THE CITY OF TEXAS CITY

LIVABLE CENTER STUDY

2016
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Special thanks to Jimmy Hayley, who passed away on February 6, 2016. Jimmy was the leader of the Texas City-La Marque Chamber of Commerce for over 25 years. His contributions to the vision of this study are greatly appreciated and remembered.
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1 | INTRODUCTION & EXISTING CONDITIONS

OVERVIEW
EXISTING CONDITIONS ASSESSMENT
MARKET ASSESSMENT SUMMARY
INFRASTRUCTURE ASSESSMENT
MOBILITY AND CONNECTIVITY
Texas City is a vibrant deepwater port located on the southwest shoreline of Galveston Bay. The City is known for petroleum refining and as a petrochemical manufacturing hub within the region. Texas City has many strong assets, including an economic base that is built around the petrochemical industry, educational institution capacity, and the health care industry. Some of the City’s main concerns center on industrial reliance on the petrochemical industry, and the fact that many of those who work in Texas City commute in and out from surrounding areas without contributing to economic or social vibrancy.

Texas City is in need of a catalyst—a visionary plan that aims to stimulate public and private initiatives that will ultimately result in a new era of growth and prosperity for the City. Like many communities in the Houston-Galveston region, the degree and timing of future development is directly linked to employment and market factors. With new jobs on the horizon, Texas City leaders want to make sure the community’s quality of life and development climate will meet the needs of prospective investors and potential residents. This plan outlines several to planning and design strategies for the Livable Center study area. If proactively and strategically designed, funded, and phased, this largely residential and underutilized area has the potential to become a destination for downtown activity. Complementary development ultimately diversifies and improves the community’s overall housing inventory—a vital step in attracting new residents to Texas City.

The study consists of a preliminary inventory analysis, needs assessment, focus group interviews, community input, conceptual design plan, study area recommendations, economic development guidelines, and implementation strategies. The objectives of this plan are to:

- Develop strategies that will transform the study area into a high-quality mixed use destination that boasts a variety of housing types and complementary uses.
- Cultivate interest among the development community and potential residents.
- Assess the timing, costs, and phases of land and infrastructure improvements.
- Develop multi-modal transportation networks that provide residents and business patrons the choice to walk, bike, or use other means of transit.
• Develop the Texas City Dike as a natural resource amenity to develop scenic outlook points, recreation opportunities accessible from adjacent neighborhoods and downtown Texas City.

• Develop strategies for housing redevelopment and maintenance for long-term viability of residential uses.

• Identify funding mechanisms that can be used to implement multi-use trails, environmental remediation, housing, infrastructure, and other necessary improvements.

VISION STATEMENT

“A City of the future in which a prosperous, diverse economic base is strengthened by a commitment to serve as an international leader in emerging technologies with opportunities for all economic and social levels in an inclusive environment that balances broad interaction among all races, ethnicities, and cultures. A leader in industry, business, and finance located with immediate access to major land and air transportation arteries, while maintaining a small town atmosphere and convenience with varied cultural and recreational opportunities emphasizing the quality of life.”


BY 2040, THE 8-COUNTY HOUSTON-GALVESTON REGION IS EXPECTED TO GROW BY AN ADDITIONAL 3.5 MILLION PEOPLE.

Source: Livable Centers Implementation Report, 2016
THE PLANNING PROCESS

The cornerstone of this Livable Center Study was the creative, inclusive, and energetic public and stakeholder participation gathered during the process. The consultant team sought diverse guidance from groups of targeted stakeholders, including City Staff, current/prospective residents, local employers, land developers, brokers, bankers, realtors, downtown business owners and property owners, Texas City ISD and College of Mainland, as well as community organizations and leaders.

The public engagement process was aimed at educating community stakeholders and constituencies regarding the purpose of the livable centers study, as well as gathering feedback and insight into the community’s needs, perceptions, trends, and interests. Several different methods were utilized to gather stakeholder input, including: a Livable Center Advisory Committee (LCAC), focus group interviews, an online survey, a project website, community workshops, and focus group interviews.

LIVABLE CENTER ADVISORY COMMITTEE (LCAC) MEETINGS

The Livable Center Advisory Committee included 24 members representing various community stakeholders, such as the Texas City Economic Development Corporation (TCEDC), City Council, industry and business leaders, and various community organizations. The LCAC met five times, at key points of the process to discuss important issues and to steer the plan development process. The LCAC participated in a number of engagement exercises that included input boards, homework questions, surveys, and topic discussions directly related to elements of the Plan.

STAFF MEETINGS

The consultant team met with City staff five times during the planning process to discuss the progress of the project, key action items and responsibilities. Each meeting was a work session designed to gather valuable institutional knowledge and current information, as well as recommendations from those who work in the City and the study area every day. It was important to know the detailed challenges and past issues that the City still deals with from the perspective of those who make decisions and maintain the City’s facilities, as well as perform its everyday functions. The feedback gained from staff on critical topics such as housing, code enforcement, public image, economic development and transportation, to name a few, were directly translated into actionable recommendations seen in this plan.
FOCUS GROUP INTERVIEWS
The City and consultants identified eight stakeholder groups to conduct small group and one-on-one interviews with; these groups included: TCISD, elected officials, developers, faith-based groups, business groups, Chamber of Commerce, police/emergency responders, and industrial stakeholders. It was important for the plan that members of the community, outside of the LCAC, be included to gather specific detail and facilitate consensus for the development and redevelopment of the study area.

COMMUNITY WORKSHOP
One community workshop was held for the public to share information about the area, gather community input, and generate further support for the Study. The purpose of the workshop was to inform and engage the community in the planning process, as well as hear their perspectives on critical challenges, opportunities, and desires they have related to the recommendations made for the study area. The workshop explained the planning process, provided an update on the work completed and findings, solicited input and feedback from citizens, and answered any questions of concern and interest expressed by local residents and business interests. The workshop was held to highlight the findings of the needs assessment and present to the public the plan’s recommendations and conceptual ideas for the study area. The comments and input gained at the meeting directly influenced the final recommendations and conceptual ideas found in this Study.

50% OF COMMUNITY SURVEY RESPONDENTS BELIEVE THAT IT IS MOST IMPORTANT FOR THIS STUDY TO IMPROVE AND EXPAND UPON ATTRACTION REDEVELOPMENT.
Source: Texas City Livable Center Online Survey
SUMMARY OF COMMUNITY INPUT

Nearly 550 people participated in the Texas City Livable Center Study Community Survey. The 11-question survey was provided online to residents of the study area and surrounding community. The survey questions ranged from multiple choice to short answer. Some questions asked citizens for detailed responses, directly soliciting suggestions regarding desired improvements, future land uses, and amenities that they would like to see in the future study area.

Five key themes emerged from community input and data received during the process, combining community survey results, stakeholder interviews, LCAC discussion points, staff comments, and citizen feedback. The following themes serve as the foundation for the development of the Livable Center’s Guiding Principles, which are discussed in the following section; the emerging themes are:

1. RECREATIONAL AND CULTURAL ASSETS
2. TRANSPORTATION AND CONNECTIVITY
3. ECONOMIC DEVELOPMENT
4. EDUCATIONAL OPPORTUNITIES
5. HOUSING MARKET

LCAC Meeting
Benefits of a Livable Center

Community - Livable Centers are comfortable, appealing places for people to interact. They feature open spaces, such as parks, plazas, and marketplaces that accommodate public gatherings and foster a sense of community.

Environment - Livable Centers help preserve the environment by requiring less land for surface parking than scattered strip development. This reduces the amount of impervious surface in the region’s watersheds. By reducing the need to make vehicle trips, Livable Centers also help to improve air quality.

Mobility - Livable Centers make walking, bicycling, and transit more convenient by concentrating many destinations into one location. Fewer local trips help reduce congestion on major thoroughfares.

Economic Development - Livable Centers create a unique, identifiable destination, bolstering civic pride and acting as a catalyst for investment and development. Public investments can help to leverage private investment.

H-GAC LIVABLE CENTERS PROGRAM

Livable Centers are places where people can live, work, and play with less reliance on their cars. Livable Centers are compact and mixed-use, are designated to be walkable, and are connected and accessible by multiple modes.¹

The Houston-Galveston Area Council’s (H-GAC) Livable Centers program works with local communities to identify specific recommendations, such as pedestrian and bicycle facilities, that can help create a Livable Center. The Texas City Livable Centers Study is a partnership between the Houston-Galveston Area Council (H-GAC) and the City of Texas City, Texas to develop Livable Centers recommendations, infrastructure improvements, and urban design solutions for Downtown Texas City. A team of consultants, including Freese and Nichols Inc., Marsh Darcy Partners, Traffic Engineers Inc., and CDS Market Research, was

LIVABLE CENTER PROGRAM GOALS:

- Engaging the community and building capacity of study participants
- Creating walkable, mixed-use places
- Improving environmental quality, including preserving and creating open spaces
- Increasing economic development and revitalization
- Increasing the sense of identity and community and preserving history and culture

¹ Livable Centers Implementation Report, 2016.
selected to lead the project and conduct the in-depth analysis necessary to produce the most successful and applicable recommendations. Additionally, a Livable Centers Advisory Committee (LCAC) was appointed to provide vital input and feedback to the team and project process. This Texas City Livable Center Study has been crafted to meet local needs while offering transferable recommendations and tools in the areas of mobility, housing, economic development, healthy communities, and the environment. Livable Centers are also safe, convenient, and attractive areas where people can live, work, and play with independence from their vehicles. Livable Centers provide mobility benefits by making options that are not single-occupancy vehicles, such as transit, walking, and bicycling, more feasible. Livable Centers have the following characteristics:

- Compact and Mixed-Use
- Designed to be Walkable
- Connected and Accessible

By 2040, the 8-county Houston-Galveston region is expected to grow by an additional 3.5 million people. Accommodating this growth will overburden the region's transportation network unless we identify ways to reduce vehicle trips. H-GAC's Livable Centers program is part of the 2040 Regional Transportation Plan's strategy to improve multi-modal mobility in the region. The Transportation Policy Council allocates funding through the Transportation Improvement Program (TIP) for a variety of transportation plans and projects, like the Livable Centers program. In addition to these funds, the Livable Centers studies also contain a 20 percent local partner match from selected local partners, including municipalities, counties, management districts, and other special districts.

Figure 1: Livable Centers Study Locations

Source: Livable Centers Implementation Report, 2016
REGIONAL CONTEXT

Texas City’s key opportunities are primarily derived from its geographic location on the southwestern shore of Galveston Bay, seven miles from Galveston and eleven miles from the Gulf of Mexico, in Galveston County. The City is also situated within one of the strongest regions in the United States, the Houston-Galveston region, expected to continue to experience remarkable growth in the coming decades. The growth in this region is driven by several factors, which include the booming domestic energy sector, an unmatched medical center, and major ports.

Because of its coastal location, Texas City and other parts of Galveston County are ideally positioned in the path of growth emanating from Houston and other major cities in Texas. Inland cities have a tendency to grow in the direction of the nearest coast. The Interstate 45 corridor that connects Houston directly with the Gulf of Mexico is already experiencing intense development and growth, as are the communities adjacent to it. The City’s small town ambiance, and stable regional job base, in combination with recreational opportunities associated with the Dike, Texas City is ideally situated for its own rapid growth.

The City of Texas City was initially established as a planned community, a tradition that is clearly seen in the separation of land uses and well-maintained quality of life within the City. Oceanside properties and port-side properties are reserved for transportation, port uses, or industry, while the City’s core is primarily residential in character. This tradition is continued today in the City’s planning efforts and everyday decision-making processes.
The Texas City economic base has emerged within the last 125 years to become a major economic generator. Boasting one of the largest ports in the country, it is a gateway to worldwide trade and a major hub for world energy supplies. The port has been in operation for more than 100 years, but just a century ago, it was primarily undeveloped farmland. It was not until 1891 that a team of businessmen from Minnesota decided to invest in the town, purchasing nearly 10,000 acres of land for the purpose of developing a port.1 The region’s natural harbor and access to railroad portals to the north and west provided a perfect location for a shipping port and refining center. The Texas City Improvement Company, a corporation that eventually became an industry that would ultimately create the Texas City Transportation Company and later Texas City Terminal Company, established itself in the area and is largely responsible for the Texas City seen today. The Texas City Improvement Company was established by investors to develop the City, including gaining federal permission to dredge a channel from Shoal Point to Bolivar Roads (the channel that connects Galveston Bay to the Gulf of Mexico). The Texas City Improvement District also built a dock with a railway trestle and laid 4.5 miles of track from the Texas City Port that ran southwest to connect with Galveston and Houston. The port offered free use of its wharves and no switching fees for use of the Texas City tracks in order to compete with the Port of Galveston and draw industry to the City. Dredging the channel allowed the port to begin receiving ocean-going vessels, which directly impacted the City’s growth potential and economic influence—both locally and across the region. The port went from shipping 36,000 tons in 1904 to nearly 180,000 tons in 1909.2

Development of Moses Lake and construction of the Texas City Dike, along with a variety of community and educational improvements, including establishment of a junior college district, further secured the City’s future. College of the Mainland opened its doors in 1967. Major refineries and petrochemical industries formed an economic base for the port City. Residential development continued throughout the period as expansion of facilities occurred causing employment to be plentiful.

With a protected and nearly land-locked harbor, the Texas City Port continued to expand its facilities and its businesses. Today the Port of Texas City is the eighth largest port in the United States and the third largest port in Texas. Over 78 million tons of material moves through the port annually, creating an epicenter of industry and commerce that requires a massive labor force to operate and maintain. The community’s expansion has been to the west, with ten major refining and petrochemical companies forming the economic base of the seaport—some of which include BP, Marathon-Ashland Petroleum, Valero Refining, Sterling Chemical, Dow Chemicals and International Specialty Products.

Texas City’s rich history, wealth of amenities and strong economic foundation ideally position the City for a vibrant future. There are a number of catalytic forces that are primed to propel the City’s future growth and success; these include: a diversified economic base, strong education system (both primary and secondary institutions), full-service medical care, and access to all forms of transportation. All of these factors contribute to Texas City’s potential to become a livable center where residents have the opportunity to work, live and play with a high quality of life.

DEMOGRAPHIC CHARACTERISTICS

This section provides a thorough assessment of demographic trends affecting demand for relevant land uses in the study area. There is discussion of the market area from which Texas City’s land uses will be supported, providing an analysis of the social and economic characteristics of the study area and larger market area—including evaluation of population growth, income distribution, household characteristics, housing tenure (owner/renter), employment trends, and residential location patterns of the local workforce as it relates to the area’s growth and development. The projections for population and household growth highlighted in this section factor in local business expansions and other site-specific factors not necessarily included in Census data or other secondary data sources.

DEFINE: Comparative Market Analysis (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 Galveston County in which the study area is located. The Market Assessment considered a CMA, encompassing the following zip codes: 77539 (Dickinson), 77518 (Bacliff), 77590 & 77591 (Texas City), 77568 (La Marque), 77563 (Hitchcock), 77510 & 77517 (Santa Fe). The CMA is roughly bounded by the following landmarks: FM 646 to the north, Galveston Bay to the east, West Bay to the south, and the Galveston County line to the west. The terms “market area” and CMA are used interchangeable in this study.
According to U.S. Census data, the population in the study area has slightly declined from 2000 to 2010 by nearly 0.2 percent, roughly 411 people. Since 2010, there has been a marginal population increase of 0.25 percent, though the number is still below what it was in 2000 (see Table 1: Population and Households, 2000 to 2015). The number of households in Texas City has also experienced a decline, decreasing by 114 households since 2000. However, since 2010, the study area has seen a 0.46 percent increase in the number of households, adding an estimated 173 households.

The majority of the population in Texas City, 41.8 percent, is made up of white, non-Hispanic individuals (see Figure 2: Race and Ethnicity Profiles, 2015). The second largest ethnic group, making up 37.2 percent, is made up of Hispanic or Latino persons. Approximately 18.4 percent of the City’s population is black or African-American, non-Hispanic individuals. Individuals identifying themselves as two or more races, non-Hispanic make up 1.5 percent while those identifying themselves as another race combine to make up less than one percent of the population.

Though the population slightly increased, the study area experienced decreases across all age groups (see Figure 3: Population by Age, 2000 to 2015). The greatest proportion of decline took place in the age groups of 35 to 44 years and 45 to 54, falling 16.9 percent and 15.9 percent, respectively. The 85 and over age group experienced a 60.3 percent population increase.
from 2000 to 2015, while the 55 to 64 years age group experienced a 54.3 percent increase—both more than doubling in population. The median age of the population living in the study area today is 35.9 years old, a slight increase from 34.9 percent in 2000.

The majority of Texas City residents over the age of 25 have graduated from high school (or obtained a GED) or have some college (obtained no degree), 31.7 percent and 27.1 percent, respectively. These numbers are in-line with the CMA, and exceed those found in the greater Houston MSA. However, those obtaining higher education and receiving their Associates, Bachelor’s and/or Master’s Degrees are lower than both the CMA and Houston MSA. This indicates that the majority of the City’s population, though primarily high school educated, is lagging in completing higher education—despite of the number of continuing education and skills training opportunities available to them through the nearby College of the Mainland and TCISD campuses.

Table 2: Educational Attainment of Population 25+ Years Old, 2015

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>LC STUDY AREA</th>
<th>CMA</th>
<th>HOUSTON MSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>LESS THAN 9TH GRADE</td>
<td>9.6%</td>
<td>6.1%</td>
<td>9.6%</td>
</tr>
<tr>
<td>SOME HIGH SCHOOL, NO DIPLOMA</td>
<td>13.8%</td>
<td>9.8%</td>
<td>9.4%</td>
</tr>
<tr>
<td>HIGH SCHOOL GRADUATE (OR GED)</td>
<td>31.7%</td>
<td>31.3%</td>
<td>23.7%</td>
</tr>
<tr>
<td>SOME COLLEGE, NO DEGREE</td>
<td>27.1%</td>
<td>27.2%</td>
<td>22.0%</td>
</tr>
<tr>
<td>ASSOCIATE DEGREE</td>
<td>6.8%</td>
<td>9.2%</td>
<td>6.2%</td>
</tr>
<tr>
<td>BACHELOR’S DEGREE</td>
<td>7.3%</td>
<td>11.9%</td>
<td>19.2%</td>
</tr>
<tr>
<td>MASTER’S DEGREE</td>
<td>2.8%</td>
<td>3.4%</td>
<td>7.0%</td>
</tr>
<tr>
<td>PROFESSIONAL SCHOOL DEGREE</td>
<td>0.3%</td>
<td>0.8%</td>
<td>1.9%</td>
</tr>
<tr>
<td>DOCTORATE DEGREE</td>
<td>0.5%</td>
<td>0.4%</td>
<td>1.3%</td>
</tr>
</tbody>
</table>

Source: U.S. Census, American Community Survey, PCensus

57.2% OF THE POPULATION IN THE STUDY AREA IS BETWEEN THE AGES OF 25 AND 74 YEARS OLD.
Table 3: Household Income Averages Adjusted for Inflation, 2000 to 2015

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>UNADJ.</td>
<td>ADJ.</td>
<td>UNADJ.</td>
<td>UNADJ.</td>
</tr>
<tr>
<td>ESTIMATED AVERAGE</td>
<td>$45,143</td>
<td>$62,476</td>
<td>$57,926</td>
<td>$48,954</td>
</tr>
<tr>
<td>ESTIMATED MEDIAN</td>
<td>$36,576</td>
<td>$50,619</td>
<td>$44,087</td>
<td>$39,465</td>
</tr>
</tbody>
</table>

Note: Adj - Adjusted for Inflation to 2014 dollars / Unadj. = Unadjusted for inflation

Educational attainment plays a direct role in household income statistics. While the study area saw an increase in higher incomes between $100,000 and $199,999, there was also an increase in the lowest income group (households making less than $15,000 annually).

Combining all income groups, 70.6 percent of Texas City households makes less than $99,999 annually, and only 14 percent make over $100,000. While overall average and median incomes in the study area and CMA increased nominally from 2000 to 2015, when adjusted for inflation the larger CMA increased in income—although relatively small. The study area saw a decrease in income when adjusted for inflation—with the average income declining by 7.3 percent and the median income decreasing by 12.9 percent. The estimated median income of households in the study area, adjusted for inflation, was $62,475 in 2000 and $57,926 in 2015 (see Table 3: Household Income Averages Adjusted for Inflation, 2000 to 2015).

According to 2015 estimates, the study area has a slightly higher percentage of families in poverty, when compared to the Houston MSA. However, the CMA actually has a slightly lower percentage when compared to the MSA (see Figure 4: Poverty Status, 2015).
HOUSING MARKET CHARACTERISTICS

The study area has added 1,221 occupied housing units since 2000; of these units, 477 were owner-occupied and 745 were renter-occupied. The market has a high renter-occupied population of 50.31 percent compared to the state and region—where owner-occupancy is between 60 and 70 percent.

The majority of residential construction built since 2000 has been single-unit detached, complexes with three to 19 units, and complexes with 20 to 49 units. Single-unit detached housing increased; however, its share of total units declined. Interestingly, single-unit attached (or townhomes), increased by 95 percent since 2000, but still only make up three percent of the market share. This is worth noting because this, alongside Figure 5: Owner- vs. Renter-Occupied Units, Estimated 2014, indicates that the area is becoming more attractive to renters in multi-unit complexes. The estimated household size in the study area is 2.74 persons per household (2015); it is the trend that smaller households may prefer to rent smaller housing options rather than maintain traditionally larger units with yards.

Housing values have increased from a median of $67,437 in 2000 to $105,017 in 2014. This reveals that dozens of homes have been built at the higher-end of the market value or converted from homes previously priced below the median value. The study area contains a primarily older housing stock, though some older units have been refurbished or torn down and replaced (post-Hurricane Ike), bringing the median year built to a more recent 1979, compared to the median of 1975 in 2000.

<table>
<thead>
<tr>
<th>YEAR STRUCTURE BUILT</th>
<th>NUMBER</th>
<th>PERCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOUSING UNITS BUILT 2005 OR LATER</td>
<td>724</td>
<td>8.4%</td>
</tr>
<tr>
<td>HOUSING UNITS BUILT 2000 TO 2004</td>
<td>1,038</td>
<td>12.0%</td>
</tr>
<tr>
<td>HOUSING UNITS BUILT 1990 TO 1999</td>
<td>1,075</td>
<td>12.4%</td>
</tr>
<tr>
<td>HOUSING UNITS BUILT 1980 TO 1989</td>
<td>1,370</td>
<td>15.8%</td>
</tr>
<tr>
<td>HOUSING UNITS BUILT 1970 TO 1979</td>
<td>2,042</td>
<td>23.6%</td>
</tr>
<tr>
<td>HOUSING UNITS BUILT 1960 TO 1969</td>
<td>1,053</td>
<td>12.2%</td>
</tr>
<tr>
<td>HOUSING UNITS BUILT 1950 TO 1959</td>
<td>874</td>
<td>10.1%</td>
</tr>
<tr>
<td>HOUSING UNITS BUILT 1940 TO 1949</td>
<td>149</td>
<td>1.7%</td>
</tr>
<tr>
<td>HOUSING UNITS BUILT 1939 OR EARLIER</td>
<td>344</td>
<td>4.0%</td>
</tr>
<tr>
<td>OWNER-OCCUPIED HOUSING UNITS</td>
<td>8,669</td>
<td></td>
</tr>
<tr>
<td>MEDIAN YEAR STRUCTURE BUILT</td>
<td>1979</td>
<td></td>
</tr>
</tbody>
</table>

Table 5: Top Five Industries in the Study Area and CMA, 2015

<table>
<thead>
<tr>
<th>INDUSTRY SECTOR</th>
<th>LC STUDY AREA</th>
<th>CMA</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFFICE AND ADMINISTRATIVE SUPPORT</td>
<td>1,058</td>
<td>8,569</td>
</tr>
<tr>
<td>INSTALLATION, MAINTENANCE, AND REPAIR</td>
<td>740</td>
<td>5,515</td>
</tr>
<tr>
<td>LEGAL</td>
<td>890</td>
<td>5,300</td>
</tr>
<tr>
<td>SALES AND RELATED OCCUPATIONS</td>
<td>260</td>
<td>4,455</td>
</tr>
<tr>
<td>TRANSPORTATION AND MATERIAL MOVING</td>
<td>785</td>
<td>4,141</td>
</tr>
<tr>
<td>SUBTOTAL</td>
<td>3,733</td>
<td>27,980</td>
</tr>
<tr>
<td>TOTAL EMPLOYED OVER AGE 16</td>
<td>8,304</td>
<td>60,335</td>
</tr>
</tbody>
</table>

Source: U.S. Census, American Community Survey, PCensus

**EMPLOYMENT AND ECONOMY**

As mentioned, the study area has a population of 21,057 persons, of which 8,304 (or 39.4 percent) are 16 years of age and over and employed. The top five industry sectors ranked by the CMA, as seen in Table 5: Top Five Industries in the Study Area and CMA, 2015, are office and administrative support (12.8 percent); installation, maintenance, and repair (8.9 percent); legal (10.7 percent); sales and related occupations (3.1 percent); and transportation and material moving (9.5 percent). These occupations combined account for just under half of all jobs in each geography. The top occupation in the CMA is also the top occupation in the study area—office and administrative support.

