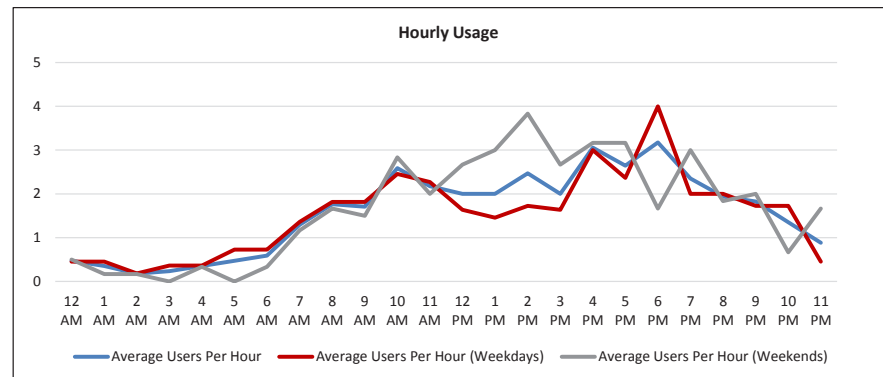
Image 24: Telephone Road Eastbound at Plainview Street
Facing West

Daily Usage				
Bellfort Street Eastbound at Plainview Street				
Date	Users	Select Weather Data*		
		High Temperature (°F)	Low Temperature (°F)	Precipitation (inches)
Saturday, August 6, 2016	41	98	77	0
Sunday, August 7, 2016	35	100	78	0
Monday, August 8, 2016	39	100	77	0
Tuesday, August 9, 2016	27	101	77	0
Wednesday, August 10, 2016	41	100	79	0
Thursday, August 11, 2016	34	101	82	0
Friday, August 12, 2016	32	99	82	0
Saturday, August 13, 2016	33	97	76	0.83
Sunday, August 14, 2016	36	89	72	1.66
Monday, August 15, 2016	38	86	75	1.43
Tuesday, August 16, 2016	35	82	74	2.05
Wednesday, August 17, 2016	23	83	73	1.73
Thursday, August 18, 2016	54	88	74	0.19
Friday, August 19, 2016	39	92	75	0.39
Saturday, August 20, 2016	59	91	75	0.53
Sunday, August 21, 2016	36	87	76	T
Monday, August 22, 2016	42	89	73	0.33
Total		644		
Average Daily Usage		38		
Average Daily Usage (Weekday)		37		
Average Daily Usage (Weekend)		40		

*Weather conditions recorded at KHOU.



Hourly Usage Belfort Street Eastbound at Plainview Street			
Time of Day	Average Users Per Hour	Average Users Per Hour (Weekdays)	Average Users Per Hour (Weekends)
12:00 a.m.	0.5	0.5	0.5
1:00 a.m.	0.4	0.5	0.2
2:00 a.m.	0.2	0.2	0.2
3:00 a.m.	0.2	0.4	0.0
4:00 a.m.	0.4	0.4	0.3
5:00 a.m.	0.5	0.7	0.0
6:00 a.m.	0.6	0.7	0.3
7:00 a.m.	1.3	1.4	1.2
8:00 a.m.	1.8	1.8	1.7
9:00 a.m.	1.7	1.8	1.5
10:00 a.m.	2.6	2.5	2.8
11:00 a.m.	2.2	2.3	2.0
12:00 p.m.	2.0	1.6	2.7
1:00 p.m.	2.0	1.5	3.0
2:00 p.m.	2.5	1.7	3.8
3:00 p.m.	2.0	1.6	2.7
4:00 p.m.	3.1	3.0	3.2
5:00 p.m.	2.6	2.4	3.2
6:00 p.m.	3.2	4.0	1.7
7:00 p.m.	2.4	2.0	3.0
8:00 p.m.	1.9	2.0	1.8
9:00 p.m.	1.8	1.7	2.0
10:00 p.m.	1.4	1.7	0.7
11:00 p.m.	0.9	0.5	1.7

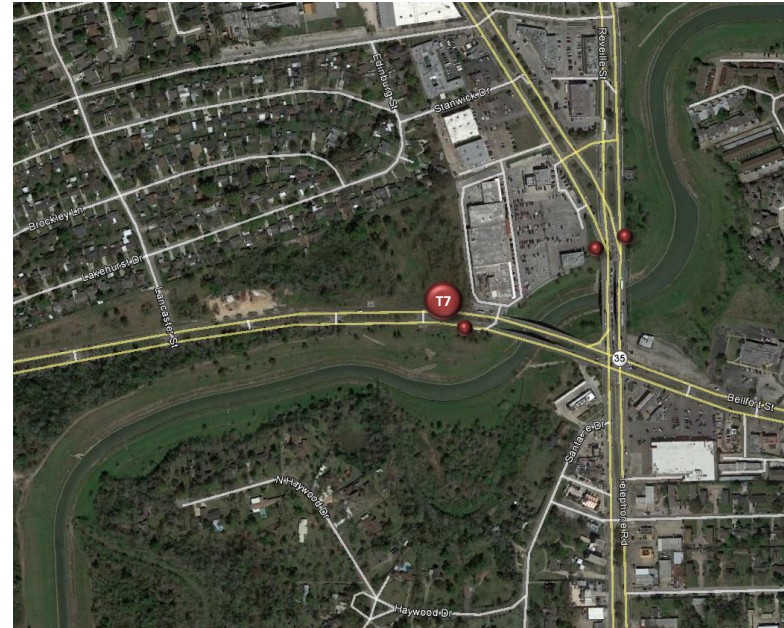


Counter T7

Bellfort Street Westbound at Sims Bayou

Location Information		
Location Name	Bellfort Street Westbound at Sims Bayou	
Location Description	Sidewalk along Bellfort Street Westbound West of Sims Bayou	
Jurisdiction	City of Houston	
Agency Deployed	Houston-Galveston Area Council/Texas Transportation Institute	
GPS Coordinates	29°40'25.96"N, 95°17'30.44"W	
Surrounding Land Uses	North	Vacant Land, Commercial/Retail, Single-Family Residential
	South	Vacant Land, Sims Bayou
	East	Vacant Land, Commercial/Retail, Sims Bayou
	West	Vacant Land
What object was device secured to?	Light Post (#247482)	
Sidewalk Width	4'	
Buffer Width	5'	
Street Width	Four-Lane Divided Roadway	
Parallel Parking	No	
Landscaping or Trees	No	
Sidewalk Pavement Type	Concrete	
ADA Ramps	Yes	
Sidewalk Condition	Poor (Unevenness and Overgrown Vegetation)	
Speed Limit	35 miles per hour	
Street Lighting	Yes	
Street Traffic Volume	13,762 (7065 Bellfort Street: City of Houston – 2009)	
Transit	Yes (METRO Bus Stop 200' East at Bellfort Street Westbound/Sims Bayou)	
Shade	No	
Have counts been collected by H-GAC at this location before?	No	
Trends		
<ul style="list-style-type: none">• Usage tends to be higher on weekdays (18 users/day) than during weekends (14 users/day).• On weekdays, usage remains low throughout the day. It is highest in the morning (7:00 a.m. – 8:00 a.m.).• During weekends, usage remains low throughout the day. It is highest in the mid-afternoon (2:00 p.m. – 3:00 p.m.) and evening (5:00 p.m. – 6:00 p.m.).		

Location Information: Map



Location Information: Photos



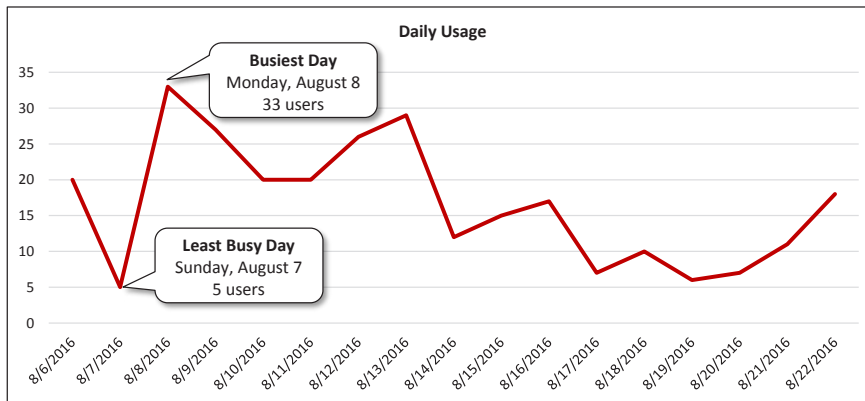
Image 25: Belfort Street Westbound at Sims Bayou
Facing East



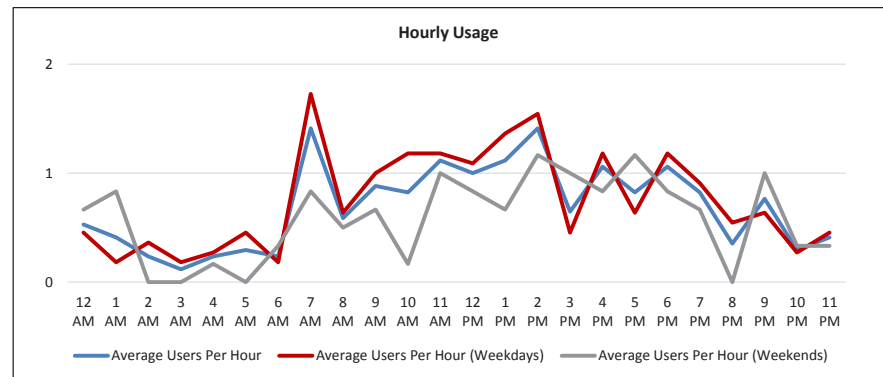
Image 26: Belfort Street Westbound at Sims Bayou
Facing West