Within the Livable Center study area, nearly 45.5 percent of the estimated employed population 16 years of age and older work in professional occupations. Nearly 29.3 percent work in agriculture-related industries, specifically 25.2 percent work in service and farming occupations. The study area has six percent more agricultural workers and roughly 14 percent less professionals, with around seven percent more service and farm workers when compared to the Houston MSA. The CMA closely parallels the proportions seen in the Houston MSA rather than the study area. These statistics further confirm the information discussed in the previous sections, discussing the lower educational attainment rates and lower average incomes of the study area and CMA.

**BEING CLOSE TO A MAJOR INDUSTRIAL COMPLEX, THE STUDY AREA HAS MORE FARM/SERVICE OCCUPATIONS THAN EITHER THE CMA OR HOUSTON MSA.**
This section presents population projections that estimate both the short-term and long-term demographic potential for the study area and its CMA. Potential developers interested in investing in the community will likely consult such projections in order to determine how successful their ventures may be.

Short-term, demographic forecasts were determined using Census data, which utilizes a formula to project future numbers based on existing Census data trends. Long-term projections in the Houston MSA are provided by the H-GAC’s 25-year projections (2015-2040) and CDS Market Research.

The short-term projections based on U.S. Census trends estimate that from the year 2015 to 2020, the study area will grow at 2.3 percent, while the CMA will grow at 6.4 percent. This roughly equates to 500 new individuals moving into the study area and 8,500 into the CMA.

The 2020 projections from H-GAC anticipate that the population in the study area will actually decrease by nearly 700 people, while increasing in the overall CMA by about 25,000. The estimates provided by CDS Market Research vary somewhat dramatically from the other data sources, in that CDS estimates that by the year 2020 the study area will increase by around 1,000 persons and the CMA will increase by nearly 45,000.

Projections from both H-GAC and CDS Market Research for the 2040 population are fairly similar, estimating only a small increase in the study area over time, while projecting large population increases for the overall CMA. The projections from H-GAC and CDS also include estimates for housing units, households, and employment. In looking at the projected employment growth, both sources assume that the study area and CMA will continue to experience growth—although CDS has much more ambitious projections when compared to H-GAC’s.

Table 6: Short-Term Study Area and CMA Projections Based on U.S. Census Trends

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LC STUDY AREA</td>
<td>21,206</td>
<td>20,795</td>
<td>21,057</td>
<td>21,546</td>
<td>- 1.9%</td>
<td>1.3%</td>
<td>2.3%</td>
</tr>
<tr>
<td>CMA</td>
<td>107,238</td>
<td>125,590</td>
<td>134,226</td>
<td>142,864</td>
<td>17.1%</td>
<td>6.9%</td>
<td>6.4%</td>
</tr>
<tr>
<td>HOUSTON MSA</td>
<td>4,693,140</td>
<td>5,920,416</td>
<td>6,467,776</td>
<td>6,967,200</td>
<td>26.2%</td>
<td>9.3%</td>
<td>7.7%</td>
</tr>
</tbody>
</table>

Source: U.S. Census, American Community Survey, PCensus
Table 7: Longer-Term Study Area and CMA Projections from H-GAC

<table>
<thead>
<tr>
<th>H-GAC FORECASTS</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
<th>2040</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC STUDY AREA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>POPULATION</td>
<td>20,221</td>
<td>20,221</td>
<td>20,415</td>
<td>20,523</td>
<td>21,048</td>
</tr>
<tr>
<td>HOUSEHOLDS</td>
<td>7,254</td>
<td>7,254</td>
<td>7,339</td>
<td>7,390</td>
<td>7,636</td>
</tr>
<tr>
<td>EMPLOYMENT</td>
<td>5,958</td>
<td>5,972</td>
<td>5,985</td>
<td>6,133</td>
<td>7,860</td>
</tr>
<tr>
<td>CMA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>POPULATION</td>
<td>158,787</td>
<td>199,406</td>
<td>243,878</td>
<td>275,705</td>
<td>304,359</td>
</tr>
<tr>
<td>HOUSEHOLDS</td>
<td>62,525</td>
<td>80,135</td>
<td>99,471</td>
<td>113,373</td>
<td>125,760</td>
</tr>
<tr>
<td>EMPLOYMENT</td>
<td>40,442</td>
<td>44,156</td>
<td>50,751</td>
<td>73,700</td>
<td>100,919</td>
</tr>
</tbody>
</table>

Source: H-GAC 2nd Quarter 2015 Forecasts

Table 8: Longer-Term Study Area and CMA Projections from CDS Market Research

<table>
<thead>
<tr>
<th>CDS FORECASTS</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
<th>2040</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC STUDY AREA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>POPULATION</td>
<td>21,997</td>
<td>22,124</td>
<td>22,204</td>
<td>22,273</td>
<td>22,343</td>
</tr>
<tr>
<td>HOUSEHOLDS</td>
<td>8,828</td>
<td>8,884</td>
<td>8,934</td>
<td>8,965</td>
<td>9,001</td>
</tr>
<tr>
<td>EMPLOYMENT</td>
<td>3,997</td>
<td>4,457</td>
<td>4,703</td>
<td>4,933</td>
<td>5,058</td>
</tr>
<tr>
<td>CMA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>POPULATION</td>
<td>179,174</td>
<td>225,911</td>
<td>276,325</td>
<td>321,345</td>
<td>367,238</td>
</tr>
<tr>
<td>HOUSEHOLDS</td>
<td>72,886</td>
<td>92,470</td>
<td>113,691</td>
<td>133,396</td>
<td>154,391</td>
</tr>
<tr>
<td>EMPLOYMENT</td>
<td>49,347</td>
<td>57,326</td>
<td>63,811</td>
<td>69,501</td>
<td>75,401</td>
</tr>
</tbody>
</table>

Source: CDS Market Research, 2015

RECENT DEVELOPMENT AND EMPLOYER ANNOUNCEMENTS IN TEXAS CITY

- Texas City Business Park
- HEB
- Railroad Museum in Downtown Texas City (potential expansion)
- Methanol Plant on Shoal Point - Fund Connell USA Energy

REDEVELOPMENT IN TEXAS CITY

- Edifis Group purchased Palmer Plaza from Weingarten Realty.

REDEVELOPMENT WITHIN THE STUDY AREA

- ShyKat, a popular restaurant in Galveston, has opened a second location at the corner of 9th Avenue and 6th Street.
- The old pharmacy building on the corner of 9th Avenue and 6th Street has been revitalized and transformed into a beautiful mixed-use development with unique shops at street level.
PREVIOUS STUDIES AND PLANS

Texas City has a strong history of planning, as evidenced by the number of studies and plans utilized daily. Many of the existing planning efforts align with the goals of the Livable Centers and established a solid foundation from which this study was conducted and viable recommendations developed.

VISION 2020 COMPREHENSIVE PLAN

Texas City first developed the Vision 2020 Comprehensive Plan in 1989, and updated in 2012. The City envisions a community with a prosperous and diverse economic base that is strengthened by a commitment to serve as a leader in emerging technologies with opportunities for all economic and social levels in an inclusive environment that balances interaction among all races, ethnicities, and cultures.

The Plan identified nine top priority goals, some of which have been implemented or are in progress. They are:

- A universally recognized, top quality educational system;
- An economy which is sufficiently diverse so that a downturn in any one area does not materially affect the economy as a whole;
- A changed environmental quality perception;
- Neighborhoods that are conducive to safe, healthy family living;
- An economy that attracts residents and highly skilled individuals and results in higher incomes for all;
- Contaminated sites have been turned into productive properties;
- A waterfront development that supports tourism and marine industries;
- Vocational preparation for young people; and
- Continuing community education for all ages that takes full advantage of the latest in video, high tech, distance learning, open university concepts, etc.

TEXAS CITY STRATEGIC PLAN 2012-2017

The Strategic Plan’s objectives are:

- Invest in redevelopment initiatives for old shopping centers, old buildings, industrial development inside the greenbelt, and other opportunities within the community.
- Develop strategies that will establish Texas City as a friendly, recreational, coastal community.
- Provide for a safe and secure community.
- Invest in strengthening existing businesses through tax incentives, revolving loan programs and grants.
- Recruit new businesses that will provide competitive paying jobs and fit the character of the community.

TEXAS CITY HIKE AND BIKE TRAILS

Texas City has a hike and bike trail that continues throughout the City and provides connections between parks and several schools, including Blocker Middle School, Roosevelt-Wilson Elementary, Fatima, Texas City High School, and Kohfeldt Elementary. It is a priority to link crucial destinations and accommodate multiple modes of transportation for residents to provide access.
TEXAS CITY DIKE

The Texas City Dike protrudes into Galveston Bay at the easternmost end of Texas City. The dike is situated parallel to and north of the 50-foot deep, 600-foot wide Texas City Channel, which allows shipping traffic to access the Port of Texas City. The dike is 28,200-foot-long (nearly 5.34 miles). The Texas City Dike was built to protect the Texas City Channel from cross current and excessive silting, although the channel still requires frequent dredging to prevent shoaling in the waterway. In 1913 the U.S. Army Corps of Engineers Galveston District began construction of the dike under the sponsorship of the City for $1.4 million dollars. Construction was completed after two years and improvements have and are constantly made to prevent erosion of the dike. In 1957 the City of Texas City leased 13 acres of land on the eastern tip of the dike to the Texas City Dike Corporation for the purpose of developing the area; development included a lighted fishing pier, a bait camp, a warehouse and a refreshment stand. When Hurricane Ike hit Galveston Bay on September 13, 2008 the Dike remained structurally intact, however all recreation and business facilities were washed away by the 25-foot storm surge and the dike was closed for two years for repairs. The dike re-opened in 2010 and currently boasts four boat ramps, ten concrete picnic shelters and one wheelchair accessible pier. The City of Texas City installed solar-powered lights and performed additional repairs on piers and ramps with grant funding from the Texas Parks and Wildlife Department. Prior to its closure post-Hurricane Ike, the dike was the second busiest boat launch site in the state.¹

EXISTING CONDITIONS ASSESSMENT

STUDY AREA

The 4,007 acres that constitutes the study area includes the City’s Downtown Historic District (locally designated). Land uses consist of mostly older single family home neighborhoods, with commercial and other non-residential uses clustered along 9th Avenue N/Palmer Highway and 6th Street N/Highway 197. At the center of the study area is the Texas City High School campus, along with several other public buildings and city-owned properties that serve as important landmarks and offer character to the area. Directly south of the study area is a significant amount of heavy industry associated with the petrochemical refinement and shipping industries.

The study area is located to the east of Highway 146 and northeast of Highway 6. The study area is served by existing infrastructure, including streets, water, and sewer. Much of the area is privately-owned residences and city-owned facilities, with very little remaining vacant or undeveloped. Refer to “Map 3: Study Area” on page 31.

The character of the area is largely influenced by the historic Downtown buildings and convention center, as well as the nearby Texas City Dike located on Galveston Bay. This amenity presents development opportunities for adjacent properties to create an attractive destination for recreation and tourism along the dike and in the Bay. As little property remains vacant for development, it is important to analyze the study area for redevelopment opportunities and identify specific areas in which to focus concentrated investments that will serve as a catalyst for future development. By capitalizing on existing assets, or the prioritized achievable goals, the City will be able to yield the maximum results with limited resources.

Table 9: Existing Land Use

<table>
<thead>
<tr>
<th>LAND USE</th>
<th>ACRES</th>
<th>PERCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMMERCIAL</td>
<td>282.76</td>
<td>12.8%</td>
</tr>
<tr>
<td>INDUSTRIAL</td>
<td>1.08</td>
<td>&lt; 0.05%</td>
</tr>
<tr>
<td>MULTIFAMILY RESIDENTIAL</td>
<td>86.94</td>
<td>3.9%</td>
</tr>
<tr>
<td>OTHER</td>
<td>25.01</td>
<td>1.1%</td>
</tr>
<tr>
<td>PUBLIC</td>
<td>304.79</td>
<td>13.8%</td>
</tr>
<tr>
<td>SINGLE-FAMILY RESIDENTIAL</td>
<td>1,267.58</td>
<td>57.5%</td>
</tr>
<tr>
<td>VACANT</td>
<td>235.87</td>
<td>10.7%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>2,204.03</td>
<td>100%</td>
</tr>
</tbody>
</table>

STUDY AREA BOUNDARIES

The study area is bounded by 25th Avenue N (north), Texas Avenue (south), 31st Avenue N (west), and Bay Street N (east). This plan will also explore the relationships and connections between the study area, Downtown, the Texas City Dike, and the Port of Texas City.
Map 3: Study Area
**DEVELOPMENT PATTERNS**

The development pattern of the study area is reminiscent of the early 20th century with a grid pattern that characterizes the area with uniform block lengths and a connected street network. Some parcels vary in size to accommodate public facilities, parks, and larger non-residential uses. These uses are located adjacent to residential areas, as seen in “Map 3: Study Area” on page 31. The majority of properties within the study area are developed, with only a few parcels remaining vacant and concentrated to the northwest corner of the study area. The major civic properties in the study area include the Convention Center and Texas City High School. Most of the primary commercial uses are located along 9th Avenue N/Palmer Highway, Texas Avenue, and 6th Street N/Highway 197.

Texas City is characterized by low-rise residential and commercial structures that typically do not exceed two stories. The existing development pattern is primarily low-density given the vast number of public properties and facilities throughout the study area. However, many of the buildings in Downtown are some of the most urban forms of development found in Texas City, that incorporate a mix of uses such as residential and office, and create continuous building edge along the street frontage.

**LAND OWNERSHIP AND VACANCY**

A substantial share of single-family homes are being rented throughout the study area. The ownership analysis examined the possible prevalence of rented single-family homes in the study area by analyzing the property records of the Galveston County Central Appraisal District. Two indicators were mapped in Map 4: Study Area Homestead Exemptions: (1) accounts where no homestead exemption was claimed, and (2) those where the taxpayer address differed from the property address.

**HOMESTEAD EXEMPTIONS**

Texas offers a variety of partial or total (absolute) exemptions from appraised property values used to determine local property taxes. A partial exemption removes a percentage or a fixed dollar amount of a property’s value from taxation. A total (absolute) exemption excludes the entire property from taxation. Taxing units are mandated by the state to offer certain (mandatory) exemptions and have the option to decide locally on whether or not to offer others (local option). There are several types of exemptions you may receive.

- School taxes
- County taxes
- Age 65 or older and disabled exemptions
- Optional percentage exemptions
- Optional age 65 or older or disabled exemptions

Source: Texas State Comptroller, comptroller.texas.gov/
Map 4: Study Area Homestead Exemptions
BUILDING CONDITION INVENTORY

Existing building conditions of the current properties within the study area play a large part in the visual perception of the study area, as well as the appraised values of the properties. It is important to gather a comprehensive baseline analysis of the current status of the existing building inventory in order to understand the underlying property values and ownership data highlighted in this section. The Market Opportunities Report contains greater detail and in-depth analysis of economic conditions and property values in the study area and can be found in the Appendix.

For the purposes of this Study, an existing conditions analysis was assembled through a series of windshield surveys alongside the demographic and statistical data found in the Market Opportunities Report. In order to manage the collection of existing conditions data and ensure adequate coverage of the study area, the study area was divided into four sectors based on the block boundaries designated by the U.S. Census and the use of major roads as boundaries (as seen in Figure 6). The windshield survey conducted for this study provides a general snapshot of the primary uses (public, residential, and commercial) found within the four quadrants and describes the range of conditions observed within these areas.

DEFINE: WINDSHIELD SURVEY

Windshield surveys are systematic observations made from a moving vehicle in order to better understand a community and/or specific conditions/aspects of it. These surveys can be used to assess general community needs—to estimate the poverty level or to examine more specific facets of the community’s physical, social, or economic character. Conditions of siding, roofs, auxiliary buildings, driveways, landscaping, and accumulations of debris could be used in the evaluation.

Source: The Community Toolbox. University of Kansas. ctb.ku.edu
CONDITIONS RATINGS CRITERIA

The properties in the study area were evaluated generally on six criteria elements, including:

- structure rating;
- fencing;
- yard conditions;
- driveways (including sidewalks and other flatwork);
- trash, debris and/or outside storage; and
- the presence of junk or inoperable vehicles.

Each category has a rating from one to five, one being good condition with no presence of debris and five being dilapidated and/or uninhabitable with trash, debris, outside storage, and the presence of debris/junk vehicles.

PUBLIC BUILDINGS

Texas City has invested a tremendous amount of resources into the new construction and upkeep of the City’s public facilities. The public facilities found in the study area include TCISD campuses, fire stations, police stations, parks, and city offices/facilities. Many of the City’s buildings are new construction, while the older facilities are well-maintained and function adequately. The investment in these buildings adds character and identity to the adjacent streets and neighborhoods, in some cases refreshing the feel of the adjacent blocks.
RESIDENTIAL STRUCTURES

The survey conducted found few properties that appeared to be vacant within the study area. Most of the vacant properties appeared to be homes that were destroyed by Hurricane Ike in 2008, properties that were completely torn down, or properties that remain undeveloped. Many of the homes in Sector One are well maintained and kept free of debris, while Sector Four had the most prevalence of disrepair, debris accumulation, overgrowth, and/or boarded-up buildings (refer to Figure 7). According to the American Community Survey, the majority of the residential housing stock in all four sectors was built prior to 1979 and as early as 1940—with sector four having the largest proportion of these older homes (approximately 85.8 percent).

The homes with the lowest ratings were the homes in the best conditions with picturesque yards, fresh paint, and well-maintained facades. Most of the homes witnessed at this quality were found in section one of the study area, though there were some found sporadically in almost every sector. Most homes are clad with siding in various states from recently painted to completely worn away and/or missing slats. In some instances driveways had shifted and were cracked, while in others the driveways had been completely renovated simultaneously with roadway improvements, or recently patched. Abandoned properties were found to be in the poorest conditions, with boarded up windows, peeling paint, overgrown landscaping, and oftentimes with large accumulations of debris and junk remaining on the property. Sector four had the most abandoned buildings, as well as the majority of renovated structures due to the refurbishment, replacement, and removal of homes that were destroyed during Hurricane Ike. There are 164 homes in the study area that have been re-built due to Hurricane Ike, and are identified by the red dots on “Map 5: Residential Properties in the Study Area” on page 41.

Looking at Figure 7: Study Area Improvement Values can help to visualize the areas with the higher ratings, as they are also the areas with the lowest improvement values. These statistics were consistent with some of the sites observed and documented in this survey. As discussed, the areas with the most investment are located around the public facilities where City investment has likely catalyzed changed and reinvestment in the adjacent areas.
RESIDENTIAL EXAMPLES

*Note: Reference “Figure 6: Existing Land Uses per U.S. Census Tract” on page 34 for sector boundaries.
COMMERCIAL

There is truly a mix of retail/commercial building quality across Sectors One, Three, Four, and Two primarily consist of residential land uses. Most of the retail/commercial uses are concentrated along Palmer Highway / 9th Avenue N, Texas Avenue, and 6th Street N. Some of the older, abandoned buildings along 6th Street N and Texas Avenue offer valuable opportunities for reinvestment. Along Palmer Highway / 9th Avenue N there are opportunities for redevelopment and new construction as this is a major roadway that runs through the study area and links major destinations across the downtown area.

Newer and renovated businesses are seen throughout the study area, with new curb and gutter infrastructure investments made by the City, as well as new signage and updated facades. As part of the 6th Street Revitalization District, many of the 6th Street businesses owners have revitalized signage, paint, and awnings that keep with the 1950s-style character of the area and make up some of the more well-maintained businesses in the study area. Beginning in 2016, City is also incentivizing commercial beautification efforts through Stay Classy Texas City award program. The program awards local businesses for investing in the community with the presentation of a personalized plaque, metal display sign, and features on the City’s communication outlets.

In referring to the Study Area Improvement Values graphic (previous page), the retail/commercial buildings in the study area are generally on the higher side of values that range from $20,000 to $150,000—regardless of condition. Older commercial buildings that have deteriorated and are showing signs of wear and tear—such as cracked or crumbling flatwork, dilapidated signage, overgrown landscaping, and/or deteriorated screening—not surprisingly, have subsequently lower improvement values when compared to other commercial properties across the study area. There were several examples of new construction and investment in the community, like Regions Bank and Star Food Mart (see examples), to name a few. These buildings are good examples of new investment in the community, alongside Eight-Eleven on 6th and the mixed-use retail building on 9th Avenue N at 6th Street.

The survey found a number of commercial properties that appeared to be vacant throughout the study area with boards covering windows, dilapidated parking areas or landscaping, and/or lack of activity. These properties could use some basic maintenance to remove debris/junk and clear the landscaping accumulation in order to make them more attractive to potential investors and developers. Much of the vacant land in the study area is likely a result of building teardowns due to the damages sustained during Hurricane Ike (2008).
*Note: Reference “Figure 6: Existing Land Uses per U.S. Census Tract” on page 34 for sector boundaries.
MARKET ASSESSMENT SUMMARY

The findings from the Market Assessment were used to detect the market-based opportunities within the study area, in order to identify the most viable market segments for future successes. The complete assessment utilized multiple sources of data, including demographics, housing trends, and development patterns, as well as stakeholder interviews, discussions with local businesses, developers and real estate agents, to name a few. The following sections summarize the complex findings of the Market Assessment. The complete Market Assessment report can be found in the Appendix accompanying this study.

SINGLE FAMILY RESIDENTIAL

Nearly 43.8 percent of the overall Texas City housing units are located in the study area. Of the 8,669 housing units in the study area, 57.8% are single-family (5,011) and 36.3% are multifamily units (3,147)—as seen in Map 5. Owner-occupied housing values have increased from a median of $67,437 in 2000 to $105,017 in 2014—refer to Map 6 to see how land improvement values are distributed within the study area. Approximately 50.3% of single-family homes are renter-occupied within the study area, which has strong implications for future preservation, rehabilitation, and renovation of existing housing units. There are 164 “Ike Homes” in the study area, which has decreased the average age of the housing stock due to the replacement of damaged homes from Hurricane Ike. Since 2010, 889 homes have sold in the study area: 80% were sold below $100,000; 16% ranged from $100,000 to $150,000; 3.4% ranged from $150,000 to $200,000; and 0.9% cost between $200,000 and $250,000. Home values are relatively low in the study area, further illustrated by the median “active listing” price for a home in the study area being $84,900.

MULTIFAMILY RESIDENTIAL

There are currently 16 multifamily properties and a total of 857 units within the study area. The 2015 estimate revealed that the study area included nearly 20 percent of the total apartment units in Texas City, most of which were classified as Class B and Class C developments with anywhere from five to 169 units. It is worth noting that there is one subsidized property located in the study area.

In general, multifamily properties in the study area are garden and low-rise development constructed between 1960 and 2005. The current vacancy rate is 11% with average rental rates of $0.84 per-square-foot (psf). Rental rates for Class B properties range from $0.98 to $1.03 psf. Comparatively, the study area has occupancies at 89% while occupancy in Texas City is at 89.9%. Average rental rates are slightly higher in Texas City ($0.86 psf), while the study area is at $0.84 psf.

Ike Homes are defined as homes that were renovated using H-GAC Hurricane Ike Disaster Recovery Housing Program funds. Housing recovery services for qualified property owners included:

- Repair and/or reconstruction of Ike-damaged single-family owner occupied homes, single-family rental homes, and multifamily rental units
- Voluntary relocation in accordance with the State’s Homeowner Opportunity Program.
RETAIL

The largest social group in Texas City is characterized as middle-class singles and couples who have retired or are approaching retirement, are living in older neighborhoods located in small cities.

There are 87 existing retail buildings in the study area, comprising 812,863 square feet of space. The average vacancy is nine percent with rental rates of $9.06 psf. In the past 5.5 years, only 3,600 square feet of retail space has been delivered in the study area, primarily along 6th Street and Texas Avenue. There is an under-supply of general merchandise stores in the study area, including fast food restaurants, eating places, electronics stores, computer stores, clothing stores, and specialty/hobby shops. There is a surplus of automotive parts and tire stores in the study area since sales are decreasing.

OFFICE

Nearly 19% of the Texas City office inventory is in the study area, including municipal offices. There are 16 multi-tenant office buildings in the study area that make up nearly 136,650 square feet of space. The gross average rent of office space in the study area is $11.07 psf with a vacancy rate of 14.2%. There is currently 62,263 square feet of Class B office space (45.5%) and the remaining 74,387 square feet is classified as Class C. There is no Class A office space in the study area. The average age of the offices in the study area is over 40 years old, with nearly 29% of the office supply being built prior to 1970. Vacancy in the study area has been volatile for the last five years, going from five percent in 2010, to 20% in 2013, and back to 14% in 2015. Office rental rates have been steadily declining from $24 in 2011 to $11.07 in 2015.
**RECOMMENDATIONS FOR DEVELOPMENT**

Based on the findings of the market study, several conclusions were drawn regarding the future development potential of single-family residential, multifamily residential, retail and office. Because the 2030 demand for single-family and multifamily units is less than 300 and 450 units, respectively, it is clear that the recommendations made in this study will not be housing driven (refer to Table 10). Despite relatively low long-term demand for new residential units, there will be a demand for the replacement and rehabilitation of existing structures. Rehabilitation includes renovation and rejuvenation efforts, with the purpose of conserving and preserving existing neighborhoods and housing stock in the study area. According to the market study, the potential for new residential unit construction between 2020 and 2030 is limited for now, while there is a greater potential demand for new retail establishments—like restaurants, entertainment/music venues, and local businesses. Long-term, the market study implies that the demand for new office space may be phased in later when vacancy rates and rents improve.

As concluded from public input, there is a demand among residents for variable housing types—including senior housing, higher-density developments, and mixed-use housing units.

---

**Table 10: Study Area Potential New Demand**

<table>
<thead>
<tr>
<th>DEMAND CLASSIFICATION</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>SINGLE-FAMILY DEMAND (UNITS)</td>
<td>50</td>
<td>100</td>
<td>250</td>
</tr>
<tr>
<td>MULTIFAMILY APARTMENTS DEMAND (UNITS)</td>
<td>309</td>
<td>396</td>
<td>429</td>
</tr>
<tr>
<td>MULTIFAMILY SENIOR HOUSING (UNITS)</td>
<td>180</td>
<td>180</td>
<td></td>
</tr>
<tr>
<td>RETAIL DEMAND (SF)</td>
<td>48,982</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>OFFICE DEMAND (SF)</td>
<td>85,593</td>
<td>79,527</td>
<td>64,636</td>
</tr>
</tbody>
</table>

Source: CDS Market Research

According to the market analysis, the study area comprised 19.9 percent of the overall Texas City apartment units, and with the application of the study area’s capture rate the multifamily demand results in 309 apartments by 2020 or 61 homes per year.

The housing market could support some condominiums above retail space along 6th Street. It is recommended that the City offer incentives to property owners to assist in minimizing the costs and spur residential growth. The analysis concludes that new Class B market-rate apartments are recommended for the study area, with estimated rents being $1.10 per-square-foot for new construction. Garden-style apartments are most suitable for this market in order to keep construction costs affordable.

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. Based on household growth in the study area over the next five years, the 2020 demand for basic Age-Restricted (aged 55 and older) or Active Adult Apartment units (with no medical services) will be an additional 1,238 households in the study area, or 247 households annually. The market assessment estimates that the site could capture 50 percent of the estimated market growth, or 180 renters in the next five years (by 2020). Texas City could potentially develop a two-phase Class B/B+ Senior Housing development with 180 units per phase. The proposed residential development should take advantage of the amenities on 6th Street or views of the Bay to attract residents.
Lease rates for this development range between $1.15 and $1.50 per-square-foot, depending on the level of amenities and finishes provided. Amenities should, at a minimum, include access gates, community room, planned activities, library, BBQ area, walking trails, fitness facilities, and a pool.

The study area currently supplies adequate retail, fast food restaurants, eating places, electronics stores, computer stores, clothing/jewelry stores, and specialty shops. The demographics of the market area, while showing some signs of evolving toward a higher income population with a more disposable income, does not yet support a major change in the area’s retail profile. The retail demand in 2020 is expected to be 48,982 square feet of space. This space should be marketed heavily to eating and drinking establishments, as well as family entertainment and music venues. There have been several successful examples of pioneering local businesses, such as bars and restaurants, investing in the study area and achieving success. Attracting new businesses like these is most likely to occur with the presence of incentives and/or additional population in the area.

Independent local businesses that serve the area’s moderate-income population will generally prefer the existing, lower-rent (and often aged) retail space in the area, over newer, more expensive spaces with higher rents that attract a limited set of regional and national chains that target such demographics. Over time, increasing population growth will help mitigate this situation—as associated retail demand increases, along with the ability of local businesses to pay higher rents increases. Simply put, smaller local businesses will prefer older retail stock to newer spaces because it costs less, but as more people move into the study area and demand increases, the local businesses ability to pay higher rents also increases. Until then, rehabilitation and preservation will be key strategies for future retail development in the study area.

The market demand for office space is the largest of all land use classifications, refer to Table 10. Given the current vacancy rate of 14% and rents of $11, it is recommended that office development be phased in as vacancy and rental rates improve in the future. Generally, the demand for typical office space will grow as the population increases and employment growth continues. Though it is difficult to project the study area’s market absorption rates for such product, it is likely that smaller increments of office space, ranging from 10,000 to 20,000 square feet, would lease up within 18 months. In addition to typical office space, there is limited demand for multi-tenant office space; these spaces are generally comprised of smaller tenants that are businesses local to the area, often because the business owner also lives in the area.
CURRENT HOUSING MARKET REALITIES

The study area overlays a large segment of the oldest part of the City and is largely built out. The remarkable grid network within the study area was originally laid out in the 1890s. The CDS Texas City Livable Center Study Market Opportunities Report (see Appendix for full report) evaluated market conditions for various land use types in the study area and related them to the broader competitive market area (CMA) in order to identify the viable target markets in Texas City. The CMA includes surrounding cities like League City, Dickinson, La Marque, Santa Fe, and Hitchcock. Regarding future housing demand, the Market Opportunities Report predicts a very low demand for new single family homes within the study area. Combined with the below-average affordable price of homes for potential buyers within the Study Area and the availability of substantial housing options outside the study area within the CMA, construction of a significant number of new single family homes within the study area cannot be expected. However, the Market Opportunities Report does indicate some potential target market demand for specialty housing niches such as condominiums, Class B apartments, and senior housing in targeted portions of the study area. Therefore, as previously explained, the Texas City Livable Center housing strategy is primarily concerned with and focused on the preservation, restoration, and transformation of existing structures.

To better understand the current realities of the residential housing conditions within the study area, a detailed analysis of property data and public safety records was prepared. The results of this analysis, described below, further reinforced the preservation, restoration, and transformation concepts and the need to focus future investments around existing assets in order to enhance the probabilities of success.

Map 7 shows the relationship of the CMA to Texas City and to the study area and “Table 12: Tax Parcels” on page 46 compares several key housing criteria for the study area to the CMA. In several categories, the housing stock in the study area is under-performing in comparison to the CMA, indicating the need for a new strategy to reverse these trends.
Map 7: Project Study Area, Texas City Limit, and CMA Boundaries
“Map 6: Study Area Land Values (in Dollars per Square Foot)” on page 41 depicts the Study Area land use breakdown by tax parcel. Over 83% of the tax parcels are currently in residential uses, while 17% are non-residential, and 9% are vacant.

The Study Area was overlaid by four Census Tracts, also shown on Map 6—which allowed a more detailed analysis of certain land use demographics characteristics by quadrant within the Study Area.

Table 12: Tax Parcels

<table>
<thead>
<tr>
<th></th>
<th>Study Area</th>
<th>CMA</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL TAX PARCELS</td>
<td>8,063</td>
<td></td>
</tr>
<tr>
<td>RESIDENTIAL</td>
<td>6,712</td>
<td></td>
</tr>
<tr>
<td>• SINGLE-FAMILY</td>
<td>6,393</td>
<td></td>
</tr>
<tr>
<td>• MULTIFAMILY</td>
<td>319</td>
<td></td>
</tr>
<tr>
<td>NON-RESIDENTIAL</td>
<td>1,351</td>
<td></td>
</tr>
<tr>
<td>VACANT</td>
<td>736</td>
<td></td>
</tr>
</tbody>
</table>

Source: CDS Market Research

Table 13: Single-Family Housing Size

<table>
<thead>
<tr>
<th>SF SIZE</th>
<th>Study Area</th>
<th>CMA</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 1,000</td>
<td>925</td>
<td>3,321</td>
</tr>
<tr>
<td>1,001 - 1,499</td>
<td>2,977</td>
<td>10,905</td>
</tr>
<tr>
<td>1,500 - 1,999</td>
<td>1,623</td>
<td>9,910</td>
</tr>
<tr>
<td>&gt; 2,000</td>
<td>788</td>
<td>8,907</td>
</tr>
<tr>
<td>NO DATA</td>
<td>49</td>
<td>1,117</td>
</tr>
<tr>
<td>GRAND TOTAL</td>
<td>6,362</td>
<td>34,160</td>
</tr>
</tbody>
</table>

Source: Galveston Central Appraisal District
Figure 8: Study Area Data by Quadrant depicts the 2015 median home values, median incomes, vacancy rates, and percent renter-occupied within the Study Area by census tract quadrant.

The median home values indicate that the northwest quadrant has the highest median home value within the Study area at $121,977, while the southwest quadrant has the lowest median home value at $80,114. It should be noted that the southeast quadrant has a similar median home value to the southwest quadrant, but also contains the highest percentage of vacant land within the Study Area.

The northeast quadrant has the highest annual median incomes within the Study area at $61,560, while the southeast quadrant has the lowest median incomes at $30,936. Additionally, the northwest quadrant also has the lowest vacancy rate within the Study area at 5.9%, while the southeast quadrant has the highest vacancy rate at 21.1%

Further, the northeast quadrant has the lowest percentage of renter-occupied properties within the Study area at 16.7%, while the southeast quadrant has the highest percentage of renter-occupied properties at 59.6%.

As shown in Figure 8, the southern two quadrants, and the southeast quadrant in particular, contain the lowest median home values, highest vacancy rates, and highest renter occupancy rates within the Study Area. Figure 9 summarizes the data shown in Figure 8 and depicts the relationship of these variables to the City of Texas City fire/EMS.
This data underscores the results of the Market Opportunities Report indicating that residential uses in close proximity to the Texas City Industrial Complex are no longer a product desired by the typical residential consumer. While the Texas City Industrial Complex provides a great tax base for the City and is a significant economic generator for the entire Houston Region, its presence has resulted in an incompatible land use impacting utilization, property values, and long-term reinvestment in residential properties. The City’s existing Industrial Buffer District (IBD) was instituted many years ago to address the conditions that are validated by this data. The IBD should be expanded to generally include land south of Fifth Avenue North and east of 10th Street (see Recommendation 9.1), refer to “Figure 10: Industrial Business District (IBD) Boundaries” on page 49.

It should be noted that at the time of the initial construction of the homes in these areas in the early-to-mid 20th Century, residential consumer preferences may have supported residential uses in close proximity to the industrial facilities. However, contemporary preferences and the presence of master-planned residential alternatives in the CMA indicate that non-residential land uses in these areas would be more viable and create a better return on investment for the community.
It should also be noted that through the community survey, the focus group discussions, and the LCAC meetings, anecdotal comments were made repeatedly that when houses “come on the market” in the Study Area they are quickly purchased. These qualitative comments support the belief that there is a reasonable demand for both new and remodeled housing in the Study Area, but it is the lack of product on the market in viable locations perceived as being safe that is depressing sales.

Figure 10: Industrial Business District (IBD) Boundaries

Source: City of Texas City Zoning Map, 2010
Planning and implementing infrastructure is perhaps one of the most important responsibilities of a municipality. Citizens need to be secure in the knowledge that they can rely on their local government to ensure an adequate and safe water supply and wastewater capacity for current populations and that proper plans are developed to provide for future growth. Additionally, citizens look to the City to regulate growth to protect citizens from flooding. Texas City has a long track record of capital improvement funding from CIP planning. The study area has directly benefited from these investments, especially around 9th Avenue and 6th Street.

Numerous technical studies can be used to analyze current and future needs for the City. One purpose of the Livable Centers Study is to determine whether the City has made or plans on undertaking these types of efforts. This Infrastructure Assessment is intended to provide a broad overview of Texas City’s infrastructure system and capacity and assess the system’s ability to reliably serve current and future populations. The Gulf Coast Water Authority provides the raw water supply and treatment, while the City provides water distribution, wastewater collection and treatment, and stormwater collection.

WATER SYSTEM
EXISTING CHARACTERISTICS
The City’s water supply is provided by the Gulf Coast Water Authority (GCWA), which diverts water from the Brazos River near Sugar Land through Jones and Oyster Creeks and GCWA’s Canal System and Industrial Reservoir. The raw water intake structure is located on GCWA’s Canal System. The Thomas S. Mackey Surface Water Treatment Plant was originally constructed by the City in 1978, acquired by GCWA in 1983 and expanded in 2000 to its present capacity of 50.0 MGD. The plant is located on a large site and could be expanded if necessary. The plant serves 13 water utilities in Galveston County. The City of Texas City has secured a treated water supply contract with GCWA for a firm supply of 11.5 MGD. There are no interconnections with neighboring cities.

CIP PROJECT LIST
- 11th Ave and 9th St. Drainage and Roadway Improvements
- 7th St. Drainage and Roadway Improvements (11th Ave. to 7th Ave.)
- 9th Ave Roadway Reconstruction (14th St to Bay St)
- 6th St Roadway Reconstruction (Texas Ave to 11th Ave)
- Magnolia Ave Construction (SH 146 to 29th St) and misc streets
- 23rd Street Reconstruction (Palmer Hwy to 25th Ave N.)
- Bay St Reconstruction (1st Ave S. to 25th Ave N.)
- 13th Ave Reconstruction (21st St to 9th St)
- FM 1764 Landscaping and Lighting (21st St to 14th St)
STORAGE & USAGE

The Texas Commission for Environmental Quality (TCEQ) requires 200 gallons per connection of storage of which 100 gallons must be elevated storage. According to TCEQ, the City currently has 19,500 connections. The minimum storage requirement for the City is 1.95 million gallons of elevated storage and 3.9 million gallons of total storage.

The City operates on a single pressure plane with five elevated storage tanks. GCWA fills the City’s elevated tanks using their high service pumps. The City owns and maintains 286 miles of water lines ranging from 2-inch cast-iron distribution lines to 36-inch PVC transmission lines.

The City has recently rebuilt the pumps and drained and re-painted the tanks within the study area. New ground and elevated storage tanks will likely be needed in the western portion of the City as development continues to occur but the City does not anticipate much extension to the distribution system within the study area.

CONSIDERATIONS

It would benefit the City to create a preventative maintenance program for its water valves wherein the valves would be located, inspected, and exercised.

The City currently budgets approximately $1,000,000 each year for water line improvements. These funds are primarily allocated to the replacement of approximately 10,000 ft of water lines each year. The lines to be replaced are prioritized based on the operations and maintenance work orders (number of leaks in an area), the opportunity to replace 2-inch cast-iron lines and the opportunity to provide improved hydraulic connectivity as a result of the replacement. The City should continue this annual investment in the rehabilitation of its water distribution system.
Map 8: City of Texas City Existing Water System Map of the Livable Centers Study Area
WASTEWATER SYSTEM

EXISTING CHARACTERISTICS
The City of Texas City is served by the Wallace R. Knox Wastewater Treatment Facility located at 3901 Bay Street Extension in Texas City. The treatment plant has a permitted average day capacity of 12.4 MGD under Permit WQ0010375001. The average daily flow is approximately 5.4 MGD. The plant discharges to a tidal marsh near Moses Lake.

The City has approximately 19,500 connections to the wastewater system and maintains a network of 207 miles of gravity and 31 miles of force mains.

Due to the fact that elevations in the City are near sea level, lift stations are required. The City currently owns and operates approximately 45 lift stations. Approximately 10 of these lift stations are connected to a Supervisory Control and Data Acquisition (SCADA) system, which monitors the system electronically. The larger lift stations also have on-site generators to provide emergency power.

New lift stations will be needed in the western portion of the City as development continues to occur but the City does not anticipate much extension to the collection system within the study area.

CONSIDERATIONS
The City chose to participate in the TCEQ Sanitary Sewer Overflow (SSO) Initiative and, as part of this program, budgets approximately $275,000 each year for inspection of the wastewater collection system. This inspection involves a combination of CCTV and smoke-testing activities. The results of the SSO Initiative testing allow the City to proactively target lines and lift stations for rehabilitation and replacement in order to reduce infiltration and inflow in the system. The City budgets approximately $1,000,000 each year for rehabilitation and replacement of wastewater lines identified by the SSO Initiative. The City should continue this annual investment in the rehabilitation of its wastewater collection system.
The existing Supervisory Control and Data Acquisition (SCADA) system for the wastewater system is not user friendly and is budgeted for replacement by the VT-SCADA Program. The City should consider converting all lift stations from radio to cellular SCADA over the next several years and should consider upgrading the SCADA system at the wastewater treatment plant from radio to hardwire or cellular SCADA.

Rehabilitation or replacement activities should be considered at the wastewater treatment plant. The grit system is budgeted for rehabilitation and that work should be completed. In addition, the City should consider replacement of the existing Class A lime-stabilized sludge system with a new sludge-handling system and digester. The operations and maintenance activities required to keep the existing system running are substantial from a labor perspective. The replacement of the existing system would be very costly unless an exemption could be obtained from TCEQ.

A reuse line was recently installed along Bay Street and the City should consider partnering with additional industrial customers interested in purchasing reclaimed water from the City.
STORMWATER SYSTEM

EXISTING CHARACTERISTICS

The City of Texas City is protected from flooding from Galveston Bay by the Texas City Hurricane-Flood Protection Levee System which was constructed by the United States Army Corps of Engineers and is operated and maintained by Galveston County.

The City of Texas City owns and maintains the stormwater drainage system within the City. One element of the system is an internal levee which protects the City from flooding from Moses Lake. The City operates two pump stations in connection with the internal levee. The pump stations are equipped with pumps capable of passing 1 million gallons per minute in order to draw down the water level in the internal ditches. The stormwater collection system in the study area consists of both ditches and curb and gutter. A curb and gutter system and roadside ditches convey stormwater flows to large ditches. These large ditches are responsible for conveying the stormwater flows to the pump stations.

CONSIDERATIONS

The City should continue to improve their stormwater collection system capacity by upsizing inlets when older asphalt roadways in the study area are rebuilt. Utilizing low-impact development (LID) techniques can also help reduce stormwater runoff and drainage for new development.

Specific areas of the City, which are outside the limits of this study area, experience drainage challenges and street flooding during storm events. The City should consider strategic partnerships with industries that would benefit from the improvement of the stormwater collection system capacity and roadways in those areas.
Map 10: City of Texas City Existing Stormwater System Map of the Livable Centers Study Area
Planning for mobility and connectivity is an important way to develop infrastructure that influences and supports the development and character of the surrounding community. As Livable Centers aim to make walking, bicycling, and transit more convenient by concentrating multiple destinations, how people move around within and between those destinations is a key component for shaping the future of Texas City. Transportation projects that support walkable, multi-modal mixed use centers are key drivers for economic development, housing, and community health. Beyond the transportation infrastructure itself, the surrounding context is also important to invest in to create a desirable place that attracts residents and visitors. Pedestrian amenities, lighting and shade, surrounding land uses and activities, and wayfinding are all factors that help identify a sense of place and can encourage greater activity within the study area.

Texas City is known for its industrial and manufacturing businesses and recreational fishing opportunities. These uses have historically focused the transportation network on vehicle access through the study area, as opposed to people walking, biking, or using transit within the core of Texas City.

The City has begun emphasizing public facilities, walking, and biking with investments in the development of 6th Street, a community center with public art, bicycle and sidewalk facilities, and new schools. The study area is just under five square miles and includes multiple destinations and areas of interest, such as the Dike, 6th Street, multiple parks, including Heritage Square Park, and community facilities. This section analyzes the current conditions and use of roadways, sidewalks, bikeways, and the transit network, discuss mobility patterns, and identifies conditions that help create a sense of place in Texas City.
ACTIVE TRANSPORTATION

According to the Urban Land Institute (ULI), active transportation is primarily non-motorized transportation involving human-powered activities like walking and bicycling. Active transportation promotes a healthy lifestyle and provides environmental benefits. Additionally, investments in active transportation facilities can spur economic development by providing safe and comfortable access to destinations.

Assessing the extent and quality of these networks is crucial to understanding the current capacities and opportunities for active transportation within the Texas City study area. Texas City provides some sections of corridors with high quality sidewalks and bike facilities, but lacks consistency throughout the study area. This creates barriers and connectivity problems for those who do, or would like to walk or bike. As there are multiple schools within the study area, high quality facilities to walk and bike can be safe options for children going to school.

PEDESTRIAN ACCESS

The basis of a livable, vibrant area is a high quality pedestrian realm. Sidewalks provide crucial mobility and connectivity on a neighborhood and community level. As a result of infrastructure being built at different times with different standards, there is a wide range of sidewalk conditions within Texas City. Many neighborhoods are lacking sidewalks entirely, while some are provided only on one side the street. Some recent projects, such as the revitalization of 6th Street, have resulted in a higher quality pedestrian experience, while other streets, Texas Avenue for example, are in need of major sidewalk improvements. Sidewalk conditions along transit routes, and near some important destinations are depicted in “Map 11: Sidewalk & Ramp Conditions” on page 61 and are based on the sidewalk quality assessment criteria shown on the following page.
**SIDEWALK QUALITY ASSESSMENT**

The information below details the methodology for identifying sidewalk and ramp conditions. The colors are representative of the colors depicted on the following map.

**SIDEWALKS**

<table>
<thead>
<tr>
<th>Color</th>
<th>Description</th>
</tr>
</thead>
</table>
| Blue  | Exceeds Standard (Blue)  
A sidewalk exceeding five feet in width, with a smooth surface and no obstacles. |
| Green | Meets Standard (Green)  
A sidewalk with a minimum of five feet in width, with a smooth surface and no obstacles. |
| Yellow | Below Standard (Yellow)  
A sidewalk less than five feet in width, has low pavement quality, is impeded by light posts or trees, exceeds maximum slope requirements, or presents other challenges to the user. |
| Orange | Needs Replacing (Orange)  
A sidewalk with unacceptable pavement conditions, which present challenges to the user, and is in need of replacement. |
| Red   | Missing (Red)  
A location without a sidewalk. |

**CURB RAMPS**

<table>
<thead>
<tr>
<th>Color</th>
<th>Description</th>
</tr>
</thead>
</table>
| Green | Meets Standard (Green)  
A ramp meeting ADA requirements for slope and width, in good condition and oriented in the desired direction of travel. |
| Yellow | Below Standard (Yellow)  
A ramp that is too narrow or steep, in bad condition, or leads the user off of the desired travel path. |
| Orange | Needs Replacing (Orange)  
A ramp with conditions that present challenges for the user, and is need of replacement. |
| Red   | Missing (Red)  
A pedestrian crossing without a ramp connecting to the sidewalk. |
Map 11: Sidewalk & Ramp Conditions
BICYCLE FACILITIES

Safe bicycle facilities are important as they expand greatly the area a person can travel without using a car, and contribute to a healthy community. The study area in Texas City encompasses many neighborhood streets with low traffic volumes that provide a comfortable bikeway opportunities. Additionally, some hike and bike trails exist that begin to create a network. Texas City has some on-street bike facilities as well. These vary in quality as well as connectivity. Many are short segments that do not provide safe connections to destinations within the study area. This section evaluates the existing bike infrastructure in the Study Area. A map depicting existing bikeways within the study area are shown in “Map 12: Existing Bike Facilities” on page 65.

BICYCLE NETWORK

Texas City has some bicycle facilities that form the foundation of a safe and useful bicycle network. Currently, bike paths and routes, along easements and alleyways, provide contiguous north-south access near the center of the city and connect to the high school and other municipal destinations. Off-street bike paths along 5th and 13th Avenues provide access to schools and could provide east-west connections. 19th Avenue has a quality bike lane that serves as an east-west corridor through neighborhoods in the northern portion of the study area, and ties into other off-street paths located there. There is a short bike lane along 5th Avenue and 2nd street that is narrower than most standards recommend, and unfortunately the pavement condition is not safe for bicycling. East-west and north-south corridors that span the city need to be identified to create a safe network that serves all users.

There are currently no bicycle facilities in many neighborhoods, including the entire west side of the city, and minimal connectivity to the bike trails in the parks along the bay. Much of the study area is comprised of neighborhoods, mostly with roads laid out in a grid, making it possible to create many safe neighborhood bikeways.
RECREATIONAL HIKE AND BIKE TRAILS

East of Bay Street, just outside of the study area, is a series of parks connected by bike trails. The trails provide a comfortable opportunity to bicycle without the stress of vehicle traffic. There is a path along Bay Street with a service gap between 14th and 16th Avenues. A bridge is currently being constructed at this location that will connect the trail segments and remove the need to detour from the designated trail network.