Daily Usage Bellfort Street Westbound at Sims Bayou				
Date	Users	Select Weather Data*		
		High Temperature (°F)	Low Temperature (°F)	Precipitation (inches)
Saturday, August 6, 2016	20	98	77	0
Sunday, August 7, 2016	5	100	78	0
Monday, August 8, 2016	33	100	77	0
Tuesday, August 9, 2016	27	101	77	0
Wednesday, August 10, 2016	20	100	79	0
Thursday, August 11, 2016	20	101	82	0
Friday, August 12, 2016	26	99	82	0
Saturday, August 13, 2016	29	97	76	0.83
Sunday, August 14, 2016	12	89	72	1.66
Monday, August 15, 2016	15	86	75	1.43
Tuesday, August 16, 2016	17	82	74	2.05
Wednesday, August 17, 2016	7	83	73	1.73
Thursday, August 18, 2016	10	88	74	0.19
Friday, August 19, 2016	6	92	75	0.39
Saturday, August 20, 2016	7	91	75	0.53
Sunday, August 21, 2016	11	87	76	T
Monday, August 22, 2016	18	89	73	0.33
Total		283		
Average Daily Usage		17		
Average Daily Usage (Weekday)		18		
Average Daily Usage (Weekend)		14		

*Weather conditions recorded at KHOU.



Hourly Usage Bellfort Street Westbound at Sims Bayou			
Time of Day	Average Users Per Hour	Average Users Per Hour (Weekdays)	Average Users Per Hour (Weekends)
12:00 a.m.	0.5	0.5	0.7
1:00 a.m.	0.4	0.2	0.8
2:00 a.m.	0.2	0.4	0.0
3:00 a.m.	0.1	0.2	0.0
4:00 a.m.	0.2	0.3	0.2
5:00 a.m.	0.3	0.5	0.0
6:00 a.m.	0.2	0.2	0.3
7:00 a.m.	1.4	1.7	0.8
8:00 a.m.	0.6	0.6	0.5
9:00 a.m.	0.9	1.0	0.7
10:00 a.m.	0.8	1.2	0.2
11:00 a.m.	1.1	1.2	1.0
12:00 p.m.	1.0	1.1	0.8
1:00 p.m.	1.1	1.4	0.7
2:00 p.m.	1.4	1.5	1.2
3:00 p.m.	0.6	0.5	1.0
4:00 p.m.	1.1	1.2	0.8
5:00 p.m.	0.8	0.6	1.2
6:00 p.m.	1.1	1.2	0.8
7:00 p.m.	0.8	0.9	0.7
8:00 p.m.	0.4	0.5	0.0
9:00 p.m.	0.8	0.6	1.0
10:00 p.m.	0.3	0.3	0.3
11:00 p.m.	0.4	0.5	0.3



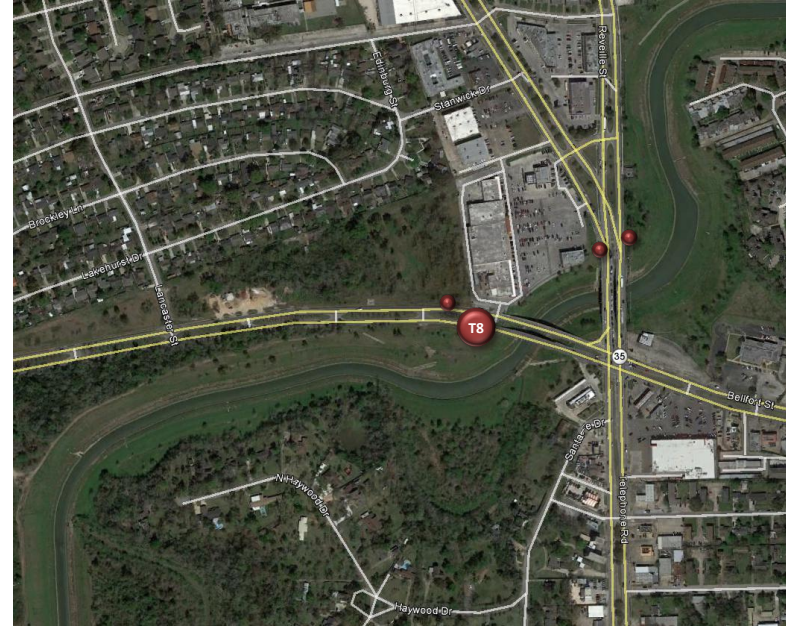
Counter T8

Bellfort Street Eastbound at Sims Bayou

Location Information		
Location Name	Bellfort Street Eastbound at Sims Bayou	
Location Description	Informal Dirt Path along Bellfort Street Eastbound West of Sims Bayou	
Jurisdiction	City of Houston	
Agency Deployed	Houston-Galveston Area Council/Texas Transportation Institute	
GPS Coordinates	29°40'25.05"N, 95°17'29.47"W	
Surrounding Land Uses	North	Vacant Land, Commercial/Retail, Single-Family Residential
	South	Vacant Land, Sims Bayou
	East	Vacant Land, Commercial, Retail, Sims Bayou
	West	Vacant Land
What object was device secured to?	Sign Post (No Parking)	
Sidewalk Width	N/A (No Pedestrian Facilities Present)	
Buffer Width	N/A (No Pedestrian Facilities Present)	
Street Width	Four-Lane Divided Roadway	
Parallel Parking	No	
Landscaping or Trees	No	
Sidewalk Pavement Type	Dirt Path (No Pedestrian Facilities Present)	
ADA Ramps	N/A (No Pedestrian Facilities Present)	
Sidewalk Condition	N/A (No Pedestrian Facilities Present)	
Speed Limit	35 miles per hour	
Street Lighting	Yes	
Street Traffic Volume	13,762 (7065 Bellfort Street: City of Houston – 2009)	
Transit	Yes (METRO Bus Stop 200' East at Bellfort Street Westbound/Sims Bayou)	
Shade	No	
Have counts been collected by H-GAC at this location before?	No	
Notes	There are no pedestrian facilities present at Counter T8, only an informal dirt path. A sidewalk is located along the opposite side of Bellfort Street (see Counter T7).	

Trends
<ul style="list-style-type: none"> Since there is no pedestrian infrastructure and limited development at this location, usage is low (2 users/day).

Location Information: Map



Location Information: Photos



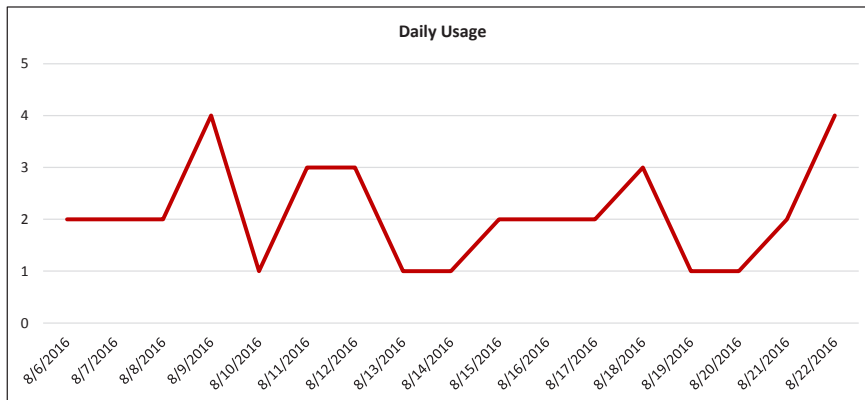
Image 27: Bellfort Street Eastbound at Sims Bayou
Facing East



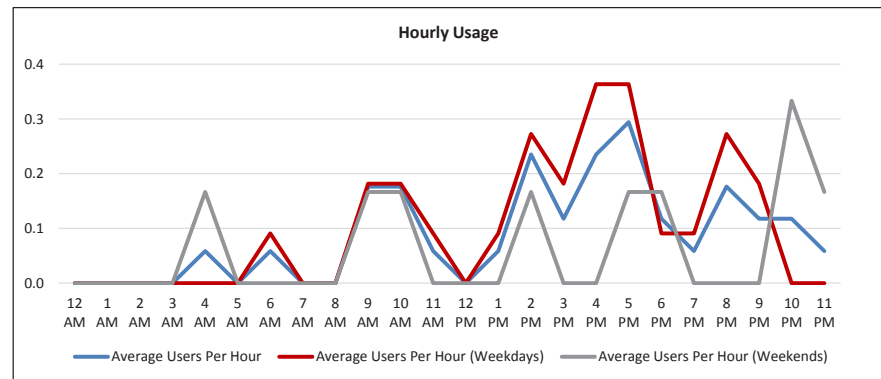
Image 28: Bellfort Street Eastbound at Sims Bayou
Facing West

Daily Usage Bellfort Street Eastbound at Sims Bayou				
Date	Users	Select Weather Data*		
		High Temperature (°F)	Low Temperature (°F)	Precipitation (inches)
Saturday, August 6, 2016	2	98	77	0
Sunday, August 7, 2016	2	100	78	0
Monday, August 8, 2016	2	100	77	0
Tuesday, August 9, 2016	4	101	77	0
Wednesday, August 10, 2016	1	100	79	0
Thursday, August 11, 2016	3	101	82	0
Friday, August 12, 2016	3	99	82	0
Saturday, August 13, 2016	1	97	76	0.83
Sunday, August 14, 2016	1	89	72	1.66
Monday, August 15, 2016	2	86	75	1.43
Tuesday, August 16, 2016	2	82	74	2.05
Wednesday, August 17, 2016	2	83	73	1.73
Thursday, August 18, 2016	3	88	74	0.19
Friday, August 19, 2016	1	92	75	0.39
Saturday, August 20, 2016	1	91	75	0.53
Sunday, August 21, 2016	2	87	76	T
Monday, August 22, 2016	4	89	73	0.33
Total	36	Notes There are no pedestrian facilities present at Counter T8, only an informal dirt path. A sidewalk is located along the opposite side of Bellfort Street (see Counter T7).		
Average Daily Usage	2			
Average Daily Usage (Weekday)	2			
Average Daily Usage (Weekend)	2			

*Weather conditions recorded at KHOU.