Impact of Proposed Spine Trail

The impact of the primary spine trail along 9th Avenue was analyzed utilizing the Bayou Greenways Initiative (BGI) model developed by Marsh Darcy Partners. The BGI model is applicable to linear trail systems, and is therefore applicable to the linear trail proposed along 9th avenue from SH 146 to Bay Street (refer to “Map 18: Spines and Nodes Map” on page 93). The BGI model utilizes a validated method to predict trail users (commuters and recreational) and the benefits that accrue from those users utilizing the trail in lieu of vehicular modes of travel.

The model predicts a range of new users who will be induced to utilize non-vehicular modes of travel if a safe and convenient trail system is available for their use. Based on the study area population of 21,057, the model predicts a range of new induced trail users between 347 and 532 per day, with the moderate projection being 411 new daily users. The annual benefits, displayed in the table below, are calculated utilizing the moderate user projection of 411 new daily users.

<table>
<thead>
<tr>
<th>ANNUAL BENEFITS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>VMT Reduction - Commuters (miles)</td>
<td>31,962</td>
</tr>
<tr>
<td>VMT Reduction - Other (miles)</td>
<td>73,855</td>
</tr>
<tr>
<td>VOC, NOx, and CO2 Reduction (lbs.)</td>
<td>1,146</td>
</tr>
<tr>
<td>Recreational Value</td>
<td>$664,889</td>
</tr>
<tr>
<td>Health Benefits</td>
<td>$150,596</td>
</tr>
<tr>
<td>Vehicle Operating Savings</td>
<td>$53,967</td>
</tr>
<tr>
<td>Crash Reduction Benefits</td>
<td>$4,004</td>
</tr>
</tbody>
</table>

Source: Marsh Darcy Partners
**BICYCLE FACILITY TYPES**

The descriptions below identify the three main types of bike facilities. The colors correlate to the colors used in the map on the following page.

**BIKE LANE**
Dedicated on-street space for bikes separated from traffic with a white line.

**SHARED LANE/BIKE ROUTE**
A road shared by both motor vehicles and bicycles marked by “sharrow” pavement markings or “bike route” signs.

**NEIGHBORHOOD BIKEWAY**
Low speed, low volume residential street shared by motor vehicles and bikes. Marked with “bike route” signs.

**WALK/BIKE PATH**
Off-street facility shared by people bicycling and walking
Map 12: Existing Bike Facilities
TRANSIT

Convenient, easily accessible transit service can help reduce automobile usage and encourage walking or biking. Two transit routes serve the study area and can aid in improving access between destinations within the study area. Amenities for pedestrians are also essential to getting the greatest ridership. Bus stop shelters and pedestrian accessibility are vital to providing a good trip experience. Texas City has some high quality stops with bus shelters, as well as some stops with no amenities.

The Gulf Coast Center operates Connect Transit, the lone public transportation service in the Texas City region. There are seven fixed routes that provide year-round service. The base fare is $1.00, with a discounted rate of $0.50. In addition to Texas City, La Marque, Dickinson, San Leon, Bacliff and Kemah (seasonal) are covered by the system. Buses and vans operate on an hourly schedule during the week, and once every other hour on Saturdays. Transfer points, which are often located at grocery stores, provide an opportunity for riders to switch from one route to another in a timely manner. Routes are scheduled such that buses arrive at transfer points simultaneously, and drivers wait there until all buses have arrived, unloaded passengers, and loaded all transferring riders. There are two routes that operate within the study area: Texas City Green and Texas City Orange Route 1. These routes are shown in “Map 13: Transit Routes” on page 68.

TEXAS CITY GREEN ROUTE

The Green Route is a loop that covers many locations at the edge of the study area. Buses navigate the counter-clockwise loop operating mostly on Texas Ave, 6th Street, 25th Avenue N and make their way to the Kroger at the intersection of Highway 146 and Palmer Highway, where transfers are available to the San Leon/Bacliff Route and the Texas City
Orange Route 1. In fiscal year 2015, there were over 20,000 boardings along the loop, making it the third-most used route in the system. The majority of the route serves residential areas, along with jobs and industry along Texas Avenue. Transfers are available on the east end of the study area at Food King and just west of the study area at Kroger, both of which are on 9th Avenue and served by the Texas City Orange Route.

TEXAS CITY ORANGE ROUTE

The Orange Route 1 is an out-and-back route that serves 9th Avenue within the study area. The Orange Route is split into an eastern and western branches that connect near State Highway 3. Within the study area, the Orange Route serves many jobs, retail, and municipal destinations along 9th Avenue. In total, the orange routes had over 75,000 boardings in the 2015 fiscal year, equal to 45% of the total boardings in the entire system.

BUS STOPS

Connect Transit bus stops are marked with a sign on a post and provide a bench for seating. At many of the busier stops there are shelters with seating and trash cans. The Food King and Kroger transfer points in Texas City are unmarked and do not provide seating.

REGIONAL SERVICE

Island Connect provides service between Mall of the Mainland in Texas City and five employment areas in Galveston. There are four trips in both the early morning and afternoon. The fare is $2.00 in each direction, with discounted coupon books offered. The Mall of the Mainland Park and Ride can be accessed by the western portion of the Texas City Orange Route 1, just outside of the study area. Connect Transit also provides service to the Veteran’s Affairs Medical Center in Houston for $3.50 per trip.
Map 13: Transit Routes
The roadway network itself can be an opportunity or a barrier for creating a livable center depending on the level of connectivity in the street network. Many parts of the study area, across all census tracts provide a high level of connectivity with shorter blocks and connected streets, forming a grid network. Particularly in the southern and eastern sections exists opportunities to provide multi-modal connectivity for vehicles, bikes, and pedestrians.

Within the study area, roadways have varying widths and lanes that handle a wide range of traffic volumes. Map 13 on page 68 shows the roadway network with traffic control types at signalized and all-way stop intersections in the study area, along with traffic volumes on major roadways. Traffic volumes are higher in the western quadrants than the eastern quadrants. Wide pavement widths and high traffic volumes can present barriers for multi-modal access in these corridors.

Key corridors are identified based largely on their classification, travel volumes, or provide important connections to key destinations. Examination of key corridors provides information that identifies where current constraints and future opportunities exist. This information includes pavement widths, right of way widths, traffic volumes, sidewalks, bike routes, on-street parking. The following corridors were identified as key corridors to evaluate due to their usage, potential, and importance to Texas City:

- Bay Street
- 6th Street
- Palmer Hwy/9th Avenue N (FM 1764)
- Texas Avenue
- 25th Avenue (Loop 197 N)

The following pages identify more specific information pertinent to these key corridors.
Summary characteristics for these and other corridors within the study area are listed in Table 14: Summary Roadway Characteristics along with information such as roadway classification, number of lanes, turn lane, median if applicable. Additionally, existing right-of-way (ROW) is shown along with existing pavement width of the roadway itself. Examination of the ROW in conjunction with the pavement width helps identify where potential improvement opportunities for sidewalks, bikeways, and roadways may be viable. For example, 9th Avenue has a pavement width between 55 and 82 feet and a 115 foot right-of-way. This leaves approximately 60 to 30 feet, respectively, to invest in infrastructure that facilitates alternative modes of travel and amenities like trees and lighting. To determine the appropriate facility design, vehicle counts should be considered. Roadways with higher speeds and traffic volumes will need greater separation for bicycle and pedestrian facilities.

<table>
<thead>
<tr>
<th>STREET NAME</th>
<th>DIRECTION</th>
<th>FROM</th>
<th>TO</th>
<th>ROAD CLASSIFICATION</th>
<th>ROW (FT.)</th>
<th>PAVEMENT WIDTH (FT.)</th>
<th>LANES</th>
<th>MEDIAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAY ST</td>
<td>N - S</td>
<td>20TH AVE N</td>
<td>DIKE RD</td>
<td>I</td>
<td>115</td>
<td>45</td>
<td>4</td>
<td>NO</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DIKE RD</td>
<td>TEXAS AVE</td>
<td>I</td>
<td>115</td>
<td>45 - 35</td>
<td>2</td>
<td>NO</td>
</tr>
<tr>
<td>6TH ST</td>
<td>N - S</td>
<td>19TH AVE</td>
<td>11TH AVE</td>
<td>M</td>
<td>115</td>
<td>61</td>
<td>4</td>
<td>NO</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11TH AVE</td>
<td>TEXAS AVE</td>
<td>M</td>
<td>115</td>
<td>61</td>
<td>3</td>
<td>NOT CONTINUOUS</td>
</tr>
<tr>
<td>21ST ST</td>
<td>N - S</td>
<td>25TH AVE</td>
<td>TEXAS AVE</td>
<td>L</td>
<td>78</td>
<td>43</td>
<td>4</td>
<td>NO</td>
</tr>
<tr>
<td>25TH ST N / N LOGAN ST</td>
<td>N - S</td>
<td>25TH AVE</td>
<td>9TH AVE</td>
<td>I</td>
<td>45</td>
<td>42</td>
<td>4</td>
<td>NO</td>
</tr>
<tr>
<td></td>
<td></td>
<td>25TH AVE</td>
<td>TEXAS AVE</td>
<td>I</td>
<td>45</td>
<td>35</td>
<td>2</td>
<td>NO</td>
</tr>
<tr>
<td>25TH AVE (LOOP 197 N)</td>
<td>E - W</td>
<td>29TH ST</td>
<td>9TH ST</td>
<td>M</td>
<td>115</td>
<td>63</td>
<td>4</td>
<td>CENTER TURN LN</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9TH ST</td>
<td>BAY ST</td>
<td>M</td>
<td>115</td>
<td>23</td>
<td>2</td>
<td>NO</td>
</tr>
<tr>
<td>13TH AVE</td>
<td>E - W</td>
<td>21ST ST</td>
<td>15TH ST</td>
<td>L</td>
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<td>25</td>
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</tr>
<tr>
<td>14TH AVE</td>
<td>E - W</td>
<td>6TH ST</td>
<td>BAY ST</td>
<td>L</td>
<td>90</td>
<td>43</td>
<td>2</td>
<td>NO</td>
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<tr>
<td>16TH AVE</td>
<td>E - W</td>
<td>6TH ST</td>
<td>BAY ST</td>
<td>L</td>
<td>90</td>
<td>40</td>
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</tr>
<tr>
<td>PALMER HWY</td>
<td>E - W</td>
<td>TX 146</td>
<td>21ND ST</td>
<td>M</td>
<td>115</td>
<td>82</td>
<td>6</td>
<td>CENTER TURN LN</td>
</tr>
<tr>
<td>9TH AVE N</td>
<td>E - W</td>
<td>22ND ST</td>
<td>14TH ST</td>
<td>M</td>
<td>115</td>
<td>82</td>
<td>6</td>
<td>YES</td>
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<tr>
<td></td>
<td></td>
<td>14TH ST</td>
<td>10TH ST</td>
<td>M</td>
<td>115</td>
<td>60</td>
<td>4</td>
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<tr>
<td></td>
<td></td>
<td>10TH ST</td>
<td>6TH ST</td>
<td>M</td>
<td>115</td>
<td>69</td>
<td>4</td>
<td>CENTER TURN LN</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6TH ST</td>
<td>BAY ST</td>
<td>I</td>
<td>115</td>
<td>55</td>
<td>2</td>
<td>CENTER TURN LN</td>
</tr>
<tr>
<td>TEXAS AVE</td>
<td>E - W</td>
<td>29TH ST</td>
<td>6TH ST</td>
<td>M</td>
<td>115</td>
<td>62</td>
<td>4</td>
<td>CENTER TURN LN</td>
</tr>
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<td></td>
<td>6TH ST</td>
<td>3RD ST</td>
<td>I</td>
<td>115</td>
<td>62</td>
<td>4</td>
<td>NO</td>
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<td></td>
<td></td>
<td>3RD ST</td>
<td>2ND ST</td>
<td>I</td>
<td>115</td>
<td>45</td>
<td>2</td>
<td>NO</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2ND ST</td>
<td>BAY ST</td>
<td>I</td>
<td>115</td>
<td>26</td>
<td>2</td>
<td>NO</td>
</tr>
</tbody>
</table>

L = LOCAL ROADWAY  I = INTERMEDIATE ROADWAY  M = MAJOR ROADWAY

Source: City of Texas City
**NORTH-SOUTH STREETS**

**6TH STREET**

6th street is classified as a major north-south roadway connecting Loop 197 North in the north and Loop 197 South in the south. The segment of 6th Street between 19th Avenue and 11th Avenue is a four-lane roadway with a pavement width of 61 feet and right-of-way width of 115 feet. The segment of 6th Street between 11th Avenue and Texas Avenue is a two-lane roadway with a pavement width of 61 feet and right-of-way width of 115 feet. The roadway carries approximately 5,500 vehicles per day.

6th street is partially a state-controlled street with the mid-section controlled by Texas City. Major investment in this area is being undertaken to make it a revitalization district and tourist destination. The street elements on 6th Street are designed in a main-street fashion with wide sidewalks, curb bulb outs, and ample parking spaces. 6th Street houses a variety of small businesses, restaurants and the Texas Museum.

**BAY STREET**

Bay Street runs in the north south direction along the east side of the study area. Bay Street faces single- and multi-family residential areas and Roosevelt-Wilson Elementary on the west and Bay Street and Tarpey Parks on the east. Bay Street and Tarpey Parks have well-maintained amenities including lighted softball fields, batting cage, playgrounds, bike trails, restroom, parking, etc.

Bay Street is classified as an intermediate roadway with pavement width of 45 feet from 20th Avenue in the north to Dike Road in the south. The pavement width narrows to 35 feet south of Dike Road towards Texas Avenue. The number of lanes on Bay Street transition from four lanes to two lanes at the intersection of Dike Road. Bay Street’s total right-of-way equals 115 feet providing opportunity for future public realm improvements.

**EAST-WEST STREETS**

**TEXAS AVENUE**

Texas Avenue runs east-west extending from FM 1765 in the west to Bay Street in the east. Texas Avenue between 29th Street in the west and 3rd Street in the east is a four-lane roadway, with pavement width of 62 feet, between 3rd Street and 2nd Street it is a two-lane roadway with 45 feet of pavement, and between 2nd Street and Bay Street, Texas Avenue reduces to a two-lane roadway that is 26 feet wide. Texas Avenue consistently has a right-of-way width of 115 feet. Within the study area Texas Avenue carries between 15,000-9,000 vehicles per day.

The primary land use along Texas Avenue is for commercial with a variety of retail and commercial businesses. Beyond Texas Avenue to the south of the study area are several petroleum and petrochemical refineries. Inside the study area, to the north of Texas Avenue, is largely single-family residential properties.
25TH STREET (LOOP 197 NORTH)

25th Avenue (Loop 197 North) runs east-west and extends from North Amburn Road in the west to Bay Street in the east. The segment of 25th Avenue to the east of 31st Street and west of 9th Street in the study area is classified as a major roadway. This section is a four-lane road with a pavement width of 63 feet. The segment of 25th Avenue to the east of 9th Street and west of Bay Street is classified as a local roadway. This segment is a two-lane roadway, 23 feet wide. The full corridor has a total right-of-way of 115 feet. This corridor carries between 17,500 and 11,000 vehicles per day, approximately.

The Texas City Green Route, one of the two transit routes in the study area, runs along 25th Avenue. The 25th Avenue corridor provides access to a variety of land uses, including commercial and retail, single- and multi-family residential, parks, and Fry Intermediate School.

PALMER HIGHWAY/9TH AVENUE

9th Avenue runs east-west between 21st Street on the west and Bay Street on the east. 9th Avenue is an extension of Palmer Highway to the west of 21st Street. Combined, the Palmer Highway and 9th Avenue carry the heaviest volumes in the study area at approximately 23,500 vehicles per day. This corridor is the spine of Texas City, with a variety of land uses along it, including major commercial, retail centers, two major schools, parks, a convention center, and other institutional uses.

Palmer Highway within the study area is a 6 lane major roadway with a center turn lane. The Palmer Highway segment between 31st Street and 21st Street has a pavement width of 82 feet and a right-of-way width of 115 feet.

The segment of 9th Avenue between 21st Street and Bay Street has pavement widths varying between 82 and 55 feet. The number of lanes on this segment transitions from six lanes from west to east. The right-of-way width along this segment remains constant and is 115 feet. The street elements like median treatments, sidewalks, and streetscaping elements degrade in quality and width moving from west to east.
SCHOOL ACCESS

In the last five years, Texas City has made major investments in school infrastructure. Schools are a common destination for pedestrians with a range of ages and abilities. Sidewalk improvements surrounding schools, can provide students a safe, active transportation opportunity for getting to school, and begin to complete the sidewalk network in the greater community, including to destinations such as the community center, library, or parks.

There are eight schools within the study area. While the majority of the schools are bordered by quiet neighborhoods, there are often missing, or below standard sidewalks within those neighborhoods. Crosswalks and pedestrian signage surrounding some schools are poor, making the streets more dangerous for both pedestrians and vehicles. For example, the crosswalk from the neighborhood to Fry Intermediate School does not have a school crossing sign, reducing visibility and safety.

SAFETY

H-GAC provided information about crashes in the Texas City for the years 2010-2015. Over a five year period, there were a total of 1,209 crashes. Within the study area, higher crash rates were identified along roadways with higher traffic volumes. Fatalities were reported in 6 crashes within the study area. Additionally, there were 16 crashes that involved pedestrians, 2 of which were fatal, and 23 crashes involving bicyclists.

CRASH HOTSPOT LOCATIONS

The following intersections were identified as higher crash locations because they had at least 15 collisions between 2010 and 2015. Crashes were highest along Palmer Highway/9th Avenue N, but are not significantly high compared to similar roadway types statewide. The majority of crashes took place at intersections, with most taking place at signalized intersections. Map 15: Crash Hotspots depicts the areas of high crash locations within the study area. This indicates locations where safety improvements for pedestrians, bicyclists, and motorists can be focused.
Map 15: Crash Hotspots
COMMUTE BEHAVIOR

Most commuters who live in Texas City and the study area drive alone to get to their workplace. With 80% of commuters driving alone, commute patterns are similar to the Houston region (see Table 15: Mode Share). Carpooling is higher in Texas City than the overall region, but transit usage is less. The rest of the mode shares in Texas City are similar to the region, with walking being slightly less in Texas City. Shorter commute trips have a greater ability to be shifted to other modes if improvements include a mix of treatments and strategies that are designed with multiple modes in mind.

Examining where residents of the study area work, and conversely where people who work in the study area live, gives insight to potential projects and strategies that may be of most use and have the greatest impact on travel mode options. This information combined with an analysis of overall travel patterns and destinations provides an understanding of the existing conditions that contribute to mode shares for the study area. Map 16 and Map 17 show some of this information through Journey to Work data. This data shows a significant number of people who live in the study area also work within the study area. The top employment locations are in the southern and western sections of the study area and contain retail and service businesses, schools, and City facilities.

Overall, the data shows that people who live in the study area are most likely to work in Galveston, the northern part of Texas City, and within the study area. People who work in the study area are most likely to live within the study area, particularly the northeast section, and within the northern part of Texas City.

<table>
<thead>
<tr>
<th>MODE</th>
<th>TEXAS CITY</th>
<th>HOUSTON</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>DRIVE ALONE</td>
<td>80%</td>
<td>76%</td>
</tr>
<tr>
<td>CARPOOL</td>
<td>15%</td>
<td>11%</td>
</tr>
<tr>
<td>TRANSIT</td>
<td>1%</td>
<td>5%</td>
</tr>
<tr>
<td>WALK</td>
<td>2%</td>
<td>5%</td>
</tr>
<tr>
<td>BIKE</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>WORK AT HOME</td>
<td>1%</td>
<td>1%</td>
</tr>
</tbody>
</table>
Map 16: Where People who Work in Texas City Live

Where people who work in Texas City live

0-3  4-25  26-60  61-110  111-250  250+

The number of people employed in the study area who live in each census tract.

Distance and direction study area employees commute from home
Map 17: Where People who Live in Texas City Work

- **Where people who live in Texas City work**
  - 0-3
  - 4-25
  - 26-60
  - 61-110
  - 111-250
  - 250+

- The number of people living in the study area who work in each census

**Distance and direction study area residents commute to work**
Heritage Square Park parking lot

Angled parking along 6th Street

PARKING

Parking on one or more sides of a road is permitted on most neighborhood streets with sufficient capacity available for needs of residents. 9th Avenue east of 10th Street has on street parking spaces. There is ample parking available on 6th Street in the form of angled parking and parallel parking. Off-street parking is also abundant within the study area.

Currently, the overall supply of parking throughout the study area is greater than what is being utilized on an average day based on visual observation. However, parking demand for special events and visitors provides a need to ensure current and future parking demand is accounted for and managed. Balancing appropriate parking availability with infrastructure and land uses that encourage active modes of transportation is key to a viable Livable Center that attracts visitors.

As Texas City continues to redevelop, parking supply should be monitored. Providing high quality pedestrian and bicycle facilities are key ways to manage parking demand while encouraging activity and redevelopment. Other strategies, such as shared parking facilities, reduced parking requirements, flexible parking standards, and overflow parking are options that can be evaluated in the future.

Strategies for addressing parking will vary based upon the specific land uses that develop and the associated transportation modes serving the particular areas (i.e. are there bike lanes and parking, good sidewalk connections, and/or transit service). It is not possible to identify the specific criteria that should be utilized at this point for a high-level conceptual plan. As the City works with developers towards redevelopment of the activity nodes, they should think about parking at an nodal-level opposed to individual developments only. Establishing guidelines/requirements for developers will help ensure not too much space is dedicated to parking. Parking is actually very expensive and costs developers money so many times they can make better use of space and make more money by not having to have a high quantity of parking. This only works though if parking is thought about holistically and emphasis on alternative modes is provided.

There are multiple resources that can be utilized to help identify appropriate strategies, they are:

- The Victoria Transport Policy Institute (http://www.vtpi.org/tdm/tdm72.htm)
- The Deleware Valley Regional Planning Commission (http://www.dvrpc.org/reports/MIT006.pdf)
SENSE OF PLACE

A sense of place is defined by a particular character, look, and heritage that are not found in other locations. A location that has a sense of place is inviting and encourages people to linger, walk around, and go to multiple businesses or attractions. People will be tempted to do this if a place is comfortable, safe, attractive, and interesting. Elements such as the overall image of the area, lighting, shade, and ease of navigation through wayfinding are important considerations when identifying potential improvements.

WAYFINDING

Informational signage and schematic maps are common wayfinding methods used to guide tourists and visitors to key destinations. Wayfinding can be utilized not only for route guidance, but to increase the visibility of Texas City and its character that lead to creating a sense of place within the city.

Texas City currently has wayfinding signage that directs visitors to common destinations. This signage is typically placed within an overall theme that reflects the character of the city and identifies Texas City consistently.

There is opportunity to provide additional wayfinding maps and signs to guide unfamiliar people and tourists to popular destinations, including the following:
- 6th Street
- Texas Museum
- Historic Square Historical Homes
- The Dike and surrounding park area
- Bike Trails along Bay St/Parks/Bird Sanctuary

IMAGE

The image of Texas City within the study area is greatly variable. Housing, commercial spaces, and public amenities include differences in both age, design, and architecture style. The City has attempted to incorporate within the design of new infrastructure elements that create the feeling of “small-town charm.” In areas where this new infrastructure exists, such as 6th Street and 9th Avenue, the streets begin to feel more walkable and reflect a style that feels more comfortable and inviting than other places within the study area, particularly those with older infrastructure or higher volumes of traffic.

LIGHTING AND SHADE

Pedestrian scale lighting and shade are significant factors that affect the comfort level of pedestrians and contribute to achieving a sense of place where people want to be. Lighting impacts the feeling of comfort and safety in an area. Where investments have been made in the pedestrian realm, pedestrian scale lighting is more prevalent within the study area.

While lighting is particularly key in the evening, shade is essential during the day to feel comfortable outside. There are many roadways lined with large trees that provide substantial shade, these roadways are typically within neighborhoods where the pedestrian facilities, such as sidewalks and lighting, are many times missing or of poor quality. Incorporating shade into areas with enhanced pedestrian facilities, and investing in corridors with high levels of shade are potential strategies to capitalize on existing assets within the study area.

Texas City’s Historic 6th Street

The City of Texas City has designated and rezoned 6th Street as a Revitalization District to further the goal of developing this historic street into a regional entertainment destination. In the years following its’ classification, 6th Street has undergone a remarkable transformation through investments by community stakeholders, including the City, existing businesses and new businesses. There have been many improvements made to the area, such as new streets and sidewalks, vintage-style light posts, esplanades, landscaping, trees, unique signage, and awnings, that all contribute to the pre-1950s charm that is envisioned for the area.
Shaded sidewalk on 6th Street

Wayfinding sign on 2nd Street at Texas Avenue

Public art along bike trail

Wayfinding map at the Dike

Pedestrian scale lighting and wide sidewalks on 9th Avenue
2 | GUIDING PRINCIPLES & CONCEPTUAL APPROACH
GUIDING PRINCIPLES

Development of a Livable Center and plan to successfully achieve the desired outcomes requires a thorough understanding of both the City’s goals and needs, as well as the desires and priorities of the community. The first step to creating an implementable plan for Texas City that will transform the study area into a unique area with economic, housing, and recreation opportunities, is to develop guidance that takes into account what is needed, desirable, and possible to achieve. As implementation and funding opportunities are crucial to any plan, it is also appropriate to consider the Housing and Urban Development (HUD) standard livability principles and general goals of the Livable Centers program as they are important to address for future funding consideration. The Texas City Livable Center Study generated five guiding principles that represent a synthesis of the priorities, needs, goals, and principles from the above-mentioned sources. These five guiding principles shown on the following page establish the foundation of the conceptual approach and the development of recommendations made in this study.

- **Public & Stakeholder Input**
- **HUD Livability Principles**
- **Livable Centers Goals**
- **Texas City Goals**

**GUIDING PRINCIPLES**
<table>
<thead>
<tr>
<th></th>
<th>Guiding Principles</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Develop a framework for the development of unique, multimodal, and mixed-use areas</td>
</tr>
<tr>
<td>2</td>
<td>Provide safe, multimodal transportation options that connect people to employment, recreation, and activity centers</td>
</tr>
<tr>
<td>3</td>
<td>Increase opportunities for economic development while maximizing the City’s return on investment</td>
</tr>
<tr>
<td>4</td>
<td>Expand recreation and tourism opportunities by leveraging existing and unique natural and community assets</td>
</tr>
<tr>
<td>5</td>
<td>Develop a framework for maintaining and improving quality housing options within the community</td>
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</table>
HUD LIVABILITY PRINCIPLES

The HUD Livability Principles were established to act as a foundation for inter-agency coordination in a national effort to build more sustainable and livable communities. The six principles are:

- **Provide more transportation choices** to decrease household transportation costs, reduce our dependence on oil, improve air quality and promote public health.

- **Expand location- and energy-efficient housing choices** for people of all ages, incomes, races and ethnicities to increase mobility and lower the combined cost of housing and transportation.

- **Improve economic competitiveness of neighborhoods** by giving people reliable access to employment centers, educational opportunities, services and other basic needs.

- **Target federal funding toward existing communities** – through transit-oriented and land recycling – to revitalize communities, reduce public works costs, and safeguard rural landscapes.

- **Align federal policies and funding** to remove barriers to collaboration, leverage funding and increase the effectiveness of programs to plan for future growth.

- **Enhance the unique characteristics of all communities** by investing in healthy, safe and walkable neighborhoods, whether rural, urban or suburban.

LIVABLE CENTER GOALS

As discussed in *Part I, Existing Conditions*, the Livable Centers initiative is a strategy within the Regional Transportation Plan that aims to bring together land use and transportation decisions to generate safe, walkable places that allow users to live, work, and play within a single area. Though the goals of a Livable Center were established almost five years before the HUD Livability Principles, there is significant alignment between the two sets of goals. The goals of a Livable Center are:

- Engaging the community and building capacity of study participants

- Creating walkable, mixed-use places

- Improving environmental quality, including preserving and creating open spaces

- Increasing economic development and revitalization

- Increasing the sense of identity and community and preserving history and culture
TEXAS CITY GOALS

Prior to this study, the City of Texas City had identified a number of desired goals directed at improving the livability of Texas City to attract new and retain existing populations, improve the quality of life for residents, and generate economic development opportunities. Many of the goals established by the City directly relate to and further the goals of a Livable Center within the study area. The previously established goals are:

- Improve property values to achieve a better “return on investment” on existing infrastructure
- Promote infill development and redevelopment of under-utilized parcels
- Identify additional pedestrian linkages for the trails plan
- Prioritize trail segments and possible funding sources
- Improve ease of local shopping by residents
- Identify methods to expand use of transit to increase economic activity
- Connect residents to employment and retail centers
- Identify owner-occupied versus rental properties
- Encourage home ownership
- Develop vacant land
- Re-develop substandard housing
- Improve economic activity within the study area
- Attract young professional families
- Improve schools
CONCEPTUAL APPROACH

The recommendations made in this Study were generated using a multi-dimensional, conceptual approach. The project team developed the conceptual approach by recognizing the market-based potential and community desire, then addressing both by turning the focus of the recommendations to investments made through catalyst redevelopment projects. The approach for this study’s recommendations is to improve the study area, one project at a time.

The conceptual approach seeks to leverage and build upon the City’s existing assets by focusing on the areas with the most development opportunity. Encompassing approximately 4,007 acres, the Study Area is very large and faces a variety of unique challenges that differ from one quadrant to another. Because of the variable challenges faced across such a large study area, a nodal approach was implemented so that focus could be given to catalytic improvements applied in and around existing community assets at key intersections that, if successful, will build a foundation from which future efforts can succeed. Nodes are defined as “integrated centers of activity, points where one corridor crosses another, such as the intersection of two streets or a street and a river.” By virtue of their concentrated configuration and high potential for synergy, node-oriented recommendations are both easier to implement and conducive to catalyzing future successes.
Nodes are destinations where design improvements could be used to attract visitors and residents into the study area for recreation and entertainment purposes, as well as encourage new development and investment in the local economy. The nodes identified along 9th Street, in the heart of the study area, are ripe for increasing economic and commercial activities, pedestrian traffic, and recreation. Focus shall be given to implementation of catalyst projects and initiatives at key intersections that are connected by major corridors (spines), and enhancing the utilization of the waterfront and dike areas as main attractions.

Each node has a specific character that is unique to its location and function within the study area. The spines are meant to link the nodes and provide critical connections to and from destinations for pedestrians, cyclists, transit users, and motorists. The nodal approach affords each intersection and surrounding area the ability to raise density and achieve multi-functionality, along with increased reliance on public transit, walking and cycling, rather than automobile. Each node is described in greater detail in the following sections.
SPINES AND NODES

After consolidating the results of the physical analysis, market assessment, and stakeholder involvement, the opportunities and challenges to redevelopment in the study area were carefully analyzed. Targeted locations and programs were assembled to create a series of recommendations. These projects are intended to display real potential for new investment in the study area. As the market embraces the spine-and-node concept, small modifications will likely occur to their programming and basic designs, but the general layout is meant to induce a strong physical identity that will strengthen the Livable Center.

The Study identifies four node areas and six roadway spines (refer to “Table 1: Population and Households, 2000 to 2015” on page 21) where the current transportation network will best support successful implementation; they are:

- 9th Avenue (spine)
- Bay Gate (node)
- 31st Street and 29th Street (spines)
- City Central (node)
- 21st Street (spine)
- 6th Street Urban Village (node)
- 6th Street (spine)
- Bayside District (node)
- Bay Street (spine)
Map 18: Spines and Nodes Map
BAY GATE NODE

The Bay Gate node is located 9th Avenue N between 36th Street N and 34th Street N. The Bay Gate is the ideal gateway into the study area and is designed to provide a visual and physical transition from the fast-passed, auto-centric development along State Highway 146 to a place of commerce with unique destinations. The Bay Gate will provide a welcoming presence to visitors and signal to drivers to slow down upon entry into the study area, where pedestrian-orientated developments and streetscapes begin.

The Bay Gate node will include a monument sign, as well as other elements of wayfinding, crosswalk enhancements, bridge enhancements, landscaping and lighting, as well as the optimization of the existing median to enhance the sense of arrival. It is here that the wayfinding signage and design themes within the nodes and spines will first be introduced, communicating to visitors that important destinations are located ahead, drawing potential new users and visitors further into the study area.

CITY CENTRAL NODE

The City Central node boundaries are 21st Street N to the west, 14th Street N to the east, 13th Avenue N to the north and 5th Avenue N to the south. The City Central node encompasses several important uses, including the City Hall, fitness center, Texas City High School, Kohfeldt Elementary School, and Blocker Elementary School. This node is the epicenter of the City’s major civic functions and is the seat of local government, making it a major destination for residents and visitors. Being located adjacent to several TCISD campuses provides opportunities for family-oriented goods and services, as well as housing options located within the adjacent blocks. The City Central node is civic-oriented destination with the potential for lively and vibrant streetscape activities. Redevelopment and reinvestment in existing commercial and retail establishments along 9th Avenue N will contribute to the streetscape atmosphere and capitalize on daytime users that work within the node, as well as attend school and to business at City Hall. The Doyle Convention Center boasts a large open greenspace that buffers the buildings from the roadway, serves as a front-yard entry to the complex; though aesthetically pleasing, this area does not fully utilize nor attract people to the space. It is recommended that the front lawn be better utilized to make the area feel less vacant—for example, installing rotating art displays (perhaps through a student/TCISD partnership), public gardens related to birding or butterflies, hosting live music events, or summer movie nights on the green. All of these events seek to attract users to the space and create a pedestrian-friendly environment for the users of the civic complex and the surrounding schools.

36.6% OF RESIDENTS SOMETIMES USE THE HIKE AND BIKE TRAILS OR PATHWAYS, AND PARKS.

Source: Texas City Livable Center Online Survey

36% SHOP OR DINE IN THE STUDY AREA ONE TO TWO TIMES A WEEK, AND 27% DAILY.

Source: Texas City Livable Center Online Survey
6TH STREET URBAN VILLAGE NODE

The 6th Street Urban Village node is located between 11th Avenue N and 3rd Avenue N, and 7th Street N and 5th Street N. This area is unique in that major improvements were recently constructed along 6th Street to include enhanced sidewalks, lighting, street trees, landscaping, pole banners, and pedestrian furniture. The improvements are a great start to building this area into a vibrant mixed use node. The character of this node is a Main Street-downtown feel with a walkable core. There are several successful businesses already, which incorporate retail and commercial uses with residential units above them. This area is uniquely suited to maintain the low-intensity commercial uses and office spaces that transition nicely into the residential neighborhoods in surrounding blocks.

It will be important to maintain connectivity from 6th Street to adjacent blocks by incorporating enhanced crosswalks that include streetscape landscaping, aesthetics, and amenities like benches, trash receptacles and wayfinding signage. This area should continue to expand upon the existing vertical mixed uses that exist along the street, as well as incorporate special events that showcase the investments and unique character that exist at this node.

BAYSIDE DISTRICT NODE

The Bayside District node is meant to capitalize on the existing dike and visitors, where visitors have an unencumbered view of the Texas City dike and Galveston Bay. The city-owned property located along the levy is ideal for recreational uses, including marinas, hotels, RV parks, restaurants, live music venues, and for hosting special outdoors events and competitions. Because there is limited infrastructure in existence on the dike today, it is a major recommendation of this plan to expand the utilization of the entire waterfront from 3rd Avenue N to 25th Avenue N.

This area is a distinct recreational asset that provides a one-of-a-kind opportunity to develop into a destination that could potentially attract regional users for extended periods of time. Ideas generated during the process included a high-end resort recreational vehicle (RV) park with rent-able cabins, beach access, a zip-line installation over the levy with uninhibited views of the Bay, and destination retail and restaurants that cater to waterfront users and dining experiences.

The Texas City dike also boasts a segment of the hike and bike trail that could potentially connect to other trail segments and allow residents to easily get to the dike. Generating interest at the Bayside District node will also provide the City with the opportunity to capture and divert existing dike users back into the study area and into other Texas City venues—further capturing the economic benefits of this asset.

36.8% OF RESIDENTS OFTEN VISIT THE DIKE, WHILE 41.3% SAID THEY SOMETIMES VISIT IT.

Source: Texas City Livable Center Online Survey
3 | IMPLEMENTATION PLAN

OVERVIEW
RECOMMENDATIONS
COST ESTIMATES
OVERVIEW

Based on the existing conditions, input from the committee, citizens and City staff, and professional insight, an implementation plan was developed to provide strategies and action items to guide the process of implementing key recommendations. The recommendations on the following pages are key to establishing the vision developed during the planning process, and provides detailed steps to achieving them. City staff and other key organizations should review these recommendations on a yearly basis, to measure their success, and determine available funding for implementation.

Each recommendation is associated with an information box, similar to the sample below, stating the recommendation goal, its relationship to the livable center principles, implementation strategies, potential partnerships and funding sources, and recommendation action items. Recommendations are also described in detail, along with supporting documentation. Recommendations are in no particular order, but some have already been identified as priorities. Cost estimates for key recommendations immediately follow.

Each recommendation is prefaced with a detailed description of the project and its purpose, introducing the recommendations that follow.

RECOMMENDATION ACTION ITEMS
The term Bayfinding was coined during the planning process to describe a strategically placed and purposefully designed family of signage that guides residents and visitors through multiple modes to key points of interest—most notably, Galveston Bay. Signage can add visual interest and contribute to an individual's sense of place within an area, but signage also communicates important information and visual cues to pedestrians, cyclists, transit, and automobile users. Bayfinding is meant to brand and differentiate each node and district, while connecting neighborhoods and destinations.
RECOMMENDATIONS:

1.1 DESIGN AND DEVELOP THE BAY GATE, a gateway node to the Livable Center along 9th Street between 34th Avenue and 36th Avenue. Gateways are designed to promote awareness and a sense of arrival into a special place, this being the Livable Center study area, helping drivers to transition from auto-oriented services and roadways to more pedestrian- and commerce-oriented environments. Gateways typically include large monument signs, but they can also boast streetscape enhancements, wayfinding signage, and crossing enhancements that lead visitors to other destinations within the study area.

The purple box in “Map 11: Sidewalk & Ramp Conditions” on page 61 indicated the location of the recommended crossing enhancements over the drainage culvert on 9th Street. The photos, above and to the right, are examples of what the crossing enhancements could look like and how they could add character to the streetscape surrounding the Bay Gate.
Map 19: Bayfinding Signage Key Map

- **Welcome Sign**
- **Information Sign**
- **District Marker Sign**
- **Wayfinding Sign**
- **Digital Sign**

Note: Destination signs are recommended for all public facilities, schools and parks.

- **Signage Map**
- **Continuous Bayfinding Improvements**
- **District Boundaries**
- **Crossing Enhancements**

- **Study Area**
- **Parks**
- **Water**
- **Streets**

- **N Logans Street**
- **Skyline Drive**
- **10th St N**
- **11th St N**
- **12th St N**
- **13th St N**
- **14th St N**
- **15th St N**
- **16th St N**
- **17th St N**
- **18th St N**
- **19th St N**
- **20th St N**
- **21st St N**
- **22nd St N**
- **23rd St N**
- **24th St N**
- **25th St N**
- **26th St N**
- **27th St N**
- **28th St N**
- **29th St N**
- **30th St N**
- **31st St N**

- **Commercial Corridor Improvements**
- **Phase 1**
- **Phase 1B**
- **Phase 2**

- **Central City Urban Village**
- **Bay Gate**
- **Bayside**

- **Texas City Dike**
- **Texas Ave**
- **11th Ave N**
- **10th Ave N**
- **9th Ave N**
- **8th Ave N**
- **7th Ave N**
- **6th Ave N**
- **5th Ave N**
- **4th Ave N**
- **3rd Ave N**
- **2nd Ave N**
- **1st Ave N**

- **Texas City High School**
- **Blocker Middle School**
- **Kohfeldt Elementary School**
- **Northside Elementary School**
- **Kohfeldt Elementary School**
- **Roosevelt Wilson Elementary School**

- **Heritage Square**
- **Historic 6th Street**
- **Skylines**
- **Commercial Corridor**
- **Improvements**

- **Study Area Welcome Sign**
- **Information Sign**
- **District Marker Sign**
- **Wayfinding Sign**
- **Digital Sign**
1.2 IMPLEMENT A BRANDING AND SIGNAGE DESIGN MASTER PLAN

that sets standards for the design and implementation of wayfinding signage throughout the Livable Center and surrounding community. The Master Plan will ensure that the wayfinding signage placed along streets and sidewalks will be coordinated with the signage on the hike and bike trails, as well as across the districts and nodes. Design signage themes that relate to the character and identity of each node and spine, visually differentiating and providing critical information about each area. A Request for Qualifications (RFQ) could be published to solicit design teams and partners interested in developing the Branding and Signage Design Master Plan, including signage designs and district themes.

Wayfinding signage should be kept simple to avoid confusion and maintain clarity—there should be no more than three to four arrows per sign to prevent visual clutter. Signage should be incorporated into all major districts, at all important municipal buildings, and key destinations. Since a major strategy of the wayfinding program is to lead visitors and residents to the Bay, an arrow should always be pointing to the Bay on all directional signage and information signage. The purpose of Bayfinding is to reinforce the character and identity of the nodes and districts, and to help brand these areas as unique destinations.
## District Markers

<table>
<thead>
<tr>
<th>6th Street District</th>
<th>Bayside District</th>
<th>City Center District</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="6th Street District sign" /></td>
<td><img src="image2" alt="Bayside District sign" /></td>
<td><img src="image3" alt="City Center District sign" /></td>
</tr>
<tr>
<td><img src="image4" alt="Pattern detail" /></td>
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<td><img src="image6" alt="Pattern detail" /></td>
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<tr>
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<td><img src="image9" alt="Front view" /></td>
</tr>
<tr>
<td><img src="image10" alt="Back view" /></td>
<td><img src="image11" alt="Back view" /></td>
<td><img src="image12" alt="Back view" /></td>
</tr>
</tbody>
</table>
## Wayfinding Signs

<table>
<thead>
<tr>
<th>6th Street District</th>
<th>Bayside District</th>
<th>City Center District</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Signage" /></td>
<td><img src="image2" alt="Signage" /></td>
<td><img src="image3" alt="Signage" /></td>
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<td><img src="image11" alt="Signage" /></td>
<td><img src="image12" alt="Signage" /></td>
</tr>
</tbody>
</table>

**Front**

**Back**
CITY CENTRAL NODE

Generate a civic-oriented atmosphere around the municipal core with supporting infill development, of the community that integrates the surrounding school campuses into the civic destinations.

LIVABLE CENTER PRINCIPLES: 1 2 3 4 5

IMPLEMENTATION STRATEGIES:

- Perform zoning diagnostic to ensure that zoning allows the uses shown in the concept plan; including a variety of housing types and commercial uses.
- Seek public/private partnerships that can help to optimize resources and facilitate infill/redevelopment.
- Implement Bayfinding.
- Maintain/enhance the functionality of civic and commercial uses with sensitivity to integration with adjacent neighborhoods.
- Utilize the greenspace/front lawn of the Doyle Convention Center to encourage pedestrian activity and circulation.

POTENTIAL PARTNERSHIPS: DEVELOPERS, BUSINESSES, NON-PROFIT ASSOCIATIONS, TEXAS CITY INDEPENDENT SCHOOL DISTRICT (TCISD), TEXAS CITY ECONOMIC DEVELOPMENT CORPORATION (TCEDC)

POTENTIAL FUNDING SOURCES: CAPITAL IMPROVEMENT PROJECTS, GRANT FUNDING, PUBLIC-PRIVATE PARTNERSHIPS (E.G. PARTNER WITH LOCAL BUSINESSES)

The City Central node, as shown in “Map 19: Bayfinding Signage Key Map” on page 101, is meant to showcase and integrate the civic functions of the City with the surrounding retail, open space, and neighborhoods. The City Central node is meant to be civic-oriented with a variety of small, street-oriented retail sites situated along 9th Street. Redeveloping the block with buildings oriented to both 9th Street and 21st Avenue helps establish a more urban edge and building form directly adjacent to the City Hall, marking a clear departure from the existing suburban form of development along 9th Street.

According to the market study, the study area has a growing population of older persons and a demand for multifamily residential units like townhomes. The conceptual plan, as seen in Map 20 on page 107, includes a portion of the site to be designated as residential, specifically for senior housing options like an assisted living facility or townhome units. A linear greenspace and centralized pavilion are proposed through the center of the site to provide event space and buffer the proposed residential units from existing retail spaces and proposed flex spaces. On the whole, this block and its proposed design start to function as a mixed-use complex where office users and visitors can easily walk to access goods and services on blocks both north and south of 9th Street. Providing strong edge treatments near the main entrances from the civic core help to denote a sense of place and importance, while remaining inviting to students and residents accessing these destinations by car, bicycle, or on-foot.
RECOMMENDATIONS:

2.1 PERFORM A ZONING DIAGNOSTIC TO ENSURE THAT ZONING PROMOTES MIXED-USE DEVELOPMENT, including a variety of housing types and densities. The conceptual plan proposes higher density housing options that are suitable for both younger and older populations, as well as flex space that can be transformed based on future market demands. Housing options are limited for a population that is aging and thus, it is a critical element of this study to incorporate retail, office, restaurant, and housing that is accessible to all populations. It will be necessary to ensure that the City’s current regulations do not hinder these land use types or densities.

2.2 SEEK PUBLIC-PRIVATE PARTNERSHIPS THAT CAN HELP TO OPTIMIZE RESOURCES AND FACILITATE INFILL/REDEVELOPMENT. The City must employ a multi-tool approach that includes multiple strategies, funding sources and partners in order to achieve the desired results. The City must continue to invest in public-born actions to help prepare larger development landscape for private investment (i.e. circulation enhancements). Public actions can also be conducted simultaneously with private investment to induce the desired development form, pattern and density shown in the conceptual plan (i.e. creating Tax Increment Reinvestment Zones for infrastructure/site improvements or applying for new market tax credit allocations). Together, public and private entities can create generate incentives that reduce the risk of project development to involved parties (i.e. tax abatements or other development incentives).
2.3 MAINTAIN AND ENHANCE THE FUNCTIONALITY OF CIVIC AND COMMERCIAL USES, WHILE MAINTAINING SENSITIVITY TO INTEGRATION WITH ADJACENT NEIGHBORHOODS. The proposed crosswalks and streetscape enhancements along 9th Avenue and 21st Street will connect the existing neighborhoods and TCISD campuses to the proposed site, as well as provide safe access to civic uses located across 9th Avenue. Creating a linear greenspace provides a buffer between the proposed housing units and retail uses, while simultaneously providing a gathering space for residents and users to interact. This linear greenspace visually links the front-lawn of the Doyle Convention Center and lends itself to dual programming and shared events. Creating a linear gathering space that connects across 9th Avenue, like the one depicted in the conceptual plan, reinforces walkability and accessibility within the civic core and heart of the study area.

2.4 IMPLEMENT BAYFINDING SIGNAGE at key intersections along 9th Avenue, as well as along the 21st Street spine and within the site to give visitors a sense of place and encourage them to discover other destinations within the study area. District signage, wayfinding signage, and informational signage should be located along 9th Avenue, from 21st Street to 14th Street—specific locations for such signage are identified on Map 19 on page 101.
2.5 UTILIZE THE GREENSPACE/FRONT-LAWN OF THE DOYLE CONVENTION CENTER TO ENCOURAGE PEDESTRIAN ACTIVITY AND CIRCULATION. This space is ideal for programming special events, local art installations, and maintaining cooperative use of the public open spaces with local organizations and businesses. Programming and rotating installations encourage community involvement, attract visitors into the site, and encourage discovery and interaction at the core of the node.
6TH STREET URBAN VILLAGE NODE

Continue to expand upon 6th Street improvements and the urban, main-street character of the 6th Street Urban Village by maintaining a walkable core that encourages unique, pedestrian-oriented local businesses and social interaction among residents.

LIVABLE CENTER PRINCIPLES: 1 2 3 4 5 6 7 8 9 10

IMPLEMENTATION STRATEGIES:

- Expand upon the improvements made to 6th Street by extending streetscape treatments and making additional enhancements.

- Perform zoning diagnostic to ensure that zoning promotes mixed-use development, as shown in the concept plan, and includes a variety of housing types and higher densities.

- Maintain marketing database to facilitate infill/redevelopment in surrounding area.

- Seek public-private partnerships to leverage assets and seek opportunities for development and redevelopment.

- Implement Bayfinding.

POTENTIAL PARTNERSHIPS: DEVELOPERS, BUSINESSES, NON-PROFIT ASSOCIATIONS, TEXAS CITY INDEPENDENT SCHOOL DISTRICT (TCISD)

POTENTIAL FUNDING SOURCES: CAPITAL IMPROVEMENT PROJECTS, GRANT FUNDING, PUBLIC-PRIVATE PARTNERSHIPS (E.G. PARTNER WITH LOCAL BUSINESSES)

The 6th Street Urban Village node, as seen on “Map 19: Bayfinding Signage Key Map” on page 101, is a catalyst conceptual plan that aims to build off of the successes of the recent 6th Street Streetscape Enhancements. Improving access and aesthetic appeal along these corridors have attracted economic development and revitalization efforts from 9th Avenue to 7th Avenue. This conceptual plan calls for the extension of roadway and crosswalk enhancements along blocks and intersections adjacent to 6th Street, enhancing connectivity and aesthetic appeal in order to attract reinvestment and infill development to surrounding blocks.