Hourly Usage Belfort Street Eastbound at Sims Bayou			
Time of Day	Average Users Per Hour	Average Users Per Hour (Weekdays)	Average Users Per Hour (Weekends)
12:00 a.m.	0.0	0.0	0.0
1:00 a.m.	0.0	0.0	0.0
2:00 a.m.	0.0	0.0	0.0
3:00 a.m.	0.0	0.0	0.0
4:00 a.m.	0.1	0.0	0.2
5:00 a.m.	0.0	0.0	0.0
6:00 a.m.	0.1	0.1	0.0
7:00 a.m.	0.0	0.0	0.0
8:00 a.m.	0.0	0.0	0.0
9:00 a.m.	0.2	0.2	0.2
10:00 a.m.	0.2	0.2	0.2
11:00 a.m.	0.1	0.1	0.0
12:00 p.m.	0.0	0.0	0.0
1:00 p.m.	0.1	0.1	0.0
2:00 p.m.	0.2	0.3	0.2
3:00 p.m.	0.1	0.2	0.0
4:00 p.m.	0.2	0.4	0.0
5:00 p.m.	0.3	0.4	0.2
6:00 p.m.	0.1	0.1	0.2
7:00 p.m.	0.1	0.1	0.0
8:00 p.m.	0.2	0.3	0.0
9:00 p.m.	0.1	0.2	0.0
10:00 p.m.	0.1	0.0	0.3
11:00 p.m.	0.1	0.0	0.2

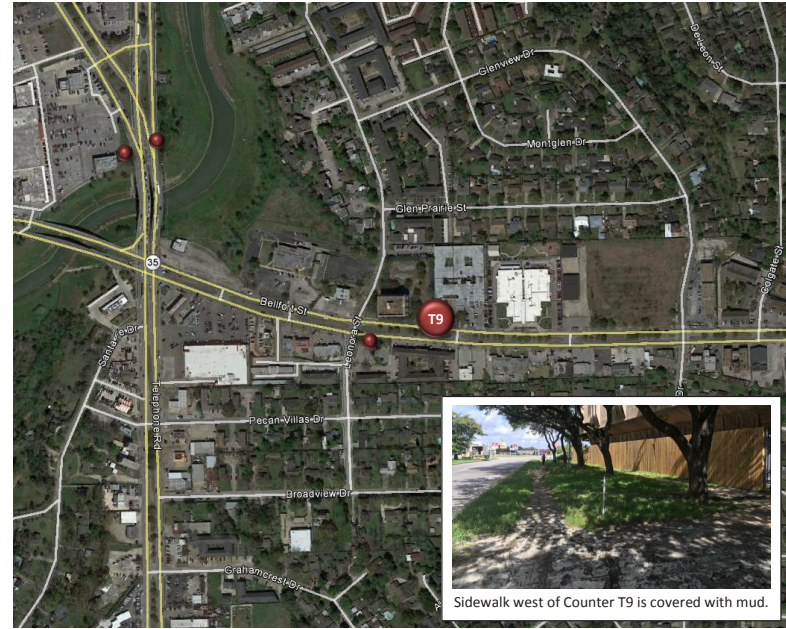


Counter T9

Bellfort Street Westbound at Leonard Street

Location Information									
Location Name	Bellfort Street Westbound at Leonard Street								
Location Description	Sidewalk along Bellfort Street Westbound East of Leonard Street								
Jurisdiction	City of Houston								
Agency Deployed	Houston-Galveston Area Council/Texas Transportation Institute								
GPS Coordinates	29°40'20.85"N, 95°17'6.28"W								
Surrounding Land Uses	<table border="1"> <tbody> <tr> <td>North</td> <td>Vacant/Abandoned Buildings, Medical Facilities, Multi-Family Residential, Single-Family Residential</td> </tr> <tr> <td>South</td> <td>Multi-Family Residential, Commercial/Retail, Single-Family Residential</td> </tr> <tr> <td>East</td> <td>Medical Facilities, Bellfort Elementary School, Commercial/Retail, Vacant Land</td> </tr> <tr> <td>West</td> <td>Vacant/Abandoned Buildings, Multi-Family Residential, Commercial/Retail</td> </tr> </tbody> </table>	North	Vacant/Abandoned Buildings, Medical Facilities, Multi-Family Residential, Single-Family Residential	South	Multi-Family Residential, Commercial/Retail, Single-Family Residential	East	Medical Facilities, Bellfort Elementary School, Commercial/Retail, Vacant Land	West	Vacant/Abandoned Buildings, Multi-Family Residential, Commercial/Retail
North	Vacant/Abandoned Buildings, Medical Facilities, Multi-Family Residential, Single-Family Residential								
South	Multi-Family Residential, Commercial/Retail, Single-Family Residential								
East	Medical Facilities, Bellfort Elementary School, Commercial/Retail, Vacant Land								
West	Vacant/Abandoned Buildings, Multi-Family Residential, Commercial/Retail								
What object was device secured to?	Sign Post (Speed Limit/End School Zone)								
Sidewalk Width	4'								
Buffer Width	5'								
Street Width	Four-Lane Divided Roadway								
Parallel Parking	No								
Landscaping or Trees	Yes								
Sidewalk Pavement Type	Concrete								
ADA Ramps	Yes								
Sidewalk Condition	Poor (Unevenness, Debris and Overgrown Vegetation on Sidewalk)								
Speed Limit	35 miles per hour								
Street Lighting	Yes								
Street Traffic Volume	21,747 (7652 Bellfort Street: City of Houston – 2009)								
Transit	Yes (METRO Bus Stop 150' East at 7633 Bellfort Street)								
Shade	Intermittent								
Have counts been collected by H-GAC at this location before?	No								
Notes	The sidewalk is in poor condition west of Counter T9, especially in front of the abandoned office building at 7603 Bellfort Street. Pedestrians seem to be leaving the sidewalk and using an informal dirt path farther from Bellfort Street.								
Trends									
<ul style="list-style-type: none"> Usage tends to be higher on weekdays (39 users/day) than during weekends (28 users/day). On weekdays, usage is highest in the early afternoon (1:00 p.m. – 2:00 p.m.). During weekends, usage is highest midday (11:00 a.m. – 12:00 p.m.) and in the mid-afternoon (2:00 p.m. – 3:00 p.m.). 									

Location Information: Map



Location Information: Photos



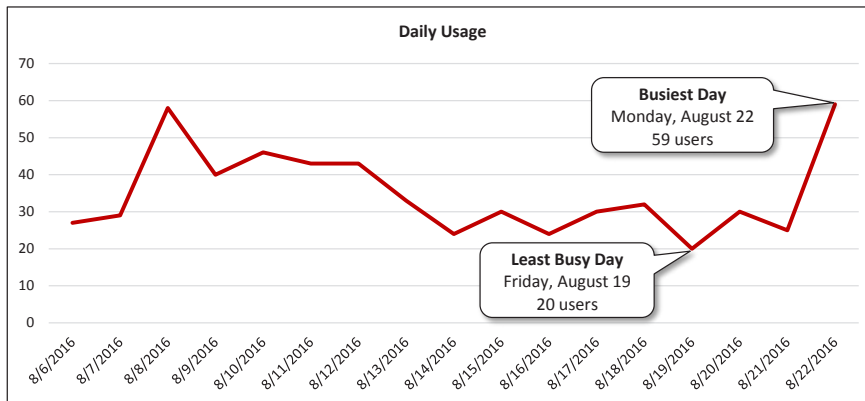
Image 29: Bellfort Street Westbound near Leonard Street Facing East



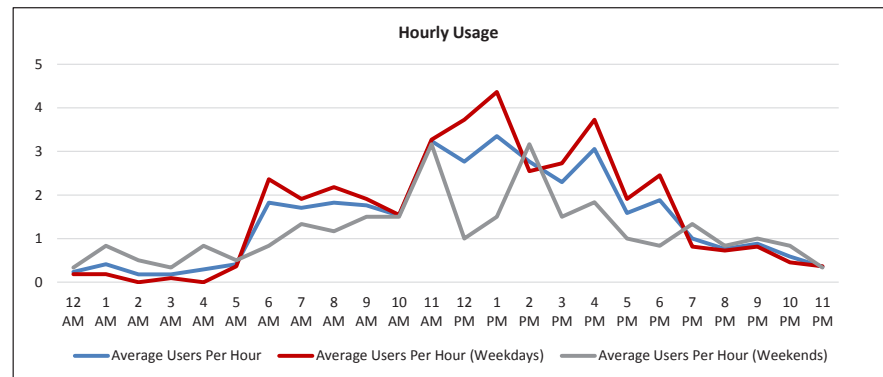
Image 30: Bellfort Street Westbound near Leonard Street Facing West

Daily Usage				
Bellfort Street Westbound at Leonard Street				
Date	Users	Select Weather Data*		
		High Temperature (°F)	Low Temperature (°F)	Precipitation (inches)
Saturday, August 6, 2016	27	98	77	0
Sunday, August 7, 2016	29	100	78	0
Monday, August 8, 2016	58	100	77	0
Tuesday, August 9, 2016	40	101	77	0
Wednesday, August 10, 2016	46	100	79	0
Thursday, August 11, 2016	43	101	82	0
Friday, August 12, 2016	43	99	82	0
Saturday, August 13, 2016	33	97	76	0.83
Sunday, August 14, 2016	24	89	72	1.66
Monday, August 15, 2016	30	86	75	1.43
Tuesday, August 16, 2016	24	82	74	2.05
Wednesday, August 17, 2016	30	83	73	1.73
Thursday, August 18, 2016	32	88	74	0.19
Friday, August 19, 2016	20	92	75	0.39
Saturday, August 20, 2016	30	91	75	0.53
Sunday, August 21, 2016	25	87	76	T
Monday, August 22, 2016	59	89	73	0.33
Total	593			
Average Daily Usage	35			
Average Daily Usage (Weekday)	39			
Average Daily Usage (Weekend)	28			

*Weather conditions recorded at KHOU.



Hourly Usage Belfort Street Westbound at Leonard Street			
Time of Day	Average Users Per Hour	Average Users Per Hour (Weekdays)	Average Users Per Hour (Weekends)
12:00 a.m.	0.2	0.2	0.3
1:00 a.m.	0.4	0.2	0.8
2:00 a.m.	0.2	0.0	0.5
3:00 a.m.	0.2	0.1	0.3
4:00 a.m.	0.3	0.0	0.8
5:00 a.m.	0.4	0.4	0.5
6:00 a.m.	1.8	2.4	0.8
7:00 a.m.	1.7	1.9	1.3
8:00 a.m.	1.8	2.2	1.2
9:00 a.m.	1.8	1.9	1.5
10:00 a.m.	1.5	1.5	1.5
11:00 a.m.	3.2	3.3	3.2
12:00 p.m.	2.8	3.7	1.0
1:00 p.m.	3.4	4.4	1.5
2:00 p.m.	2.8	2.5	3.2
3:00 p.m.	2.3	2.7	1.5
4:00 p.m.	3.1	3.7	1.8
5:00 p.m.	1.6	1.9	1.0
6:00 p.m.	1.9	2.5	0.8
7:00 p.m.	1.0	0.8	1.3
8:00 p.m.	0.8	0.7	0.8
9:00 p.m.	0.9	0.8	1.0
10:00 p.m.	0.6	0.5	0.8
11:00 p.m.	0.4	0.4	0.3

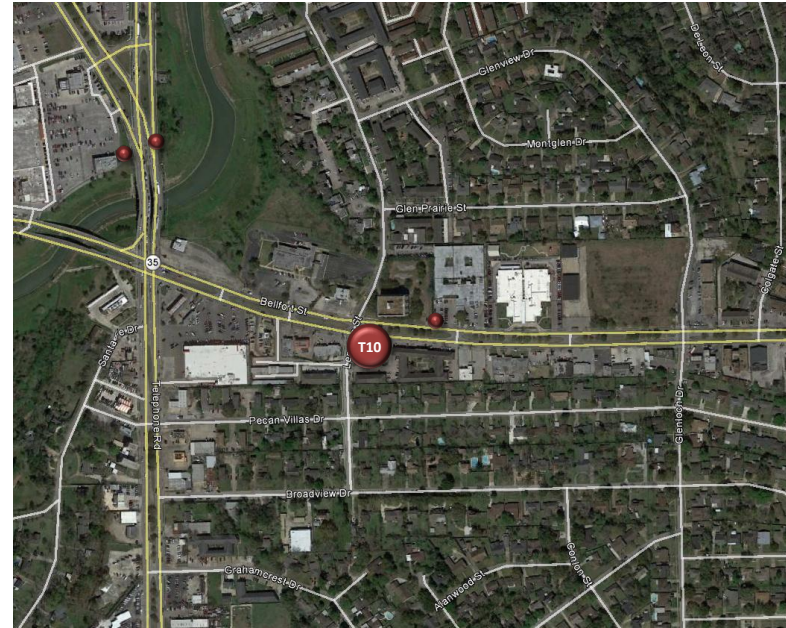


Counter T10

Bellfort Street Eastbound at Leonard Street

Location Information		
Location Name	Bellfort Street Eastbound at Leonard Street	
Location Description	Sidewalk along Bellfort Street Eastbound East of Leonard Street	
Jurisdiction	City of Houston	
Agency Deployed	Houston-Galveston Area Council/Texas Transportation Institute	
GPS Coordinates	29°40'20.22"N, 95°17'9.82"W	
Surrounding Land Uses	North	Vacant/Abandoned Buildings, Medical Facilities, Multi-Family Residential, Single-Family Residential
	South	Commercial/Retail, Single-Family Residential
	East	Multi-Family Residential, Medical Facilities, Bellfort Elementary School, Commercial/Retail, Vacant Land
	West	Commercial/Retail
What object was device secured to?	Sign Post (Bicycles: Share the Road)	
Sidewalk Width	4'	
Buffer Width	4'	
Street Width	Four-Lane Divided Roadway	
Parallel Parking	No	
Landscaping or Trees	No	
Sidewalk Pavement Type	Concrete	
ADA Ramps	Yes	
Sidewalk Condition	Fair (Unevenness, Debris and Overgrown Vegetation on Sidewalk)	
Speed Limit	35 miles per hour	
Street Lighting	Yes	
Street Traffic Volume	21,747 (7652 Bellfort Street: City of Houston – 2009)	
Transit	Yes (METRO Bus Stop 450' East at 7633 Bellfort Street)	
Shade	No	
Have counts been collected by H-GAC at this location before?	No	
Trends		
<ul style="list-style-type: none">• Usage tends to be higher during weekends (76 users/day) than on weekdays (70 users/day).• On weekdays, usage is highest midday (12:00 p.m. – 1:00 p.m.).• During weekends, usage is highest midday (11:00 a.m. – 12:00 p.m.) and in the evening (6:00 p.m. – 7:00 p.m.).		

Location Information: Map



Location Information: Photos



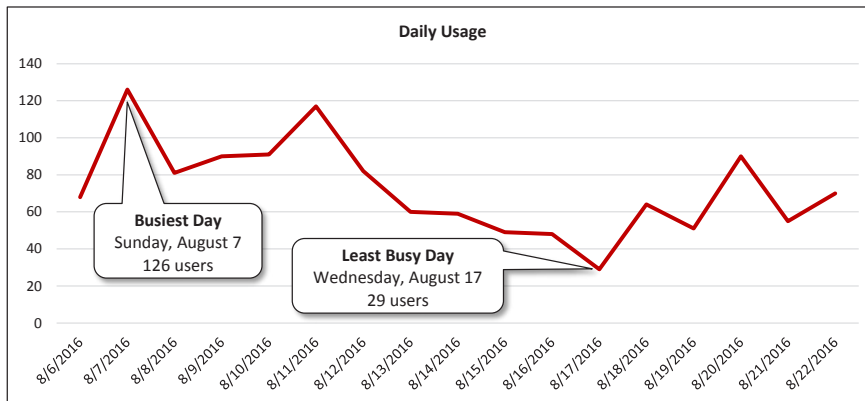
Image 31: Belfort Street Eastbound near Leonard Street
Facing East



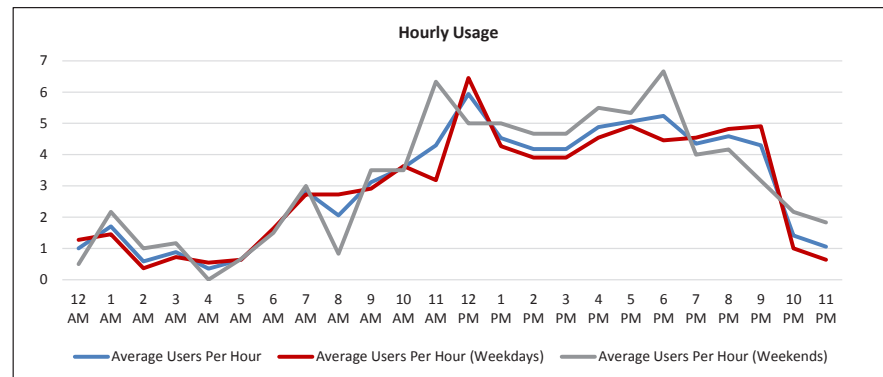
Image 32: Belfort Street Eastbound near Leonard Street
Facing West

Daily Usage				
Bellfort Street Eastbound at Leonard Street				
Date	Users	Select Weather Data*		
		High Temperature (°F)	Low Temperature (°F)	Precipitation (inches)
Saturday, August 6, 2016	68	98	77	0
Sunday, August 7, 2016	126	100	78	0
Monday, August 8, 2016	81	100	77	0
Tuesday, August 9, 2016	90	101	77	0
Wednesday, August 10, 2016	91	100	79	0
Thursday, August 11, 2016	117	101	82	0
Friday, August 12, 2016	82	99	82	0
Saturday, August 13, 2016	60	97	76	0.83
Sunday, August 14, 2016	59	89	72	1.66
Monday, August 15, 2016	49	86	75	1.43
Tuesday, August 16, 2016	48	82	74	2.05
Wednesday, August 17, 2016	29	83	73	1.73
Thursday, August 18, 2016	64	88	74	0.19
Friday, August 19, 2016	51	92	75	0.39
Saturday, August 20, 2016	90	91	75	0.53
Sunday, August 21, 2016	55	87	76	T
Monday, August 22, 2016	70	89	73	0.33
Total		1,230		
Average Daily Usage		72		
Average Daily Usage (Weekday)		70		
Average Daily Usage (Weekend)		76		

*Weather conditions recorded at KHOU.