Higher density housing units, such as workforce housing for teachers, civil servants, or industrial laborers, is recommended to be tucked behind loft office and retail space facing 6th Street. A pedestrian pocket park or public courtyard is proposed to create a link between new housing and infill retail and office uses facing along 6th Street N. An urban-style streetscape with buildings oriented toward the street, and street trees and landscaping along sidewalks would encourage a walkable environment for residents and users of the retail and office space. Depending on constraints of land assembly and financing, this development concept may be phased such that the properties north of 7th Street may develop initially, and the properties south of 7th Street may develop afterwards.
RECOMMENDATIONS:

3.1 EXPAND UPON THE IMPROVEMENTS MADE TO 6TH STREET by further enhancing the streetscape between 9th and 7th Avenues first. As development continues to occur along 6th Street, implement additional street enhancements between 5th Street and 6th Avenue. Additional street enhancements can include trash receptacles, curb bulb-outs, landscaping, benches, bike racks, patterned intersections, street trees, and lighting.

The existing median’s appearances should be updated with larger trees, mass planting beds and banners on existing light poles. Sites can be improved with the inclusion of landscaping along front setbacks to screen parking lots from direct, parking lot trees, repaved surfaces, and freshly painted striping.
3.3 UPDATE, PREPARE, AND MAINTAIN MARKETING AND INCENTIVE PACKAGES. The City, in collaboration with the 6th Street Business Association, will be responsible for maintaining a marketing database of all available properties and economic development incentives for the purpose of seeking public-private partnership opportunities in an effort to recruit restaurant and boutique retail to this area.

The City should also update its CIP database or rankings to align with Livable Center projects, ensuring timely implementation and measurable progress. This information is valuable to developers and real estate brokers in predicting future development/redevelopment opportunities and determining locations.

3.4 PERFORM A ZONING DIAGNOSTIC AND MAKE RECOMMENDED REGULATORY UPDATES. A critical first step for both public and private interest is to make certain the regulatory environment is in place to promote the recommendations of this Livable Center Study. At a minimum, early action items should include policy updates to the Future Land Use Map, Master Thoroughfare Plan, and Design Guidelines to incorporate recommendations.
BAYSIDE DISTRICT

Generate an appealing recreation-oriented regional destination that utilizes and builds upon the Texas City dike and Galveston Bay in order to attract tourists, and residents.

LIVABLE CENTER PRINCIPLES: 1 2 3 4 5

IMPLEMENTATION STRATEGIES:

- Expand utilization of the entire water frontage up to 25th Avenue N.
- Program special events and festivals to take place on the dike.
- Perform zoning diagnostic to ensure that zoning promotes a variety of land uses, as shown in the concept plan.
- Coordinate with the Army Corps of Engineers regarding any limitations to development along the levee.
- Form a Bayside Business Association.

- Implement Bayfinding along the levee, hike and bike trails, Bay Street and Texas City Dike Road.
- Seek public-private partnerships with and/or developers interested in developing the city-owned property surrounding the dike.

POTENTIAL PARTNERSHIPS: DEVELOPERS, BUSINESSES, NON-PROFIT ASSOCIATIONS, TEXAS CITY INDEPENDENT SCHOOL DISTRICT (TCISD), ARMY CORPS OF ENGINEERS

POTENTIAL FUNDING SOURCES: CAPITAL IMPROVEMENT PROJECTS, GRANT FUNDING (E.G. TEXAS PUBLIC WORKS ASSOCIATION FUNDS), PUBLIC-PRIVATE PARTNERSHIPS (E.G. PARTNER WITH LOCAL BUSINESSES), TAX INCREMENT FINANCING (TIF) OR SPECIAL MANAGEMENT DISTRICT

The Bayside District is meant to be a regional attraction located at the terminus of the Study Area—refer to “Map 19: Bayfinding Signage Key Map” on page 101. The dike is currently underutilized with minimal remaining infrastructure, limited trail connectivity, few available amenities, and limited recreational opportunities. The conceptual plan proposes the full utilization of the city-owned property along the dike, incorporating new recreational uses, high-end, resort-style recreational vehicle campgrounds, cabin rentals, and camping sites, as well as restaurants and retail development along Texas City Dike Road and Bay Street. The capstone idea that is conceptualized for this area will include a major recreational component that includes the formation man-made lakes for paddleboarding, wakeboarding, swimming, and other watersports and activities. The recreational concept plan also includes the incorporation of an elevated zip-line system that showcases an uninhibited view of Galveston Bay from above the levee and a one-of-a-kind outdoor adventure at the Texas City dike. These uses can provide the City with a source of year-round revenue and can help to attract visitors and outdoor enthusiasts from across the region, furthering economic development opportunities and benefits in the study area as a whole.
RECOMMENDATIONS:

4.1 PERFORM A ZONING DIAGNOSTIC OF EXISTING REGULATIONS TO ENSURE THAT THE PROPOSED USES ARE ALLOWED. The conceptual plan proposes a resort-style RV park, campgrounds, and seasonal cabin rentals, as well as restaurants, marinas, and hotels to support the proposed developments. It will be necessary for development regulations to allow for land uses such as these, but it will be equally as important to coordinate with the Army Corps of Engineers to fully ensure the parameters of allowable future development on and around the levee.

4.2 PROGRAM SPECIAL EVENTS AND OUTDOOR ACTIVITIES TO BE HELD ON THE DIKE OR NEAR THE NEW DEVELOPMENT. The Texas City dike is a popular environmental and recreational asset that has open spaces ideal for hosting outdoor competitions and demonstrations. Hosting events generates activity on the dike and attracts visitors to the area, generating economic activity for any small businesses or restaurants looking to locate near the levee. Some events have the potential to draw publicity and recognition that could initiate a tourism effort for the Texas City dike, adjacent Livable Center study area, and the surrounding community. Hunting, fishing, and outdoor competitions are popular in the region, and there is only one wakeboarding facility within close proximity. An elevated zip-line is proposed for the site, along with a man-made lake on which wakeboarding may be facilitated—both of which would be regional destinations, appealing to residents and tourists alike.
4.3 MAXIMIZE THE RECREATIONAL VALUE OF THE DIKE by expanding trails and connectivity, and leveraging programs to attract users. By maximizing the recreational value of the dike, the study area will be able to capitalize on capturing existing dike users and diverting them to other venues and businesses within Texas City. By generating a one-of-a-kind destination for recreation and outdoor education/events, the number of visitors will increase. By incorporating unique aspects of such a design plan, such as vacation rentals and long-term residences, the Bayside District could eventually develop into a destination that generates a steady stream of revenue for the City through increased demand in retail and restaurant activity.

Connect the City’s existing hike and bike trails to the dike and adjacent recreational uses so that residents can easily get to and from the Bay. Increasing connectivity will increase the opportunities available to residents to the dike and traverse other parts of the City on the same trip. It will be important that the trail network connects to the dike at 9th Avenue, Bay Street, and Texas City Dike Road, and into connecting roadways like 25th Avenue and Texas Avenue.
Artist Rendering of Bayside District Conceptual Plan - Bird's Eye View
Artist Rendering of Bayside District Conceptual Plan - View from Zip Line Tower

Artist Rendering of Gateway to Bayside District
4.4 UPDATE, PREPARE AND MAINTAIN MARKETING AND INCENTIVE PACKAGES. The City, in collaboration with the Bayside Business Association, will be responsible for maintaining a marketing program of all available properties and economic development incentives for the purpose of seeking public-private partnership opportunities in an effort to recruit developers and investors to this area.

The City should also update its CIP database or rankings to align with Livable Center projects and ensuring timely implementation and measurable progress. Texas City should develop an RFQ to seek developers interested in assisting in the development of the city-owned property surrounding the dike.
CONNECTED SIDEWALK NETWORK

Create a comfortable sidewalk network that connects neighborhoods to activity centers, schools, parks, transit, and other destinations of interest.

LIVABLE CENTER PRINCIPLES: 1 2 3 4 5

TIME-FRAME:

IMPLEMENTATION STRATEGIES:

- Develop a sidewalk assessment and improvement program to be included in the City’s Capital Improvement Plan to track and plan sidewalk improvements.
- Require all new construction and property redevelopments to have sidewalks that are up to standards.
- Utilize partnerships and grant opportunities to leverage funding.
- Utilize a Complete Streets approach that includes sidewalk improvements on roadway corridor projects funded through the City’s Capital Improvement Program.
- Prioritize sidewalks along key spines connecting neighborhoods to the City Central, 6th Street Urban Village, and Bayside District nodes as well as schools, parks, and transit stops.

POTENTIAL PARTNERSHIPS: DEVELOPERS, BUSINESSES, NON-PROFIT ASSOCIATIONS, TEXAS CITY INDEPENDENT SCHOOL DISTRICT (TCISD)

POTENTIAL FUNDING SOURCES: CAPITAL IMPROVEMENT PROJECTS, GRANT FUNDING (E.G., SURFACE TRANSPORTATION BLOCK GRANT [STBG] OR FEDERAL TRANSIT ADMINISTRATION [FTA] FUNDS), PUBLIC-PRIVATE PARTNERSHIPS (E.G., PARTNER WITH LOCAL BUSINESSES)

Walkability is a key pillar for a vibrant community that has a high degree of livability. Texas City has continuously worked to improve the pedestrian realm, particularly along 6th Street and 9th Avenue around the high school and city facilities. To prioritize walking as a mode of travel in the study area, the City must continue to invest in sidewalk and other ADA improvements.

RECOMMENDATIONS:

5.1 DEVELOP A CONSISTENT APPROACH AND STANDARDS TO CREATE A COMFORTABLE PEDESTRIAN ENVIRONMENT that encourages walking with sidewalks that:

- Are 6’ wide, or wider in areas with high pedestrian activity, with a minimum of 5’ wide in other locations,
- Include pedestrian scale lighting and shade through trees where possible,
- Provide ADA compliant curb ramps at all intersections and clearly visible crosswalk markings and signage,
- Incorporate pedestrian amenities such as benches in locations with higher activity density, and
- Are buffered from the roadway where possible.
5.2 DEVELOP A SIDEWALK IMPROVEMENT PROGRAM to be included in the annual Texas City Capital Improvement Program. This program should focus on high priority areas, as identified in Map 23: Texas City Sidewalk Network Recommendations, by building high quality facilities where they do not exist today and upgrading existing facilities where needed. Many of the high priority corridors have existing sidewalks, but have segments missing, are in need of repair, are too narrow, are uncomfortable to utilize with no buffer from the roadway, or needing lighting and shade. The high priority corridors are identified in Table 17: High Priority Corridors

While the high priority sidewalks are focused directly around schools and the identified nodes and spines, the sidewalks identified as neighborhood connectors begin the extension of sidewalks into neighborhoods and other locations of interest. To complete the sidewalk network, it is recommended to provide accessible, comfortable sidewalks throughout the study area. These sidewalks are long-term projects that would ensure multi-modal access for all residents to parks, civic and educational facilities, shopping, jobs, and entertainment options within the study area.

The pictures on this page show examples of recently completed projects in Texas City, and best practices utilized elsewhere. It is important to note that while many sidewalks may be constructed along a curb-and-gutter roadway, accommodations along open-ditch roadways are also possible and will be important for providing access in certain neighborhoods in Texas City. An example of how this design can be implemented without blocking stormwater runoff is also provided on the following pages.

In the photos on Page 122, there is an image that shows a sidewalk constructed along an open ditch roadway. Essentially, a slotted curb between the edge of the roadway and the sidewalk can be constructed to provide a barrier and still allow for drainage to the ditches if the area between the ditch and the roadway is wide enough. If there is not enough room for the sidewalk along the open ditch road, then the City could consider acquiring private property (if necessary) to place the sidewalk between the ditch and the abutting property, or the drainage system could be buried and a curb and gutter installed.

Recent sidewalk improvements in Texas City. Left: 6th Street / Right: 16th Street at Roosevelt-Wilson Elementary

<table>
<thead>
<tr>
<th>Corridor</th>
<th>From</th>
<th>To</th>
</tr>
</thead>
<tbody>
<tr>
<td>9th Avenue</td>
<td>31st Street</td>
<td>Bay Street</td>
</tr>
<tr>
<td>5th Avenue</td>
<td>23rd Street</td>
<td>14th Street</td>
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<tr>
<td>13th Avenue</td>
<td>21st Street</td>
<td>14th Street</td>
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<td>19th Avenue</td>
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<td>19th Street</td>
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<tr>
<td>25th Avenue</td>
<td>23rd Street</td>
<td>16th Street</td>
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<tr>
<td>14th Avenue</td>
<td>6th Street</td>
<td>Bay Street</td>
</tr>
<tr>
<td>16th Avenue</td>
<td>6th Street</td>
<td>Bay Street</td>
</tr>
<tr>
<td>Heights Drive</td>
<td>25th Street</td>
<td>23rd Street</td>
</tr>
<tr>
<td>2nd Avenue N</td>
<td>25th Street</td>
<td>23rd Street</td>
</tr>
<tr>
<td>8th Avenue</td>
<td>Bay Street</td>
<td>The Dike</td>
</tr>
<tr>
<td>Bay Street</td>
<td>25th Avenue</td>
<td>3rd Avenue</td>
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<td>6th Street</td>
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<td>14th Street</td>
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<td>29th Street</td>
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</tr>
<tr>
<td>31st Street</td>
<td>Magnolia Avenue</td>
<td>Robinson Boulevard</td>
</tr>
<tr>
<td>23rd Street N</td>
<td>2nd Avenue</td>
<td>Heights Drive</td>
</tr>
<tr>
<td>N Logan Street</td>
<td>2nd Avenue N</td>
<td>3rd 1/2 Avenue N</td>
</tr>
</tbody>
</table>
Map 23: Texas City Sidewalk Network Recommendations
Sidewalk constructed along an open ditch roadway in Houston, TX

Existing comfortable sidewalk in Texas City with ADA curb ramps

Visible crosswalk with pedestrian-only signal

High-comfort sidewalk and pedestrian amenities in a retail district similar to 6th street Urban Village
TRAIL & BIKEWAY NETWORK CONNECTIVITY

Expand upon the existing bike facilities to develop a comfortable trail and bikeway network that connects neighborhoods to activity centers, parks, and other destinations of interest.

IMPLEMENTATION STRATEGIES:

- Utilize a Complete Streets approach to include trail and bikeway improvements with roadway corridor projects funded through the City’s Capital Improvement Program.
- Utilize partnerships and grant opportunities to leverage funding.
- Incorporate bike parking at civic buildings, incentivize bike parking for businesses, and require bike parking in new developments.
- Incorporate maintenance of bicycle facilities into roadway maintenance activities.
- Develop a bikeways map that is updated as new bikeways are built. Incorporate the map into wayfinding and promote it at events and on the City’s website.

POTENTIAL PARTNERSHIPS: DEVELOPERS, BUSINESSES, NON-PROFIT ASSOCIATIONS, TXDOT

POTENTIAL FUNDING SOURCES: CAPITAL IMPROVEMENT PROJECTS, GRANT FUNDING (E.G., SURFACE TRANSPORTATION BLOCK GRANT [STBG] OR FEDERAL TRANSIT ADMINISTRATION [FTA] FUNDS), PUBLIC PRIVATE-PARTNERSHIPS (E.G. PARTNERSHIPS FOR LOCAL MATCH FUNDING, SPONSORSHIP OF BIKE PARKING, OR BIKE SHARE STATIONS)

Bicycling is a means of active transportation that significantly improves livability by linking neighborhoods and destinations. Safe bicycle facilities, supported with signage, maps, and bike parking encourage a wider portion of the population to bicycle for both commuting and recreational trips. Texas City has the ability to create an attractive, connected network that will support more active people and potentially bring more visitors to the city.

RECOMMENDATIONS:

6.1 EXPAND THE EXISTING TRAIL AND BIKEWAY NETWORK using shared on-street facilities (bike routes), off-street trails, and dedicated on-street bike lanes to provide access to a variety of destinations and activities. “Map 23: Texas City Sidewalk Network Recommendations” on page 121 and “Table 17: High Priority Corridors” on page 120 identify proposed facilities.

All facilities should be designed using best practice NACTO or AASHTO guidelines. Bike routes should provide clear signage that bikes are permitted to use the full lane, as well as wayfinding information like directional arrows and mileage to destinations. Bike routes are most appropriate on streets with lower speeds and traffic volumes.
Bike lanes should be at a minimum 5’ wide (6’ preferred). On streets with higher traffic volumes and speeds, bike lanes should include striped or physical buffers.

Off-street trails should include wayfinding and visible crossings where a trail crosses a street to provide warning to motorists.

Particular attention should be paid to the ongoing maintenance of bicycle facilities, particularly off-street trails and bike lanes where general maintenance of the street and travel lanes may not be provided.

<table>
<thead>
<tr>
<th>MAP #</th>
<th>CORRIDOR</th>
<th>DESCRIPTION</th>
<th>FACILITY TYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7TH STREET N</td>
<td>CONNECT TEXAS AVENUE NORTH TO THE EXISTING BIKE LANE AT 19TH AVENUE N</td>
<td>BIKE LANE</td>
</tr>
<tr>
<td>2</td>
<td>9TH AVENUE N</td>
<td>CONNECT WEST OF THE GATEWAY AREA TO THE DIKE</td>
<td>BIKE LANE</td>
</tr>
<tr>
<td>3</td>
<td>14TH AVENUE N</td>
<td>CONNECT EXISTING BIKE LANES WEST TO 7TH STREET N</td>
<td>BIKE LANE</td>
</tr>
<tr>
<td>4</td>
<td>19TH AVENUE N</td>
<td>CONNECT THE EXISTING BIKE LANES EAST TO BAY STREET</td>
<td>BIKE LANE</td>
</tr>
<tr>
<td>5</td>
<td>21ST STREET N</td>
<td>CONNECT TEXAS AVENUE NORTH THE THE EXISTING OFF-STREET PATH AT 19TH AVENUE N</td>
<td>BIKE LANE</td>
</tr>
<tr>
<td>6</td>
<td>25TH STREET N</td>
<td>CONNECT TEXAS AVENUE TO 25TH AVENUE N</td>
<td>BIKE LANE</td>
</tr>
<tr>
<td>7</td>
<td>2ND STREET N</td>
<td>CONNECT TEXAS AVENUE TO 5TH AVENUE N, PROVIDING DIRECT ACCESS TO HERITAGE SQUARE PARK</td>
<td>BIKE ROUTE</td>
</tr>
<tr>
<td>8</td>
<td>5TH AVENUE N</td>
<td>CONNECT BAY STREET TO THE EXISTING OFF-STREET PATHS IN THE CITY CENTRAL NODE, THEN CONTINUE WEST TO 25TH STREET N (N. LOGAN ST.) TO HEIGHTS ELEMENTARY SCHOOL</td>
<td>BIKE ROUTE</td>
</tr>
<tr>
<td>9</td>
<td>13TH AVENUE N</td>
<td>CONNECT EXISTING TRAIL ALONG 13TH AVENUE N TO 21ST STREET N</td>
<td>OFF-STREET PATH</td>
</tr>
<tr>
<td>10</td>
<td>13TH AVENUE N</td>
<td>CONNECT 7TH STREET N TO 25TH STREET N (N. LOGAN ST.) AS A CONTINUATION OF THE BIKE FACILITY ON 14TH AVENUE N</td>
<td>BIKE ROUTE</td>
</tr>
<tr>
<td>11</td>
<td>TEXAS CITY DIKE ROAD</td>
<td>PROVIDE CONNECTIVITY FROM BAY STREET PARK TO THE BASE OF THE DIKE (COULD CONTINUE ALONG THE DIKE)</td>
<td>BIKE ROUTE</td>
</tr>
<tr>
<td>12</td>
<td>14TH STREET N</td>
<td>CONTINUE THE EXISTING TRAIL FROM PARK LANE NORTH TO 25TH AVENUE N, AND SOUTH FROM 16TH AVENUE N TO 13TH AVENUE N</td>
<td>OFF-STREET PATH</td>
</tr>
<tr>
<td>13</td>
<td>16TH STREET N</td>
<td>CONTINUE THE EXISTING TRAIL SOUTH TO 9TH AVENUE N BY REPLACING THE EXISTING BIKE ROUTE WITH A DEDICATED FACILITY</td>
<td>OFF-STREET PATH</td>
</tr>
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<td>14</td>
<td>25TH AVENUE N</td>
<td>CONNECT THE EXISTING HIKE AND BIKE TRAIL WEST FROM 9TH STREET N THROUGH THE STUDY AREA TO A POTENTIAL FUTURE REGIONAL CONNECTION ALONG SH 3</td>
<td>OFF-STREET PATH</td>
</tr>
<tr>
<td>15</td>
<td>BAY STREET</td>
<td>CONNECT EXISTING TRAIL SOUTH TO TEXAS AVENUE</td>
<td>OFF-STREET PATH</td>
</tr>
<tr>
<td>16</td>
<td>TEXAS AVENUE N</td>
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<td>OFF-STREET PATH</td>
</tr>
<tr>
<td>17</td>
<td>DESTINATION TRAIL</td>
<td>ENHANCEMENTS TO THE TRAIL IN BAY STREET &amp; TARPEY PARKS, AND ALONG THE PROPOSED BIKE FACILITY ON 9TH AVENUE N TO 21ST STREET</td>
<td>ENHANCEMENTS</td>
</tr>
</tbody>
</table>
Map 24: Texas City Bikeway Recommendations
6.2 DEVELOP A DESTINATION TRAIL to enhance and extend the existing hike and bike trail through Tarpey Park and Bay Street Park, and potentially along the Dike. The trail would be a destination and point of interest for residents and visitors by providing opportunities to celebrate unique and special areas, that tie in culture, nature, and art along the trail. Destination trails enhance property values and provide opportunities for economic development. Indianapolis’ Cultural Trail has been a stimulus for private investment in its downtown area. Property values within 500ft of the trail have increased by more than $1 billion and the average trail user spends $53 at local businesses (Reasons to love the Indianapolis Cultural Trail: A Legacy of Gene and Marilyn Glick).

The trail should expand upon existing hike and bike trails in Tarpey Park and Bay Street Park, incorporating unique elements and opportunities. Points of interest along the trail could include rest places, shade structures, public art, and sustainable landscape.

Additionally, the trail should tie into a high-comfort, separated bikeway on 9th Avenue that would connect the City Central, 6th Street Urban Village, and Bayside District nodes together. Elements of the bikeway could include unique signage, artistic elements, and landscaping into the 9th Avenue bikeway.

Cultural Trail in Indianapolis - hike and bike trail with art and public space

Architectural focal point of a destination trail in Dallas, Texas
Source: Halff Associates
6.3 EXPLORE IMPLEMENTATION OF A BIKE SHARE NETWORK. As the trail and bikeway network is built out and bicycle connections are made to the activity nodes, consideration of a bike share system should be explored. The system could be sponsored entirely, or in part by private businesses in Texas City. A well-connected and advertised bike share system could encourage additional multimodal connectivity between the nodes, active transportation and tourism.

Businesses may want to sponsor Bike Share Programs if they could advertise their business on the bike racks, on the bikes themselves, or in promotional materials, websites, or social media. To attract sponsors, the project lead would need to market and sell the sponsorships to individual businesses—which would take a direct sales effort. Dependent upon whether or not the businesses are able to receive incentives from the City, the City may consider subsidizing a portion of the program cost that is not supported by the sponsorships (either for a start up period or indefinitely, depending on the success of the sponsorship sales).

6.4 PROVIDE BIKE PARKING in locations close to businesses, at activity centers, and other destinations of interest, such as parks and civic buildings. Bike parking should be visible with easy access to building entrances and maintain clearance in pedestrian areas. Inverted U racks and Post & Ring racks are recommended racks as they provide multiple points of contact with the bicycle frame and accommodate a variety of bicycles. See the APBP Essentials of Bike Parking guide for further guidance on placement, rack types, and materials. Some cities have developed bike rack cost share programs where bike racks are provided to businesses that apply to the program either for free or at a discounted rate, with the business typically assuming maintenance of the bicycle rack. Costs of bike racks can vary widely depending on design and materials used.

6.5 DEVELOP NEW BIKeway MAPS FOR PRINT AND MADE AVAILABLE ONLINE. The trail and bikeway network should also be visible on wayfinding maps. Print versions can be distributed with other visitor or event information. Promotion of the network will help encourage people to utilize it, particularly for events. Events encouraging people to attend on bikes should also provide a clear, secure area for bicycle parking for the event, such as a bike valet.
Transit service in Texas City currently operates with infrequent hourly service. This service is essential in providing a low-cost transportation option for a broad range of customers, but is not a significant driver of mobility options within the study area. In an effort to encourage transit usage and make the service more comfortable for existing and potential users, the following improvements are recommended.