Hourly Usage Belfort Street Eastbound at Leonard Street			
Time of Day	Average Users Per Hour	Average Users Per Hour (Weekdays)	Average Users Per Hour (Weekends)
12:00 a.m.	1.0	1.3	0.5
1:00 a.m.	1.7	1.5	2.2
2:00 a.m.	0.6	0.4	1.0
3:00 a.m.	0.9	0.7	1.2
4:00 a.m.	0.4	0.5	0.0
5:00 a.m.	0.6	0.6	0.7
6:00 a.m.	1.6	1.6	1.5
7:00 a.m.	2.8	2.7	3.0
8:00 a.m.	2.1	2.7	0.8
9:00 a.m.	3.1	2.9	3.5
10:00 a.m.	3.6	3.6	3.5
11:00 a.m.	4.3	3.2	6.3
12:00 p.m.	5.9	6.5	5.0
1:00 p.m.	4.5	4.3	5.0
2:00 p.m.	4.2	3.9	4.7
3:00 p.m.	4.2	3.9	4.7
4:00 p.m.	4.9	4.5	5.5
5:00 p.m.	5.1	4.9	5.3
6:00 p.m.	5.2	4.5	6.7
7:00 p.m.	4.4	4.5	4.0
8:00 p.m.	4.6	4.8	4.2
9:00 p.m.	4.3	4.9	3.2
10:00 p.m.	1.4	1.0	2.2
11:00 p.m.	1.1	0.6	1.8



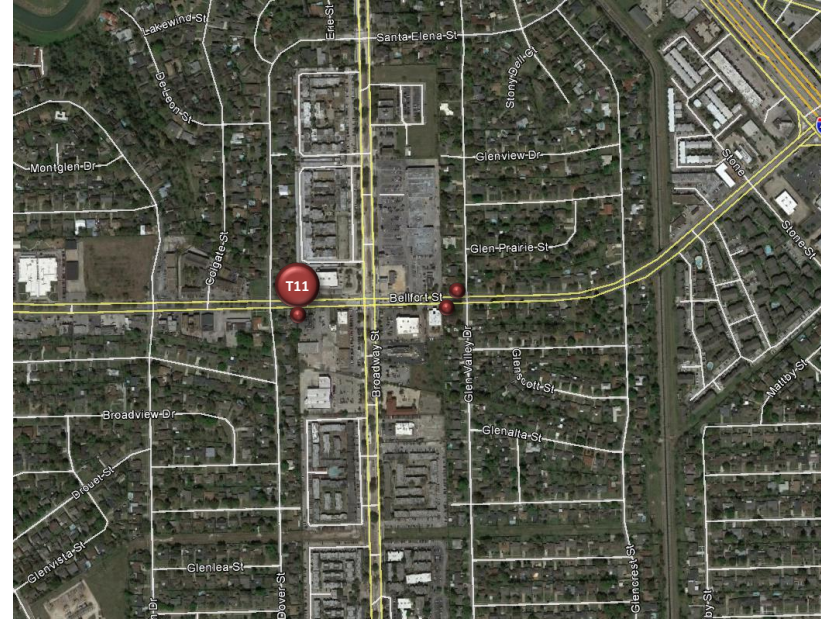
Counter T11

Bellfort Street Westbound West of Broadway Street

Location Information	
Location Name	Bellfort Street Westbound West of Broadway Street
Location Description	Sidewalk along Bellfort Street Westbound West of Broadway Street
Jurisdiction	City of Houston
Agency Deployed	Houston-Galveston Area Council/Texas Transportation Institute
GPS Coordinates	29°40'20.92"N, 95°16'42.64"W
Surrounding Land Uses	North Commercial/Retail, Single-Family Residential, Multi-Family Residential
	South Commercial/Retail, Single-Family Residential, Multi-Family Residential
	East Commercial/Retail, Single-Family Residential
	West Single-Family Residential, Commercial/Retail, Multi-Family Residential
What object was device secured to?	Sign Post (Speed Limit/Keep Houston Safe)
Sidewalk Width	4'
Buffer Width	13.5'
Street Width	Four-Lane Divided Roadway
Parallel Parking	No
Landscaping or Trees	No
Sidewalk Pavement Type	Concrete
ADA Ramps	Yes
Sidewalk Condition	Poor (Unevenness, Overgrown Vegetation, and Missing Segments)
Speed Limit	35 miles per hour
Street Lighting	Yes
Street Traffic Volume	21,910 (7800 Bellfort Street: TxDOT – 2012)
Transit	Yes (METRO Bus Stop 400' East at Bellfort Street Westbound/Broadway Street)
Shade	No
Have counts been collected by H-GAC at this location before?	No

Trends
<ul style="list-style-type: none"> Usage tends to be higher during weekends (63 users/day) than on weekdays (57 users/day). On weekdays, usage is highest in the morning (7:00 a.m. – 8:00 a.m.) and late afternoon/evening (3:00 p.m. – 7:00 p.m.). During weekends, usage is highest in the morning (8:00 a.m. – 9:00 a.m.). This may be skewed by particularly high usage on Saturday, August 13, 2016 between 8:00 a.m. and 9:00 a.m., when 44 people passed the counter.

Location Information: Map



Location Information: Photos



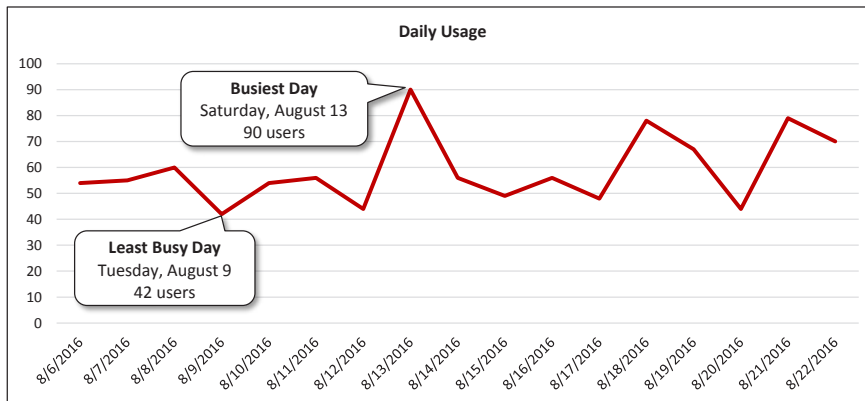
Image 33: Bellfort Street Westbound
West of Broadway Street Facing East



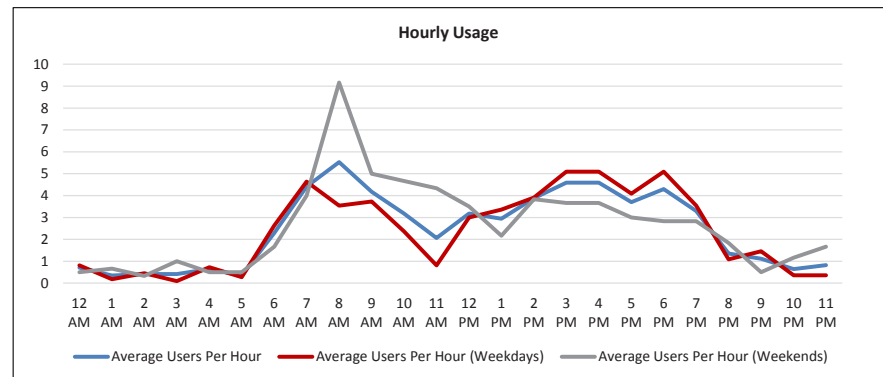
Image 34: Bellfort Street Westbound
West of Broadway Street Facing West

Daily Usage Bellfort Street Westbound West of Broadway Street				
Date	Users	Select Weather Data*		
		High Temperature (°F)	Low Temperature (°F)	Precipitation (inches)
Saturday, August 6, 2016	54	98	77	0
Sunday, August 7, 2016	55	100	78	0
Monday, August 8, 2016	60	100	77	0
Tuesday, August 9, 2016	42	101	77	0
Wednesday, August 10, 2016	54	100	79	0
Thursday, August 11, 2016	56	101	82	0
Friday, August 12, 2016	44	99	82	0
Saturday, August 13, 2016	90	97	76	0.83
Sunday, August 14, 2016	56	89	72	1.66
Monday, August 15, 2016	49	86	75	1.43
Tuesday, August 16, 2016	56	82	74	2.05
Wednesday, August 17, 2016	48	83	73	1.73
Thursday, August 18, 2016	78	88	74	0.19
Friday, August 19, 2016	67	92	75	0.39
Saturday, August 20, 2016	44	91	75	0.53
Sunday, August 21, 2016	79	87	76	T
Monday, August 22, 2016	70	89	73	0.33
Total		1,002		
Average Daily Usage		59		
Average Daily Usage (Weekday)		57		
Average Daily Usage (Weekend)		63		

*Weather conditions recorded at KHOU.