**RECOMMENDATIONS:**

7.1 IMPROVE ACCESS IN AREAS THAT CONNECT PEOPLE AND BUSINESSES TO TRANSIT ROUTES with comfortable sidewalks, ADA ramps, and street crossings that include visible markings and signs, and appropriately phased pedestrian signals.

7.2 INCREASE PASSENGER AMENITIES by building more shelters, focusing on 9th Avenue and stops with higher numbers of boardings.

7.3 IMPROVE SIGNAGE AT TRANSIT STOPS to include a route map, schedule, and wayfinding to nearby points of interest. This will make it easier to understand where the bus system goes and timing to make trips easier for new and existing users.

7.4 IMPROVE CONNECTIONS AT TRANSFER POINTS, such as at 10th Avenue and 6th Street and the Kroger on SH 146 to provide signage and passenger amenities. These locations should include a well marked area for buses and shelters for passengers.
7.5 ENCOURAGE INCREASING FREQUENCY OF THE ORANGE ROUTE, the most heavily used route in the system, to every 30 minutes through coordination with Connect Transit. This would relieve passenger wait times and encourage more people to use the system.

7.6 EVALUATE EXTENDING THE ORANGE ROUTE TO BAY STREET as development and activity increase in the nodes, particularly the Bayside District, through coordination with Connect Transit. This would provide connectivity between the Bayside District, 6th Street Urban Village, and City Central. Alternatively, a circulator service could also be evaluated.
9TH AVENUE/PALMER HIGHWAY CORRIDOR IMPROVEMENTS

Develop a “Main Street” feel along 9th Avenue that serves the nearby economic, social, civic and cultural activities and moves people safely through a variety of modes, including bicycling, walking, driving and transit.

LIVABLE CENTER PRINCIPLES: 1 □ 2 □ 3 □ 4 □ 5 □ TIME-FRAME: □  □  □  □  □

IMPLEMENTATION STRATEGIES:

- Develop a Complete Streets approach to mobility improvements along roadway corridors.
- Require improvements to the pedestrian realm from developers or businesses when new or redevelopment occurs.
- Coordinate with businesses to develop opportunities and support for driveway consolidation.
- Coordinate with TxDOT to ensure future roadway work is compatible with the City’s vision for 9th Avenue.
- Pursue grant funding and public-private partnerships for corridor improvements.

POTENTIAL PARTNERSHIPS: TXDOT, DEVELOPERS, BUSINESSES

POTENTIAL FUNDING SOURCES: CAPITAL IMPROVEMENT PROJECTS, GRANT FUNDING (E.G., HIGHWAY SAFETY IMPROVEMENT PROGRAM [HSIP] FUNDS), PUBLIC-PRIVATE PARTNERSHIPS (E.G., PARTNERSHIPS WITH LOCAL BUSINESSES TO HELP PROVIDE LOCAL MATCH OR OTHER PROJECT ELEMENTS, SUCH AS LANDSCAPING)

9th Avenue is in the heart of the study area and connects the City Central, 6th Street Urban Village, and Bayside District nodes. The corridor is lined with a variety of uses, including retail and services, civic institutions, schools, and residential property. The roadway is served by transit, and has a mostly continuous sidewalk with varying conditions along the corridor.

Along with bike facilities, expanding the pedestrian realm with wider sidewalks, lighting, landscaping, Bayfinding, and other amenities will encourage active transportation, improve the image of the corridor and create economic growth. More specific projects and improvements include the following:

RECOMMENDATIONS:

8.1 REDUCE CONFLICT POINTS FOR VEHICLES, BICYCLES, AND PEDESTRIANS

by introducing a center median with landscaping where feasible (as also identified in the FM 1764 Access Management Study) and consolidating driveways. Benefits of these improvements also include maintaining traffic flow, providing more area for landscaping, and making the overall environment safer for all users.

Due to the varying contexts along the corridor, the specific cross-sections of 9th Avenue through the study area will vary, but they should provide a consistent experience for people walking, biking, and driving. This is exemplified in the proposed typical cross-sections.
8.2 REMOVE THE CONTINUOUS RIGHT-TURN LANE, allowing space for an enhanced pedestrian realm and protected bicycle facilities. This would also decrease the crossing distance for pedestrians at intersections where pedestrian refuges and curb bulb outs could be placed.

8.3 IMPROVE INTERSECTION CROSSINGS with highly visible crosswalks, appropriately phased pedestrian signal timing, median refuges, and curb bulb outs where possible. The intersection of 9th Avenue at 6th Street is a high priority location for these improvements. 9th Avenue at 21st street is also a priority location in an effort to encourage other improvement in City Central.

8.4 Provide an IMPROVED CROSSING BETWEEN 21ST STREET AND 14TH STREET to accommodate school children and others using the off-street trail, or accessing the Library and other community facilities in the area. Options to evaluate include a pedestrian-only signal timed with the surrounding traffic signals to allow safe mid-block crossing, or active warning beacons. The crosswalk should also be highly visible through striping and signage.

Further, as trail usage across 9th Avenue and in the City Central area increases, evaluation of a bicycle and pedestrian bridge should be considered. This would also connect school buildings to the civic center area.

8.5 STREETSCAPING SHOULD BE PROVIDED ALONG ROADWAYS AND WITHIN MEDIANS. Streetscaping can soften the feel of a corridor or place to make it more comfortable for people walking or biking, provide a buffer between vehicles and people, and act as a visual cue for drivers to slow down. Curb bulb-outs are also a location where streetscaping, such as planters, can also have these effects.
PROPOSED 9TH AVENUE TYPICAL CROSS-SECTIONS

1. 21st Street to 14th Street
2. 14th Street to 10th Street
3. 10th Street to 5th Street
4. 5th Street to Bay Street
Map 25: Street Section Key
In order for a community to be livable, it must have desirable housing choices. On a community-wide level, Texas City has great economic assets that are enhanced in the Livable Centers context by the existing grid street network, multimodal transportation options, and existing and potential activity nodes such as the Bayside District, City Central, and 6th Street Urban Village areas. While the Market Opportunities Report supports potential demand within these nodes, other areas likely do not have the same potential for mixed use Livable Center opportunities. It is essential for Texas City to address housing at a comprehensive level to provide the support for full development of the identified activity nodes, and overall improvements in the study area that could lead to greater neighborhood stability, commercial activity, tourism, and more.
RECOMMENDATIONS:

9.1 PURSUE A HOUSING REVITALIZATION STRATEGY TO PROVIDE QUALITY HOUSING CHOICES throughout the study area. Implementation of this recommendation is closely tied to the viability of all recommendations in this study as it is a crucial component of enhancing the economic vitality and livability of the Study Area and the City in general. A key component of this strategy is housing revitalization. It is recommended that the City develop a three-tiered approach to revitalization of housing stock within the Study Area based on preservation of quality homes in good condition and good locations, restoration of homes that are still viable from a market-preference and condition perspective, and allowing the transformation of residential properties in nonviable locations to more productive non-residential uses.

The distinction between preservation/restoration and transformation can be made on both viability factors and locational factors. Based on the data presented in the “Understanding Current Market Realities” section, the most appropriate strategy by section of the Study Area would generally be:

- Preservation: North of 9th Avenue North
- Restoration: South of 9th Avenue North and west of 10th Street
- Transformation: South of 5th Avenue North and east of 10th Street

The transformation of land use south of 5th Avenue North and east of 10th Street should be to market-based non-residential uses. As previously discussed in this report, the uses could be such things as training centers, offices, support facilities for plant operations, or simply open space. This study does not identify specific targets; only that it is clear that housing is no longer a desirable use in this area and the City should be open to alternative uses. This “openness” can be accomplished through buy outs or by approving zone changes that may come forward in the future from non-residential uses (it is crucial that decisionmakers not be stuck on the notion that this area once was residential and must always be residential). In this area, the study are not suggesting that housing should be consolidated into mixed use development; mixed use development may be appropriate in some portions of the study area, but the area south of 5th Avenue and east of 10th Street should be non-residential.

However, homes in any category could occur in any area, so these general categorizations need to be tempered by applying criteria that enable structures or groups of structures to be viable for their intended use given the current housing market and consumer preferences. Viability factors to be considered include:

- Age of the structure
- Size of the structure
- Number of bedrooms
- Number of bathrooms
- Number of garage stalls
- Cost to restore as a percentage of value
- Clustering of structures considered as non-viable

Homes that do not meet a minimum threshold requirement for these factors are not likely to be viable as quality and sought-after housing options; therefore, homes below the defined threshold are likely to continue to deteriorate regardless of the public efforts intended to reverse that trend and should be allowed to transform to other uses. Developing and applying these criteria will allow the City to determine the most appropriate strategy on a block by block or sub-area basis throughout the Study Area. The following sections provide detailed strategies, partnership opportunities, and funding streams that are applicable to each revitalization tier.

PRESERVATION TO MAINTAIN AND SUPPORT CURRENT CONDITIONS

Preservation of housing that is desirable and drives the largest demand for housing is the first step to ensuring the long-term viability of
housing and overall livability in the study area. This recommendation can be implemented in the short-term through the following strategies:

- Facilitate and organize the creation and management of homeowners associations
- Organize, promote, and sponsor community/block parties on a regular recurring basis
- Establish and champion a residential beautification award program
- Review and update as needed the City’s property maintenance code requirements
- Increase code enforcement staffing and frequency of inspections

Potential partners pertinent to preservation include engaging existing informal neighborhood groups and faith-based organizations.

Potential funding sources include the City general fund and private donations.

RESTORATION TO ENCOURAGE RENOVATION AND REMODEL OF SOUND STRUCTURES, AND PROMOTE BEAUTIFICATION

Restoration of housing in viable market areas through remodeling and overall property improvements will increase the desirability of housing within the study area and expand long-term housing choices within the study area. This recommendation can be implemented in the medium-term through the following strategies:
• Review and update as needed the City’s property maintenance code requirements
• Increase code enforcement staffing and frequency of inspections
• Waive permitting fees for remodel of existing homes
• Abate property taxes for remodel of at least 30% of home value
• Waive water and sewer base fees for three years for owner-occupied buyers
• Facilitate, organize, and sponsor neighborhood clean ups including providing dumpsters

Based on the feedback provided from the community and visual inspections, more could be done with code enforcement. The City already does a lot with the resources they currently commit to code enforcements, however it is clear that the residents want more; therefore, more funding and personnel are needed. There are other related housing activities that we have also recommended that simply require additional personnel in order to sufficiently provide services without distracting current employees and duties.

Potential partners pertinent to restoration include the Texas Homes for Heroes Loan Program, TCISD Construction Trades Program, Habitat for Humanity, and waste disposal contractors.

Potential funding sources include the City general fund, the City utility fund, and private donations.

TRANSFORMATION INTENDED TO FACILITATE A TRANSITION TO MARKET-BASED, DIVERSIFIED NON-RESIDENTIAL USES

Transformation of housing in target areas that are not viable from their condition and surrounding land uses will be an important step to elevate the study area into a vibrant, livable community with a quality mix of housing choice and compatible land uses that maximizes the City’s return on investment and attracts both residents and visitors. Implementation of this recommendation will be long-term in scope through the following strategies:

• Review and update as needed the City’s property maintenance code requirements
• Increase code enforcement staffing and frequency of inspections
• Increase budget for building demolitions
• Encourage aggregation of land through ongoing buy-outs

Potential partners key to transformation include private industry, the Texas City Economic Development Corporation, and the TCISD Construction Trades Program.

Potential Funding Sources include the City general fund, Texas City Economic Development Corporation funds, and private industry.

9.2 DEVELOP A RENTAL REGISTRATION AND INSPECTION PROGRAM that would require rental homes to be registered and inspected on a regular basis. This strategy has been successful in other cities to ensure living conditions are adequate for renters and property values are maintained for neighborhoods. Establishment of this recommended program could be completed in the short-term, through the following strategies identified:

• Adopt a City code requiring the registration and inspection of rental homes
• Revise zoning code and zoning map to reflect market-driven non-residential uses in target areas
• Broaden powers of Texas City Economic Development Corporation to include provision of affordable housing
• Utilize Texas City Economic Development Corporation funding to incentivize non-Federally funded affordable housing incentives
• Establish minimum life-safety criteria with which rental homes must comply
• Hire sufficient inspection and administrative staff to operate the system
• Communicate and justify the program need to residents and landlords
• Track compliance metrics to determine success of program and adjust requirements as needed

Potential partners to implement this recommendation include landlords, the TCISD Construction Trades Program, and housing advocate organizations.

Potential funding sources to operate this recommendation include rental registration and inspection fees.

**ESTABLISH A CHAPTER 380 AGREEMENT** over the study area to facilitate investment and reinvestment that promotes livable center activities. Chapter 380 agreements have been highly effective tools for local governments to incentivize and promote economic development and stimulate business and commercial activity, which is key to the development of livable communities. This recommendation can be implemented in the medium-term through the following strategies:

• Recommended livable center improvements are eligible for funding
• Rebate or abate incremental property and/or sales taxes for implementation of livable center recommended improvements, especially at the defined nodes
• Establish housing revitalization as eligible for funding including rehabilitation or transformation (land acquisition, demolition, environmental remediation)
• Combine with Type B sale tax corporation to incentivize non-Federally funded affordable housing activities

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**Example Staffing and Cost Estimates**

**Livable Center Program Administrator**

Estimated annual salary and benefits: $67,500

• Report to the Administrative Coordinator of Economic Development and Media (James)

• Sample Duties:
  - Facilitate and organize the creation and management of homeowners associations
  - Organize, promote, and sponsor community/block parties on a regular recurring basis
  - Establish and champion a residential beautification award program
  - Facilitate, organize, and sponsor neighborhood clean ups including providing dumpsters
  - Manage incentive programs such as waiver of permitting fees for qualified remodels, abatement of property taxes for qualifying home improvements, and waiver of water/sewer fees for qualifying new home buyers
  - Manage the aggregation of land through on-going buy-outs

**Additional Code Enforcement Officer**

Estimated annual salary and benefits: $54,000 plus additional support, prosecution, and court costs as needed

• Sample Duties:
  - Review and update as needed the City’s property maintenance code requirements
  - Adopt and administer a program requiring the registration and inspection of rental homes
  - Establish minimum life-safety criteria with which rental homes must comply
  - Perform additional code enforcement inspections and follow up activities
Potential partners include private industry, the Texas City Economic Development Corporation, land owners, the development community, and the Texas City-La Marque Chamber of Commerce. The Chamber can be a partner because businesses often come to the Chamber seeking assistance or information on ways they can grow their business. Chambers also typically sponsor educational forums for their members, which could include making sure the business community is aware of the 380 program and connecting their members with the appropriate city person who can help them.

Potential funding sources include incremental property and sales taxes, Texas City Economic Development Corporation funds, and private investment. Private funding is mentioned often as a potential funding source for many of the recommendations made in this study. Some of the potential private funding resources, including philanthropic organizations are listed on pages 141-143.
## Texas Parks and Wildlife Department Recreational Grants

<table>
<thead>
<tr>
<th>Grant Name</th>
<th>Funding Limits</th>
<th>Eligible for Funding</th>
<th>Website / Funding Info / Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recreational Trails Grant</td>
<td>80% of funding up to max of $200,000</td>
<td>Both motorized and non-motorized recreational trail projects such as the construction of new recreational trails, to improve existing trails, to develop trailheads or trailside facilities, and to acquire trail corridors.</td>
<td><a href="http://tpwd.texas.gov/business/grants/recreation-grants/recreational-trails-grants">tpwd.texas.gov/business/grants/recreation-grants/recreational-trails-grants</a> Funding cycles are currently annual as funded by State budget. Application can be found on line along with deadlines for submittals. Interested parties can sign-up online for email notifications of grant opportunities.</td>
</tr>
<tr>
<td>Local Park Grants</td>
<td>50% of funding on a reimbursement basis for public park projects</td>
<td>Assist local units of government with the acquisition and/or development of public recreation areas and facilities throughout the State of Texas.</td>
<td><a href="http://tpwd.texas.gov/business/grants/recreation-grants/about-local-parks-grants">tpwd.texas.gov/business/grants/recreation-grants/about-local-parks-grants</a> Funding cycles are currently annual as funded by State budget. Application can be found on line along with deadlines for submittals. Interested parties can sign-up online for email notifications of grant opportunities.</td>
</tr>
<tr>
<td>Community Outdoor Outreach Program (CO-OP)</td>
<td>$5,000 to $50,000 reimbursement funding</td>
<td>Grant provides funding to for programming that introduces under-served populations to environmental and conservation programs as well as TPWD mission oriented outdoor activities.</td>
<td><a href="http://tpwd.texas.gov/business/grants/recreation-grants/community-outdoor-outreach-program-co-op-grants">tpwd.texas.gov/business/grants/recreation-grants/community-outdoor-outreach-program-co-op-grants</a> Funding cycles are currently annual as funded by State budget. Application can be found on line along with deadlines for submittals. Interested parties can sign-up online for email notifications of grant opportunities.</td>
</tr>
</tbody>
</table>

**Per Website Current Deadlines and Funding Cycle:**

<table>
<thead>
<tr>
<th>Grant Program</th>
<th>Grant Ceiling</th>
<th>Next Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Parks Urban Outdoor Recreation</td>
<td>$1 Million</td>
<td>October 1, 2016</td>
</tr>
<tr>
<td>Local Parks Non-Urban Outdoor Recreation</td>
<td>$500,000</td>
<td>October 1, 2016</td>
</tr>
<tr>
<td>Local Parks Small Community Recreation</td>
<td>$75,000</td>
<td>October 1, 2016</td>
</tr>
<tr>
<td>Local Parks Urban Indoor Recreation</td>
<td>$1 Million</td>
<td>October 1, 2016</td>
</tr>
<tr>
<td>Local Parks Non-Urban Indoor Recreation</td>
<td>$750,000</td>
<td>October 1, 2016</td>
</tr>
<tr>
<td>Community Outdoor Outreach Program</td>
<td>$50,000</td>
<td>February 1, 2017</td>
</tr>
<tr>
<td>Recreational Trails</td>
<td>$200,000</td>
<td>February 1, 2017</td>
</tr>
<tr>
<td>COMPANY NAME</td>
<td>MISSION STATEMENT</td>
<td>WEBSITE / FUNDING INFO / COMMENTS</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>Marathon Oil</td>
<td>We believe that promoting and contributing to the health and vitality of the communities in which we have the privilege to operate is essential to our success. We focus our resources where we can have the greatest impact and on issues that affect the long-term value of our assets and communities.</td>
<td><a href="http://www.marathonpetroleum.com/Corporate_Citizenship/Philanthropy/">www.marathonpetroleum.com/Corporate_Citizenship/Philanthropy/</a> Funding cycles appear to be determined locally Contact information for local application is: <a href="mailto:bmduron@marathonpetroleum.com">bmduron@marathonpetroleum.com</a></td>
</tr>
<tr>
<td>Valero</td>
<td>The Valero Energy Foundation – Valero’s philanthropic arm – annually contributes $13 million to $20 million to improve the lives of those who live in or near the communities where Valero has major operations, plus in-kind donations.</td>
<td>Per website: “If your organization shares this mission, please submit a brief funding proposal and a copy of the agency’s IRS tax determination letter by email to: <a href="mailto:valeroenergyfoundation@valero.com">valeroenergyfoundation@valero.com</a>.”</td>
</tr>
<tr>
<td>Dow</td>
<td>Dow’s commitments to communities large and small enable economic development, sustainability and education leading to socially healthy and resilient communities, while also encouraging self-sufficiency. To drive community development and improve quality of life, we must attend to the social, economic and environmental needs of people and groups at the local level. For Dow, this begins with employee-led, grassroots involvement closest to the communities where we live and work. It continues by working with our partners to grow high-impact initiatives, which can then keep giving back to other communities around the globe.</td>
<td><a href="http://www.dow.com/en-us/science-and-sustainability/global-citizenship/community-well-being">www.dow.com/en-us/science-and-sustainability/global-citizenship/community-well-being</a> Website indicates local initiatives and the following: Partners for Community Collaboration Habitat for Humanity Jaipur Foot Keep America Beautiful LOYAC My Handicap United Way</td>
</tr>
<tr>
<td>ORGANIZATION</td>
<td>EXAMPLES OF PROJECTS FUNDED</td>
<td>WEBSITE / FUNDING INFO / COMMENTS</td>
</tr>
<tr>
<td>---------------------</td>
<td>--------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Houston Endowment</td>
<td>2016 Awarded</td>
<td><a href="http://www.houstonendowment.org">www.houstonendowment.org</a>&lt;br&gt;Website indicates funding available for the following: Arts &amp; Culture, Education, Environment, Health, Human Services (including affordable housing)</td>
</tr>
<tr>
<td></td>
<td>Air $250,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Water $2,135,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Land $5,335,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Urban Development $200,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TOTAL $7,920,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>See website for more detail.</td>
<td></td>
</tr>
<tr>
<td>Hildebrand Foundation</td>
<td>$10 million to Houston Parks Board for Bayou Greenway Initiative Trail System</td>
<td><a href="http://www.hildebrandfoundation.com">www.hildebrandfoundation.com</a>; Website indicates funding for non-profit corporation partners, which could be a city created local government corporation for example.</td>
</tr>
<tr>
<td>Kinder Foundation</td>
<td>Urban Greenspace – Discovery Green, Bayou Greenways 2020, Buffalo Bayou Park</td>
<td><a href="http://www.kinderfoundation.org">www.kinderfoundation.org</a>&lt;br&gt;Website indicates the foundation does not accept unsolicited applications. But, their giving is so generous that this might be a relationship that needs to be explored in some way.</td>
</tr>
<tr>
<td></td>
<td>Education – Education Center at Museum of Fine Arts, MD Anderson School of Health Professions, Kinder Institute on Constitutional Democracy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Quality of Life – Houston Food Bank, Kinder Institute for Urban Research at Rice University, The Lawson Academy for Peace and Prosperity Charter School.</td>
<td></td>
</tr>
</tbody>
</table>
COST ESTIMATES

The City, as well as, the planning team have identified key recommendations for planning level cost estimates. Since cost estimates are for planning and budgeting purposes, they are not exhaustive. It is recommended that the cost estimates are updated when projects are near the implementation/construction phases, providing more detail and updated material cost based on the current market at the time. The following cost estimates are identified by the recommendation number and goal established in the previous section. They also include general unit cost of various items, contingency, and design and management fees. Assumptions have been listed for each recommendation, and where applicable, potential funding sources and examples of applicable grant programs have been identified. The cost estimates will help City leadership and staff determine when projects are implemented, and other funding sources needed to assist with implementation.
## BAYFINDING

### 1.2 Implement a branding and signage design master plan

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UNIT</th>
<th>UNIT COST</th>
<th>QUANTITY</th>
<th>TOTAL COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Branding and Signage Design Master Plan</td>
<td>EA</td>
<td>$60,000.00</td>
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<td>$60,000.00</td>
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<td>Welcome Signage</td>
<td>EA</td>
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<td>$15,000.00</td>
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<tr>
<td>Destination Signage</td>
<td>EA</td>
<td>$5,000.00</td>
<td></td>
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<tr>
<td>Hike-and-Bike Trail Signage</td>
<td>EA</td>
<td>$3,000.00</td>
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<tr>
<td>District Signage</td>
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<td>$7,000.00</td>
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<tr>
<td>Map Information Signage</td>
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<tr>
<td>Digital Signage</td>
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<td>2</td>
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<tr>
<td>Gateway Signage</td>
<td>EA</td>
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<tr>
<td>Wayfinding Signage</td>
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<td>$72,000.00</td>
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<td><strong>$57,200.00</strong></td>
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<tr>
<td>Design and Management (20% of Subtotal + Contingency)</td>
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<tr>
<td><strong>Total for Recommendation</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>$343,500.00</strong></td>
</tr>
</tbody>
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**POTENTIAL FUNDING SOURCES:** CIP FUNDING, GRANTS, PUBLIC-PRIVATE PARTNERSHIPS

**EXAMPLES OF APPLICABLE GRANT PROGRAMS:** DOWNTOWN PUBLIC SPACES IMPROVEMENTS PROGRAM

**ASSUMPTIONS:** FEE OF A BRANDING AND SIGNAGE MASTER PLAN VARIES ON LEVEL OF DETAIL, AND NUMBER OF SIGNS TO BE DESIGNED. SIZE OF SIGNAGE, NUMBER OF SIGNS, AND INFORMATION DISPLAYED ON SIGNAGE.
CITY CENTRAL NODE

2.3 Maintain and enhance the functionality of civic and commercial uses, while maintaining sensitivity to integration with adjacent neighborhoods