Hourly Usage Belfort Street Westbound West of Broadway Street			
Time of Day	Average Users Per Hour	Average Users Per Hour (Weekdays)	Average Users Per Hour (Weekends)
12:00 a.m.	0.7	0.8	0.5
1:00 a.m.	0.4	0.2	0.7
2:00 a.m.	0.4	0.5	0.3
3:00 a.m.	0.4	0.1	1.0
4:00 a.m.	0.6	0.7	0.5
5:00 a.m.	0.4	0.3	0.5
6:00 a.m.	2.3	2.6	1.7
7:00 a.m.	4.4	4.6	4.0
8:00 a.m.	5.5	3.5	9.2
9:00 a.m.	4.2	3.7	5.0
10:00 a.m.	3.2	2.4	4.7
11:00 a.m.	2.1	0.8	4.3
12:00 p.m.	3.2	3.0	3.5
1:00 p.m.	2.9	3.4	2.2
2:00 p.m.	3.9	3.9	3.8
3:00 p.m.	4.6	5.1	3.7
4:00 p.m.	4.6	5.1	3.7
5:00 p.m.	3.7	4.1	3.0
6:00 p.m.	4.3	5.1	2.8
7:00 p.m.	3.3	3.5	2.8
8:00 p.m.	1.4	1.1	1.8
9:00 p.m.	1.1	1.5	0.5
10:00 p.m.	0.6	0.4	1.2
11:00 p.m.	0.8	0.4	1.7



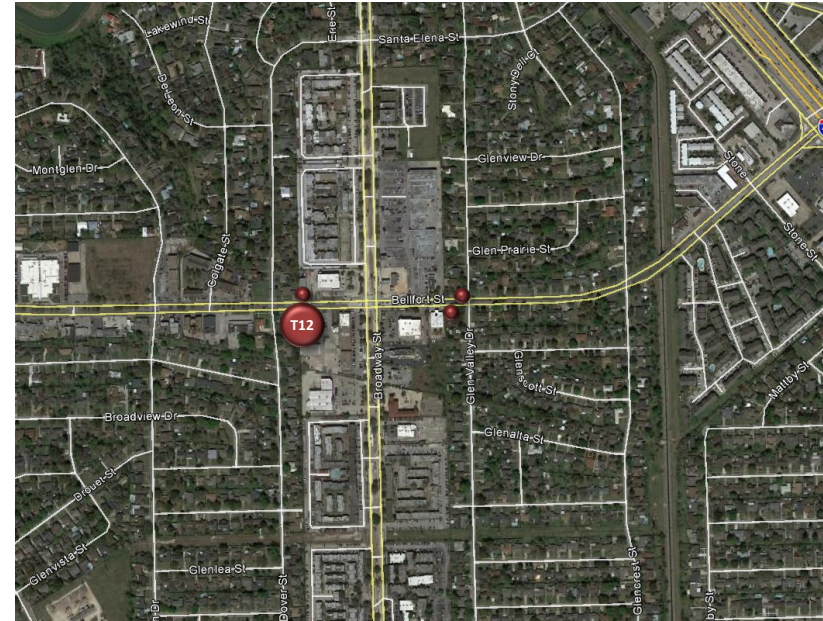
Counter T12

Bellfort Street Eastbound West of Broadway Street

Location Information	
Location Name	Bellfort Street Eastbound West of Broadway Street
Location Description	Sidewalk along Bellfort Street Eastbound West of Broadway Street
Jurisdiction	City of Houston
Agency Deployed	Houston-Galveston Area Council/Texas Transportation Institute
GPS Coordinates	29°40'20.11"N, 95°16'42.92"W
Surrounding Land Uses	North Commercial/Retail, Single-Family Residential, Multi-Family Residential
	South Commercial/Retail, Single-Family Residential, Multi-Family Residential
	East Commercial/Retail, Single-Family Residential
	West Single-Family Residential, Commercial/Retail, Multi-Family Residential
What object was device secured to?	Light Post (#200294)
Sidewalk Width	4'
Buffer Width	14'
Street Width	Four-Lane Divided Roadway
Parallel Parking	No
Landscaping or Trees	No
Sidewalk Pavement Type	Concrete
ADA Ramps	Yes
Sidewalk Condition	Poor (Unevenness, Overgrown Vegetation, and Missing Segments)
Speed Limit	35 miles per hour
Street Lighting	Yes
Street Traffic Volume	21,910 (7800 Bellfort Street: TxDOT – 2012)
Transit	Yes (METRO Bus Stop 300' East at Bellfort Street Eastbound/Broadway Street)
Shade	No
Have counts been collected by H-GAC at this location before?	No

Trends
<ul style="list-style-type: none"> Usage tends to be higher during weekends (194 users/day) than on weekdays (174 users/day). On weekdays, usage generally increases as the day progresses. It is highest in the evening (5:00 p.m. – 6:00 p.m.). During weekends, usage remains relatively steady throughout the day. It is highest midday (11:00 a.m. – 12:00 p.m.).

Location Information: Map



Location Information: Photos



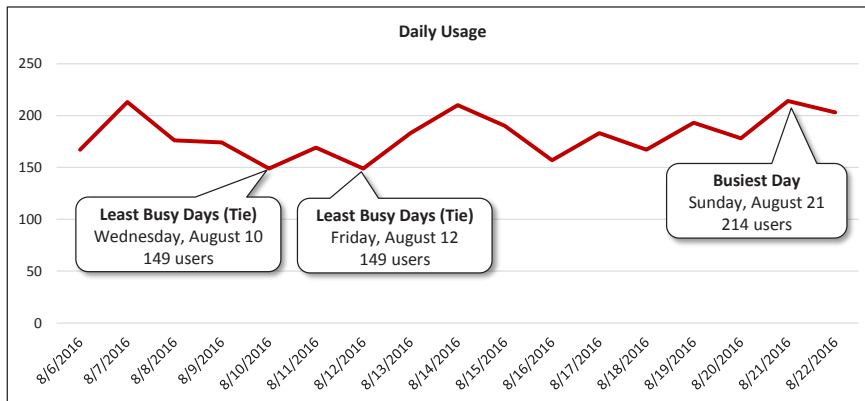
Image 35: Bellfort Street Eastbound
West of Broadway Street Facing East



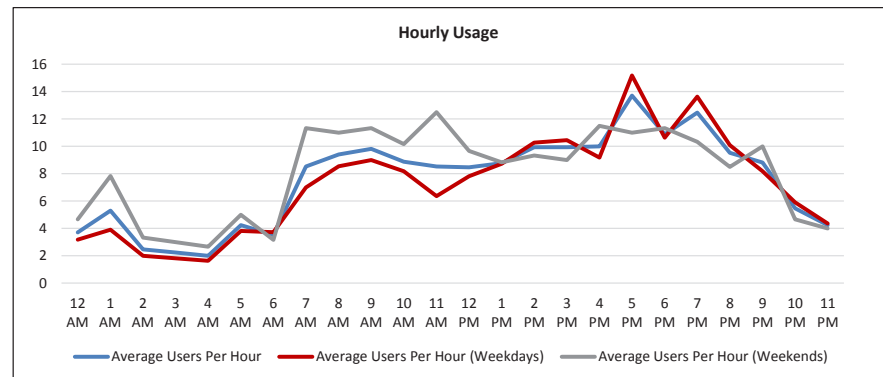
Image 36: Bellfort Street Eastbound
West of Broadway Street Facing West

Daily Usage				
Bellfort Street Eastbound West of Broadway Street				
Date	Users	Select Weather Data*		
		High Temperature (°F)	Low Temperature (°F)	Precipitation (inches)
Saturday, August 6, 2016	167	98	77	0
Sunday, August 7, 2016	213	100	78	0
Monday, August 8, 2016	176	100	77	0
Tuesday, August 9, 2016	174	101	77	0
Wednesday, August 10, 2016	149	100	79	0
Thursday, August 11, 2016	169	101	82	0
Friday, August 12, 2016	149	99	82	0
Saturday, August 13, 2016	183	97	76	0.83
Sunday, August 14, 2016	210	89	72	1.66
Monday, August 15, 2016	190	86	75	1.43
Tuesday, August 16, 2016	157	82	74	2.05
Wednesday, August 17, 2016	183	83	73	1.73
Thursday, August 18, 2016	167	88	74	0.19
Friday, August 19, 2016	193	92	75	0.39
Saturday, August 20, 2016	178	91	75	0.53
Sunday, August 21, 2016	214	87	76	T
Monday, August 22, 2016	203	89	73	0.33
Total		3,075		
Average Daily Usage		181		
Average Daily Usage (Weekday)		174		
Average Daily Usage (Weekend)		194		

*Weather conditions recorded at KHOU.



Hourly Usage Bellfort Street Eastbound West of Broadway Street			
Time of Day	Average Users Per Hour	Average Users Per Hour (Weekdays)	Average Users Per Hour (Weekends)
12:00 a.m.	3.7	3.2	4.7
1:00 a.m.	5.3	3.9	7.8
2:00 a.m.	2.5	2.0	3.3
3:00 a.m.	2.2	1.8	3.0
4:00 a.m.	2.0	1.6	2.7
5:00 a.m.	4.2	3.8	5.0
6:00 a.m.	3.5	3.7	3.2
7:00 a.m.	8.5	7.0	11.3
8:00 a.m.	9.4	8.5	11.0
9:00 a.m.	9.8	9.0	11.3
10:00 a.m.	8.9	8.2	10.2
11:00 a.m.	8.5	6.4	12.5
12:00 p.m.	8.5	7.8	9.7
1:00 p.m.	8.8	8.7	8.8
2:00 p.m.	9.9	10.3	9.3
3:00 p.m.	9.9	10.5	9.0
4:00 p.m.	10.0	9.2	11.5
5:00 p.m.	13.7	15.2	11.0
6:00 p.m.	10.9	10.6	11.3
7:00 p.m.	12.5	13.6	10.3
8:00 p.m.	9.5	10.1	8.5
9:00 p.m.	8.8	8.2	10.0
10:00 p.m.	5.5	5.9	4.7
11:00 p.m.	4.2	4.4	4.0



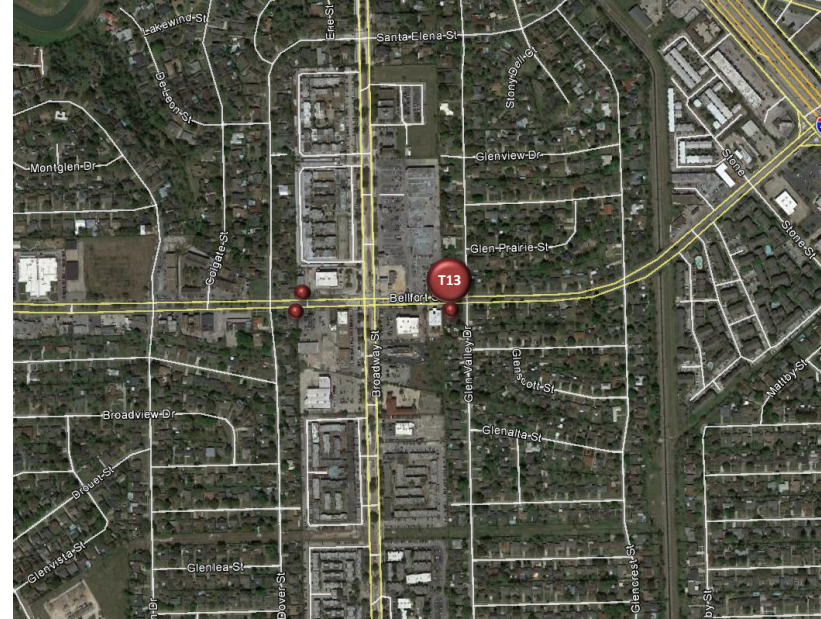
Counter T13

Bellfort Street Westbound East of Broadway Street

Location Information		
Location Name	Bellfort Street Westbound East of Broadway Street	
Location Description	Sidewalk along Bellfort Street Westbound between Broadway Street and Glen Valley Drive	
Jurisdiction	City of Houston	
Agency Deployed	Houston-Galveston Area Council/Texas Transportation Institute	
GPS Coordinates	29°40'21.06"N, 95°16'31.52"W	
Surrounding Land Uses	North	Single-Family Residential, Commercial/Retail
	South	Single-Family Residential, Commercial/Retail
	East	Single-Family Residential
	West	Commercial/Retail, Multi-Family Residential, Single-Family Residential
What object was device secured to?	Sign Post (Bicycles: Share the Road)	
Sidewalk Width	4'	
Buffer Width	4'	
Street Width	Four-Lane Divided Roadway	
Parallel Parking	No	
Landscaping or Trees	Yes	
Sidewalk Pavement Type	Concrete	
ADA Ramps	Yes	
Sidewalk Condition	Fair (Minor Unevenness)	
Speed Limit	35 miles per hour	
Street Lighting	Yes	
Street Traffic Volume	21,910 (7800 Bellfort Street: TxDOT – 2012)	
Transit	Yes (METRO Bus Stop 100' Southeast at Bellfort Street Eastbound/Glen Valley Drive and 150' West along Bellfort Street Westbound near Broadway Street)	
Shade	Intermittent	
Have counts been collected by H-GAC at this location before?	No	

Trends
<ul style="list-style-type: none"> Usage tends to be slightly higher on weekdays (67 users/day) than during weekends (63 users/day). On weekdays, usage is highest in the late afternoon (3:00 p.m. – 5:00 p.m.). During weekends, usage is highest in the mid-afternoon (2:00 p.m. – 3:00 p.m.).

Location Information: Map



Location Information: Photos



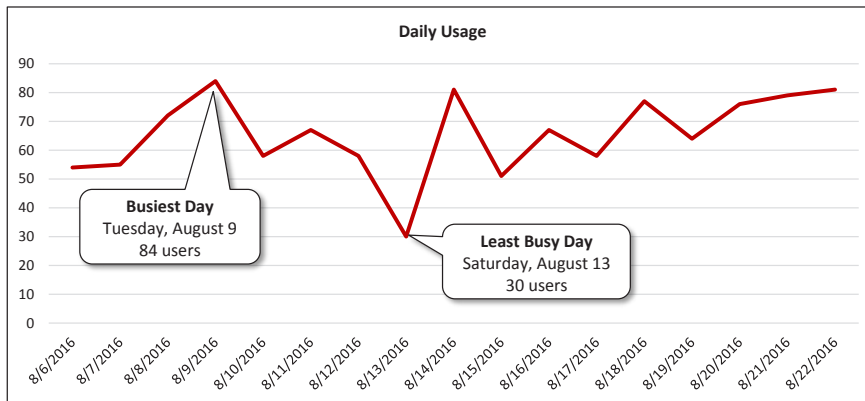
Image 37: Bellfort Street Westbound East of Broadway Street Facing East



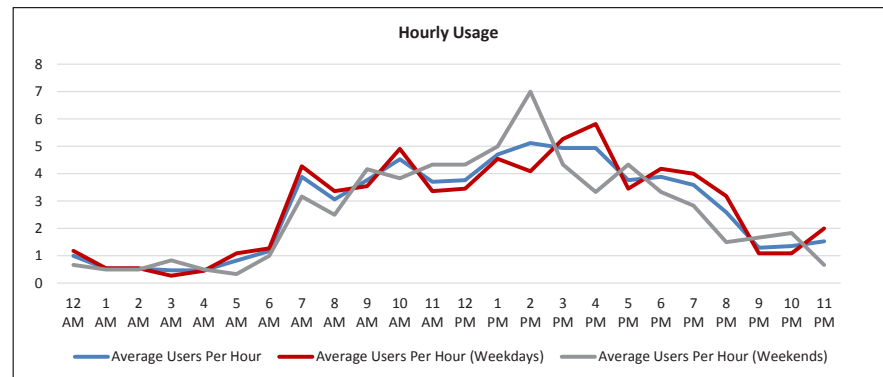
Image 38: Bellfort Street Westbound East of
Broadway Street Facing West

Daily Usage Bellfort Street Westbound East of Broadway Street				
Date	Users	Select Weather Data*		
		High Temperature (°F)	Low Temperature (°F)	Precipitation (inches)
Saturday, August 6, 2016	54	98	77	0
Sunday, August 7, 2016	55	100	78	0
Monday, August 8, 2016	72	100	77	0
Tuesday, August 9, 2016	84	101	77	0
Wednesday, August 10, 2016	58	100	79	0
Thursday, August 11, 2016	67	101	82	0
Friday, August 12, 2016	58	99	82	0
Saturday, August 13, 2016	30	97	76	0.83
Sunday, August 14, 2016	81	89	72	1.66
Monday, August 15, 2016	51	86	75	1.43
Tuesday, August 16, 2016	67	82	74	2.05
Wednesday, August 17, 2016	58	83	73	1.73
Thursday, August 18, 2016	77	88	74	0.19
Friday, August 19, 2016	64	92	75	0.39
Saturday, August 20, 2016	76	91	75	0.53
Sunday, August 21, 2016	79	87	76	T
Monday, August 22, 2016	81	89	73	0.33
Total		1,112		
Average Daily Usage		65		
Average Daily Usage (Weekday)		67		
Average Daily Usage (Weekend)		63		

*Weather conditions recorded at KHOU.



Hourly Usage Belfort Street Westbound East of Broadway Street			
Time of Day	Average Users Per Hour	Average Users Per Hour (Weekdays)	Average Users Per Hour (Weekends)
12:00 a.m.	1.0	1.2	0.7
1:00 a.m.	0.5	0.5	0.5
2:00 a.m.	0.5	0.5	0.5
3:00 a.m.	0.5	0.3	0.8
4:00 a.m.	0.5	0.5	0.5
5:00 a.m.	0.8	1.1	0.3
6:00 a.m.	1.2	1.3	1.0
7:00 a.m.	3.9	4.3	3.2
8:00 a.m.	3.1	3.4	2.5
9:00 a.m.	3.8	3.5	4.2
10:00 a.m.	4.5	4.9	3.8
11:00 a.m.	3.7	3.4	4.3
12:00 p.m.	3.8	3.5	4.3
1:00 p.m.	4.7	4.5	5.0
2:00 p.m.	5.1	4.1	7.0
3:00 p.m.	4.9	5.3	4.3
4:00 p.m.	4.9	5.8	3.3
5:00 p.m.	3.8	3.5	4.3
6:00 p.m.	3.9	4.2	3.3
7:00 p.m.	3.6	4.0	2.8
8:00 p.m.	2.6	3.2	1.5
9:00 p.m.	1.3	1.1	1.7
10:00 p.m.	1.4	1.1	1.8
11:00 p.m.	1.5	2.0	0.7

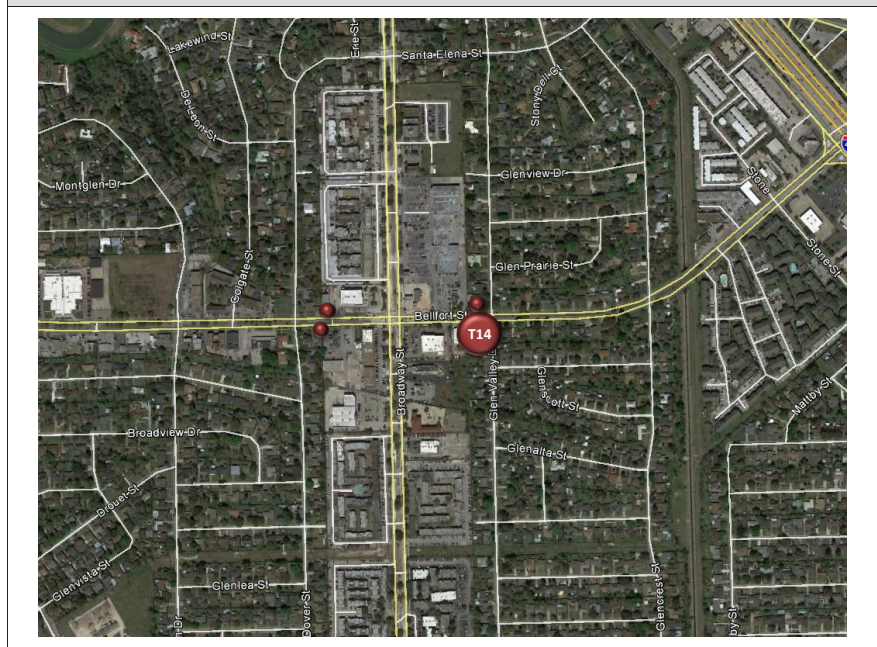


Counter T14

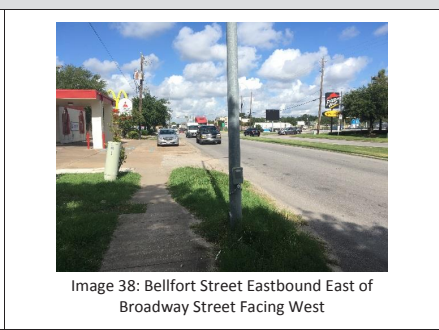
Bellfort Street Eastbound East of Broadway Street

Location Information		
Location Name	Bellfort Street Eastbound East of Broadway Street	
Location Description	Sidewalk along Bellfort Street Eastbound between Broadway Street and Glen Valley Drive	
Jurisdiction	City of Houston	
Agency Deployed	Houston-Galveston Area Council/Texas Transportation Institute	
GPS Coordinates	29°40'20.40"N, 95°16'32.28"W	
Surrounding Land Uses	North	Single-Family Residential, Commercial/Retail
	South	Single-Family Residential, Commercial/Retail
	East	Single-Family Residential
	West	Commercial/Retail, Multi-Family Residential, Single-Family Residential
What object was device secured to?	Light Post	
Sidewalk Width	4'	
Buffer Width	4.5'	
Street Width	Four-Lane Divided Roadway	
Parallel Parking	No	
Landscaping or Trees	Yes	
Sidewalk Pavement Type	Concrete	
ADA Ramps	Yes	
Sidewalk Condition	Fair (Minor Unevenness and Overgrown Vegetation)	
Speed Limit	35 miles per hour	
Street Lighting	Yes	
Street Traffic Volume	21,910 (7800 Bellfort Street: TxDOT – 2012)	
Transit	Yes (METRO Bus Stop 100' East at Bellfort Street Eastbound/Glen Valley Drive)	
Shade	Intermittent	
Have counts been collected by H-GAC at this location before?	No	
Trends		
<ul style="list-style-type: none">Usage tends to be higher on weekdays (162 users/day) than during weekends (132 users/day).On weekdays, usage is highest in the late afternoon/evening (4:00 p.m. – 6:00 p.m.). There is also a spike in usage earlier in the morning (8:00 a.m. – 9:00 a.m.).During weekends, usage is highest in the evening (6:00 p.m. – 7:00 p.m.).		

Location Information: Map

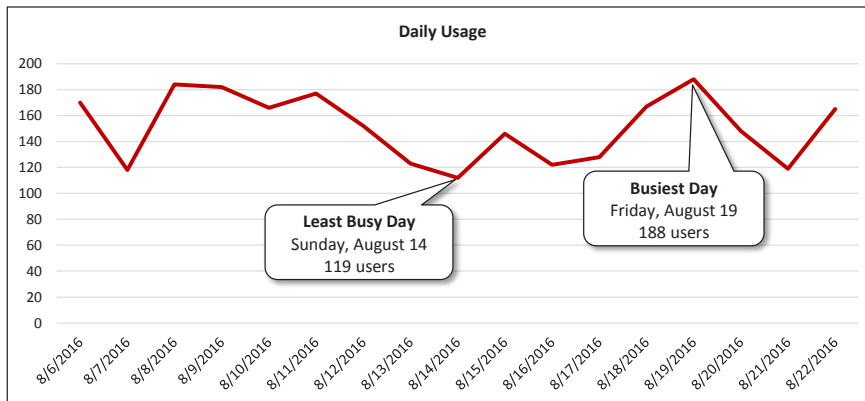


Location Information: Photos

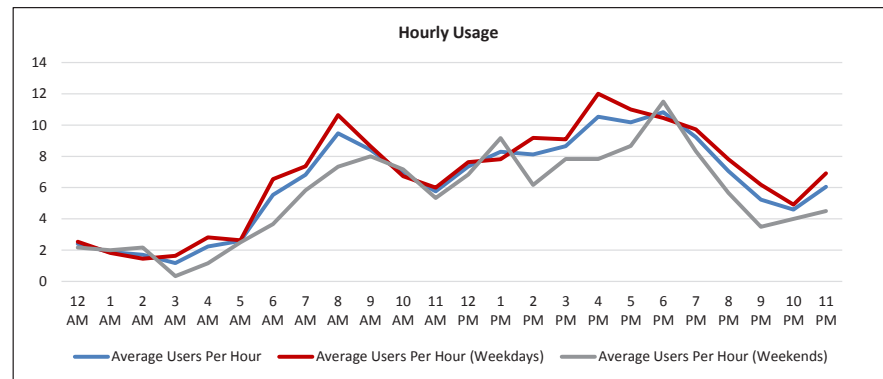


Daily Usage				
Bellfort Street Eastbound East of Broadway Street				
Date	Users	Select Weather Data*		
		High Temperature (°F)	Low Temperature (°F)	Precipitation (inches)
Saturday, August 6, 2016	170	98	77	0
Sunday, August 7, 2016	118	100	78	0
Monday, August 8, 2016	184	100	77	0
Tuesday, August 9, 2016	182	101	77	0
Wednesday, August 10, 2016	166	100	79	0
Thursday, August 11, 2016	177	101	82	0
Friday, August 12, 2016	152	99	82	0
Saturday, August 13, 2016	123	97	76	0.83
Sunday, August 14, 2016	112	89	72	1.66
Monday, August 15, 2016	146	86	75	1.43
Tuesday, August 16, 2016	122	82	74	2.05
Wednesday, August 17, 2016	128	83	73	1.73
Thursday, August 18, 2016	167	88	74	0.19
Friday, August 19, 2016	188	92	75	0.39
Saturday, August 20, 2016	148	91	75	0.53
Sunday, August 21, 2016	119	87	76	T
Monday, August 22, 2016	165	89	73	0.33
Total		2,567		
Average Daily Usage		151		
Average Daily Usage (Weekday)		162		
Average Daily Usage (Weekend)		132		

*Weather conditions recorded at KHOU.



Hourly Usage Belfort Street Eastbound East of Broadway Street			
Time of Day	Average Users Per Hour	Average Users Per Hour (Weekdays)	Average Users Per Hour (Weekends)
12:00 a.m.	2.4	2.5	2.2
1:00 a.m.	1.9	1.8	2.0
2:00 a.m.	1.7	1.5	2.2
3:00 a.m.	1.2	1.6	0.3
4:00 a.m.	2.2	2.8	1.2
5:00 a.m.	2.6	2.6	2.5
6:00 a.m.	5.5	6.5	3.7
7:00 a.m.	6.8	7.4	5.8
8:00 a.m.	9.5	10.6	7.3
9:00 a.m.	8.4	8.6	8.0
10:00 a.m.	6.9	6.7	7.2
11:00 a.m.	5.8	6.0	5.3
12:00 p.m.	7.4	7.6	6.8
1:00 p.m.	8.3	7.8	9.2
2:00 p.m.	8.1	9.2	6.2
3:00 p.m.	8.6	9.1	7.8
4:00 p.m.	10.5	12.0	7.8
5:00 p.m.	10.2	11.0	8.7
6:00 p.m.	10.8	10.5	11.5
7:00 p.m.	9.2	9.7	8.3
8:00 p.m.	7.1	7.8	5.7
9:00 p.m.	5.2	6.2	3.5
10:00 p.m.	4.6	4.9	4.0
11:00 p.m.	6.1	6.9	4.5



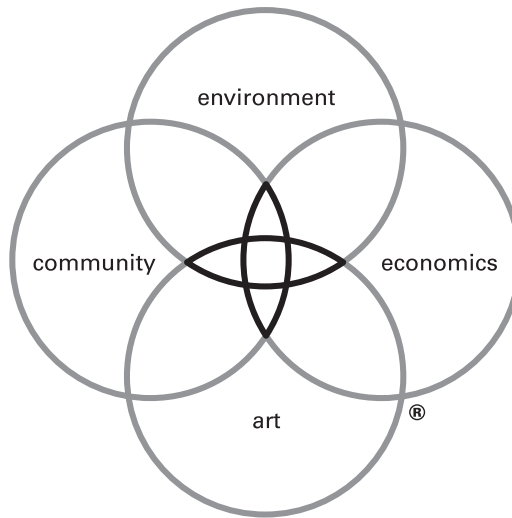
Participants

Houston-Galveston Area Council: Pedestrian-Bicyclist Planning

www.h-gac.com/go/pedbike

Texas Transportation Institute

<http://tti.tamu.edu/>



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