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UNIT</th>
<th>UNIT COST</th>
<th>QUANTITY</th>
<th>TOTAL COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Removing Concrete Pavement</td>
<td>SF</td>
<td>$15.00</td>
<td>8,000</td>
<td>$120,000.00</td>
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<tr>
<td>5” Decorative Concrete Art Plazas</td>
<td>SF</td>
<td>$100.00</td>
<td>400</td>
<td>$40,000.00</td>
</tr>
<tr>
<td>11” Stamped Concrete Intersection Design</td>
<td>SY</td>
<td>$110.00</td>
<td>1,000</td>
<td>$110,000.00</td>
</tr>
<tr>
<td>Decorative Site Furniture (Trash Receptacles)</td>
<td>EA</td>
<td>$1,800.00</td>
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<td>$12,600.00</td>
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<tr>
<td>Ornamental Trees</td>
<td>EA</td>
<td>$400.00</td>
<td>13</td>
<td>$5,200.00</td>
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<tr>
<td>Street Trees</td>
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<td>$650.00</td>
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<td>$16,250.00</td>
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<tr>
<td>Import Topsoil</td>
<td>CY</td>
<td>$70.00</td>
<td>400</td>
<td>$28,000.00</td>
</tr>
<tr>
<td>Landscape Irrigation</td>
<td>LS</td>
<td>$35,000.00</td>
<td>1</td>
<td>$35,000.00</td>
</tr>
<tr>
<td>Compost and Mulch Topdress</td>
<td>CY</td>
<td>$180.00</td>
<td>400</td>
<td>$72,000.00</td>
</tr>
<tr>
<td>Corner Plaza / Park</td>
<td>EA</td>
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<td>$50,000.00</td>
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<tr>
<td>Landscape Amenity (4’ Bench)</td>
<td>EA</td>
<td>$4,000.00</td>
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<td>$40,000.00</td>
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<td>General Project Cost (Workzone, Removal, Roadway, etc.)</td>
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<td>$2,500,000.00</td>
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<td>$2,500,000.00</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
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<td>Contingency (25% of Subtotal)</td>
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<td></td>
<td></td>
<td></td>
<td><strong>$4,534,575.00</strong></td>
</tr>
</tbody>
</table>

POTENTIAL FUNDING SOURCES: CIP FUNDING, GRANTS, PUBLIC-PRIVATE PARTNERSHIPS

EXAMPLES OF APPLICABLE GRANT PROGRAMS: DOWNTOWN PUBLIC SPACES IMPROVEMENTS PROGRAM

ASSUMPTIONS: PARKING ALONG 9TH AVENUE, NUMBER AND TYPE OF TREES, NUMBER AND TYPE OF SITE FURNISHINGS, CROSSWALK DESIGN
### CITY CENTRAL NODE

2.5 Utilize the greenspace/front-lawn of the Doyle Convention Center to encourage pedestrian activity and circulation

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UNIT</th>
<th>UNIT COST</th>
<th>QUANTITY</th>
<th>TOTAL COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Custom Stage</td>
<td>EA</td>
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<td>1</td>
<td>$30,000.00</td>
</tr>
<tr>
<td>Electrical Panels</td>
<td>EA</td>
<td>$1,000.00</td>
<td>20</td>
<td>$20,000.00</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>$50,000.00</strong></td>
</tr>
<tr>
<td>Contingency (25% of Subtotal)</td>
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<td></td>
<td></td>
<td><strong>$12,500.00</strong></td>
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<tr>
<td>Design and Management (20% of Subtotal + Contingency)</td>
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<td></td>
<td><strong>$75,000.00</strong></td>
</tr>
</tbody>
</table>

**POTENTIAL FUNDING SOURCES:** CIP, GRANTS, PUBLIC-PRIVATE PARTNERSHIPS, ECONOMIC DEVELOPMENT CORPORATION, CHAMBER OF COMMERCE

**EXAMPLES OF APPLICABLE GRANT PROGRAMS:** TPWD LOCAL PARK GRANTS

**ASSUMPTIONS:** SIZE OF STAGE, NUMBER OF ELECTRICAL PANELS
3.1 Expand upon 6th Street improvements

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UNIT</th>
<th>UNIT COST</th>
<th>QUANTITY</th>
<th>TOTAL COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Removing Concrete Pavement</td>
<td>SF</td>
<td>$15.00</td>
<td>10,000</td>
<td>$150,000.00</td>
</tr>
<tr>
<td>5” Decorative Concrete Art Plazas</td>
<td>SF</td>
<td>$100.00</td>
<td>400</td>
<td>$40,000.00</td>
</tr>
<tr>
<td>11” Stamped Concrete Intersection Design</td>
<td>SY</td>
<td>$110.00</td>
<td>2,000</td>
<td>$220,000.00</td>
</tr>
<tr>
<td>Decorative Site Furniture (Trash Receptacles)</td>
<td>EA</td>
<td>$1,800.00</td>
<td>8</td>
<td>$14,400.00</td>
</tr>
<tr>
<td>Ornamental Trees</td>
<td>EA</td>
<td>$400.00</td>
<td>13</td>
<td>$5,200.00</td>
</tr>
<tr>
<td>Street Trees</td>
<td>EA</td>
<td>$650.00</td>
<td>40</td>
<td>$26,000.00</td>
</tr>
<tr>
<td>Import Topsoil</td>
<td>CY</td>
<td>$70.00</td>
<td>400</td>
<td>$28,000.00</td>
</tr>
<tr>
<td>Landscape Irrigation</td>
<td>LS</td>
<td>$30,000.00</td>
<td>1</td>
<td>$30,000.00</td>
</tr>
<tr>
<td>Compost and Mulch Topdressing</td>
<td>CY</td>
<td>$180.00</td>
<td>400</td>
<td>$72,000.00</td>
</tr>
<tr>
<td>4” Thick Median Pavement</td>
<td>SF</td>
<td>$6.00</td>
<td>4,300</td>
<td>$25,800.00</td>
</tr>
<tr>
<td>Corner Plaza / Park</td>
<td>EA</td>
<td>$60,000.00</td>
<td>1</td>
<td>$60,000.00</td>
</tr>
<tr>
<td>Landscape Amenity (4’ Bench)</td>
<td>EA</td>
<td>$4,000.00</td>
<td>10</td>
<td>$40,000.00</td>
</tr>
<tr>
<td>General Project Cost (Workzone, Removal, Roadway, etc.)</td>
<td></td>
<td>$2,500,000.00</td>
<td>1</td>
<td>$2,500,000.00</td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td></td>
<td></td>
<td>$3,211,400.00</td>
</tr>
<tr>
<td>Contingency (25% of Subtotal)</td>
<td></td>
<td></td>
<td></td>
<td>$802,850.00</td>
</tr>
<tr>
<td>Design and Management (20% of Subtotal + Contingency)</td>
<td></td>
<td></td>
<td></td>
<td>$802,850.00</td>
</tr>
<tr>
<td>Total for Recommendation</td>
<td></td>
<td></td>
<td></td>
<td>$4,817,100.00</td>
</tr>
</tbody>
</table>

POTENTIAL FUNDING SOURCES: CIP FUNDING, GRANTS, PUBLIC-PRIVATE PARTNERSHIPS

EXAMPLES OF APPLICABLE GRANT PROGRAMS: DOWNTOWN PUBLIC SPACES IMPROVEMENTS PROGRAM, COMMUNITY TREES GRANT PROGRAM, H-GAC TRANSPORTATION IMPROVEMENT PROJECTS (TIP)

ASSUMPTIONS: NUMBER AND TYPE OF TREES, NUMBER AND TYPE OF SITE FURNISHINGS, CROSSWALK DESIGN, LANDSCAPING ON MEDIANS
BAYSIDE DISTRICT

4.3 Maximize the recreational value of the dike

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UNIT</th>
<th>UNIT COST</th>
<th>QUANTITY</th>
<th>TOTAL COST</th>
</tr>
</thead>
</table>

Subtotal
Contingency (25% of Subtotal)
Design and Management (20% of Subtotal + Contingency)
Total for Recommendation

POTENTIAL FUNDING SOURCES:
EXAMPLES OF APPLICABLE GRANT PROGRAMS:
ASSUMPTIONS:
## CONNECTED SIDEWALK NETWORK

### 5.2 Develop a Sidewalk Implementation Program

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UNIT</th>
<th>UNIT COST</th>
<th>QUANTITY</th>
<th>TOTAL COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>6’ Concrete Sidewalks (4”)</td>
<td>SY</td>
<td>$42.75</td>
<td>7,040</td>
<td>$300,976.26</td>
</tr>
<tr>
<td>Curb Ramps</td>
<td>EA</td>
<td>$1,787.00</td>
<td>60</td>
<td>$107,220.00</td>
</tr>
<tr>
<td>Plant Material (45 Gallon) (Tree)</td>
<td>EA</td>
<td>$502.07</td>
<td>279</td>
<td>$140,077.24</td>
</tr>
<tr>
<td>Tree Grates</td>
<td>EA</td>
<td>$250.00</td>
<td>279</td>
<td>$69,750.00</td>
</tr>
<tr>
<td>Lighting</td>
<td>EA</td>
<td>$2,500.00</td>
<td>124</td>
<td>$310,000.00</td>
</tr>
</tbody>
</table>

Subtotal (Per Mile) $928,023.51

Contingency (25% of Subtotal) $232,005.88

Total (Per Mile) $1,160,029.38

High Priority Total (14.9 Corridor Miles) $17,284,437.78

Neighborhood Connector Total (24.2 Corridor Miles) $28,072,711.03

### Potential Funding Sources

CIP, GRANTS, PUBLIC-PRIVATE PARTNERSHIPS

### Examples of Applicable Grant Programs

CONGESTION MITIGATION AND AIR QUALITY IMPROVEMENT PROGRAM (CMAQ), SAFE ROUTES TO SCHOOLS, SURFACE TRANSPORTATION BLOCK GRANT (STBG), FEDERAL TRANSIT AUTHORITY (FTA), COMMUNITY DEVELOPMENT BLOCK GRANT (CDBG)

### Assumptions

Recommendations are made a per mile basis, on both sides of the street. Curb ramps are assumed to be placed approximately every 350’. Costs may vary based on right-of-way constraints or other site specific conditions, such as quality of existing sidewalks. Does not include professional services support (e.g. survey, engineering).
### TRAIL & BIKEWAY NETWORK CONNECTIVITY

6.1 Expand the existing trail and bikeway network

#### SIGNED BIKE ROUTE

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UNIT</th>
<th>UNIT COST</th>
<th>QUANTITY</th>
<th>TOTAL COST</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SIGNAGE</strong></td>
<td>EA</td>
<td>$433.65</td>
<td>13</td>
<td>$5,637.39</td>
</tr>
<tr>
<td>Contingency (25% of Subtotal)</td>
<td></td>
<td></td>
<td></td>
<td>$1,409.35</td>
</tr>
<tr>
<td><strong>Total (Per Mile)</strong></td>
<td></td>
<td></td>
<td></td>
<td>$7,046.74</td>
</tr>
</tbody>
</table>

**ASSUMPTIONS:** SIGNAGE PLACED EVERY 400’ PER DIRECTION. COST HERE ASSUMES SINGLE DIRECTION.

#### PROTECTED BIKE LANE

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UNIT</th>
<th>UNIT COST</th>
<th>QUANTITY</th>
<th>TOTAL COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bollards</td>
<td>LF</td>
<td>$30.00</td>
<td>3696</td>
<td>$110,880.00</td>
</tr>
<tr>
<td>Refl. Pav. Mark TY I (W) (Bike Symbol) (090 Mil)</td>
<td>EA</td>
<td>$144.23</td>
<td>62</td>
<td>$8,942.31</td>
</tr>
<tr>
<td>Refl. Pav. Mark TY I (W) (Bike Symbol) (090 Mil)</td>
<td>EA</td>
<td>$219.35</td>
<td>62</td>
<td>$13,599.46</td>
</tr>
<tr>
<td>Pavement Sealer</td>
<td>EA</td>
<td>$22.24</td>
<td>124</td>
<td>$2,757.35</td>
</tr>
<tr>
<td>Signage</td>
<td>FT</td>
<td>$0.63</td>
<td>5,280</td>
<td>$3,326.40</td>
</tr>
<tr>
<td>Contingency (25% of Subtotal)</td>
<td></td>
<td></td>
<td></td>
<td>$34,044.78</td>
</tr>
<tr>
<td><strong>Total (Per Mile)</strong></td>
<td></td>
<td></td>
<td></td>
<td>$144,924.78</td>
</tr>
</tbody>
</table>

**ASSUMPTIONS:** PROTECTED TWO-WAY BIKE LANE WITH BOLLARDS. COSTS MAY VARY BASED UPON ACTUAL DESIGN AND ENHANCEMENT ELEMENTS. USING RAISED CURBS INSTEAD WOULD INCREASE INITIAL COST.

#### BIKE LANE

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UNIT</th>
<th>UNIT COST</th>
<th>QUANTITY</th>
<th>TOTAL COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remove Existing Pavement Markings</td>
<td>FT</td>
<td>$1.06</td>
<td>2,640</td>
<td>$2,798.40</td>
</tr>
<tr>
<td>Signage</td>
<td>EA</td>
<td>$433.65</td>
<td>20</td>
<td>$8,673.00</td>
</tr>
<tr>
<td>Bike Lane Markings</td>
<td>FT</td>
<td>$4.74</td>
<td>3,696</td>
<td>$17,519.04</td>
</tr>
<tr>
<td>Contingency (25% of Subtotal)</td>
<td>FT</td>
<td>$4.74</td>
<td>3,696</td>
<td>$17,519.04</td>
</tr>
<tr>
<td><strong>Total (Per Mile)</strong></td>
<td></td>
<td></td>
<td></td>
<td>$36,238.05</td>
</tr>
</tbody>
</table>

**ASSUMPTIONS:** COSTS INCLUDE RE-STRIPING OF EXISTING ROADWAY FACILITY ONLY, PER DIRECTION. COSTS MAY VARY BASED ON RIGHT-OF-WAY CONSTRAINTS, FINAL DESIGN, OR OTHER SITE SPECIFIC CONDITIONS.
OFF-STREET TRAIL

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UNIT</th>
<th>UNIT COST</th>
<th>QUANTITY</th>
<th>TOTAL COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>10’ - 12’ Concrete Trail with Amenities</td>
<td>MI</td>
<td>$750,000.00</td>
<td>1</td>
<td>$750,000.00</td>
</tr>
<tr>
<td>Contingency (25% of Subtotal)</td>
<td></td>
<td></td>
<td></td>
<td>$187,500.00</td>
</tr>
<tr>
<td>Total (Per Mile)</td>
<td></td>
<td></td>
<td></td>
<td>$937,500.00</td>
</tr>
</tbody>
</table>

ASSUMPTIONS: COST ESTIMATE ASSUMES ASPHALT MEDIUM. COSTS MAY VARY BASED ON RIGHT-OF-WAY CONSTRAINTS, FINAL DESIGN, OR OTHER SITE SPECIFIC CONDITIONS, SUCH AS BRIDGES.

TRAIL AND BIKEWAY NETWORK RECOMMENDATIONS

<table>
<thead>
<tr>
<th>PROPOSED FACILITY</th>
<th>UNIT</th>
<th>UNIT COST</th>
<th>QUANTITY</th>
<th>TOTAL COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 7th Street N</td>
<td>MI</td>
<td>$36,238.05</td>
<td>2.61</td>
<td>$94,671.91</td>
</tr>
<tr>
<td>2. 9th Avenue N</td>
<td>MI</td>
<td>$144,924.78</td>
<td>2.87</td>
<td>$415,934.12</td>
</tr>
<tr>
<td>3. 14th Avenue N</td>
<td>MI</td>
<td>$36,238.05</td>
<td>0.93</td>
<td>$33,753.55</td>
</tr>
<tr>
<td>4. 19th Avenue N</td>
<td>MI</td>
<td>$36,238.05</td>
<td>1.09</td>
<td>$39,628.50</td>
</tr>
<tr>
<td>5. 21st Street N</td>
<td>MI</td>
<td>$36,238.05</td>
<td>2.62</td>
<td>$94,918.98</td>
</tr>
<tr>
<td>6. 25th Street N</td>
<td>MI</td>
<td>$36,238.05</td>
<td>3.29</td>
<td>$119,324.76</td>
</tr>
<tr>
<td>7. 2nd Street N</td>
<td>MI</td>
<td>$7,046.74</td>
<td>0.73</td>
<td>$5,111.56</td>
</tr>
<tr>
<td>8. 5th Avenue N</td>
<td>MI</td>
<td>$7,046.74</td>
<td>2.56</td>
<td>$18,030.59</td>
</tr>
<tr>
<td>9. 13th Avenue N (trail section)</td>
<td>MI</td>
<td>$937,500.00</td>
<td>0.74</td>
<td>$692,471.59</td>
</tr>
<tr>
<td>10. 13th Avenue N</td>
<td>MI</td>
<td>$7,046.74</td>
<td>1.84</td>
<td>$12,985.76</td>
</tr>
<tr>
<td>11. Texas City Dike Road</td>
<td>MI</td>
<td>$7,046.74</td>
<td>1.10</td>
<td></td>
</tr>
<tr>
<td>12. 14th Street N</td>
<td>MI</td>
<td>$937,500.00</td>
<td>1.11</td>
<td></td>
</tr>
<tr>
<td>13. 16th Street N</td>
<td>MI</td>
<td>$937,500.00</td>
<td>0.50</td>
<td></td>
</tr>
<tr>
<td>14. 25th Avenue N</td>
<td>MI</td>
<td>$937,500.00</td>
<td>3.93</td>
<td></td>
</tr>
<tr>
<td>15. Bay Street</td>
<td>MI</td>
<td>$937,500.00</td>
<td>1.14</td>
<td></td>
</tr>
<tr>
<td>16. Texas Avenue N</td>
<td>MI</td>
<td>$937,500.00</td>
<td>5.73</td>
<td></td>
</tr>
</tbody>
</table>

Total Bikeway Recommendation Cost $13,173,816.63

POTENTIAL FUNDING SOURCES: CIP, GRANTS, PUBLIC-PRIVATE PARTNERSHIPS

EXAMPLES OF APPLICABLE GRANT PROGRAMS: SURFACE TRANSPORTATION BLOCK GRANT (STBG), CONGESTION MITIGATION AND AIR QUALITY IMPROVEMENT PROGRAM (CMAQ), HIGHWAY SAFETY IMPROVEMENT PROGRAM, NATIONAL HIGHWAY PERFORMANCE PROGRAM
# TRAIL & BIKEWAY NETWORK CONNECTIVITY

## 6.2 Develop a destination trail

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UNIT</th>
<th>UNIT COST</th>
<th>QUANTITY</th>
<th>TOTAL COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enhancements to Trail Facilities</td>
<td>LF</td>
<td>$47.35</td>
<td>24,605</td>
<td>$1,165,009</td>
</tr>
<tr>
<td>Contingency (25% of Subtotal)</td>
<td></td>
<td></td>
<td></td>
<td>$291,252.00</td>
</tr>
<tr>
<td>Total for Recommendation</td>
<td></td>
<td></td>
<td></td>
<td>$1,456,262.00</td>
</tr>
</tbody>
</table>

**POTENTIAL FUNDING SOURCES:** CIP, GRANTS, PUBLIC-PRIVATE PARTNERSHIPS

**EXAMPLES OF APPLICABLE GRANT PROGRAMS:** SURFACE TRANSPORTATION BLOCK GRANT (STBG), COMMUNITY DEVELOPMENT BLOCK GRANT (CDBG)

**ASSUMPTIONS:** UNIT COST INCLUDES ESTIMATE OF CONSTRUCTION AND DESIGN COSTS. COSTS MAY VARY BASED ON ACTUAL ENHANCEMENT ELEMENTS AND DESIGN, SUCH AS SIGNAGE, ART, LANDSCAPING, SHADE STRUCTURES, BENCHES, ETC.

## 6.3 Bike Share Network

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UNIT</th>
<th>UNIT COST</th>
<th>QUANTITY</th>
<th>TOTAL COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bike Share Station</td>
<td>EA</td>
<td>$40,000.00</td>
<td>3</td>
<td>$120,000.00</td>
</tr>
<tr>
<td>Bikes</td>
<td>EA</td>
<td>$1,000.00</td>
<td>30</td>
<td>$30,000.00</td>
</tr>
<tr>
<td>Contingency (25% of Subtotal)</td>
<td></td>
<td></td>
<td></td>
<td>$30,000.00</td>
</tr>
<tr>
<td>Total for Recommendation</td>
<td></td>
<td></td>
<td></td>
<td>$180,000.00</td>
</tr>
</tbody>
</table>

**POTENTIAL FUNDING SOURCES:** PUBLIC-PRIVATE PARTNERSHIPS

**EXAMPLES OF APPLICABLE GRANT PROGRAMS:** FEDERAL TRANSIT ADMINISTRATION (FTA)

**ASSUMPTIONS:** COST IS FOR THE STATION AND BICYCLE ACQUISITION AND INSTALLATION ONLY. OPERATING COSTS WOULD BE IN ADDITION TO THIS, AND WOULD INCLUDE MAINTENANCE OF THE BIKES, ENSURING A PROPER RATIO OF AVAILABILITY OF BIKES AND OPEN DOCKS, AND OTHER NEEDS.
### TRAIL & BIKEWAY NETWORK CONNECTIVITY

6.4 Provide bike parking

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UNIT</th>
<th>UNIT COST</th>
<th>QUANTITY</th>
<th>TOTAL COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bike Racks</td>
<td>EA</td>
<td>$1,500.00</td>
<td>41</td>
<td>$61,500.00</td>
</tr>
<tr>
<td>Contingency (25% of Subtotal)</td>
<td></td>
<td></td>
<td></td>
<td>$15,375.00</td>
</tr>
<tr>
<td>Total for Recommendation</td>
<td></td>
<td></td>
<td></td>
<td>$76,875.00</td>
</tr>
</tbody>
</table>

**POTENTIAL FUNDING SOURCES:** CIP, PUBLIC-PRIVATE PARTNERSHIPS, GRANTS (BIKE PARKING COULD BE ELIGIBLE THROUGH SOME GRANT PROGRAMS IF ACCOMPANYING A BICYCLE-FACILITY PROJECT, OR RELATED TO OTHER IMPROVEMENTS E.G. TRANSIT FACILITIES)

**EXAMPLES OF APPLICABLE GRANT PROGRAMS:** CONGESTION MITIGATION AND AIR QUALITY IMPROVEMENT PROGRAM (CMAQ), FEDERAL TRANSIT ADMINISTRATION (FTA)

**ASSUMPTIONS:** UNIT COST IS AN AVERAGE. COST MAY VARY DEPENDING ON THE TYPE OF BIKE RACK, FINISHES, OR OTHER FACTORS. THE QUANTITY ASSUMES 3 PER NODE PLUS 2 PER PROPOSED BICYCLE FACILITY.
TRANSIT IMPROVEMENTS

7.1 Improve access [Coordinates with Recommendation 5.2]

7.2 & 7.3 Improve passenger amenities and signage (shelters, etc.)

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UNIT</th>
<th>UNIT COST</th>
<th>QUANTITY</th>
<th>TOTAL COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benches</td>
<td>EA</td>
<td>$2,500.00</td>
<td>15</td>
<td>$37,500.00</td>
</tr>
<tr>
<td>Enhanced Transit Signage</td>
<td>EA</td>
<td>$557.08</td>
<td>61</td>
<td>$33,981.88</td>
</tr>
<tr>
<td>Shelters</td>
<td>EA</td>
<td>$20,000.00</td>
<td>3</td>
<td>$60,000.00</td>
</tr>
<tr>
<td>Trash Receptacles</td>
<td>EA</td>
<td>$750.00</td>
<td>18</td>
<td>$15,000.00</td>
</tr>
<tr>
<td>Contingency (25% of Subtotal)</td>
<td>EA</td>
<td>$750.00</td>
<td>18</td>
<td>$15,000.00</td>
</tr>
<tr>
<td>Total for Recommendation</td>
<td></td>
<td></td>
<td></td>
<td>$88,500.00</td>
</tr>
</tbody>
</table>

POTENTIAL FUNDING SOURCES: CIP, GRANTS, PUBLIC-PRIVATE PARTNERSHIPS

EXAMPLES OF APPLICABLE GRANT PROGRAMS: FEDERAL TRANSIT AUTHORITY (FTA), SURFACE TRANSPORTATION BLOCK GRANT (STBG), COMMUNITY DEVELOPMENT BLOCK GRANT (CDBG)

ASSUMPTIONS: SHELTERS RECOMMENDED AT THREE NEW LOCATIONS WITH APPROXIMATELY 20 OR MORE BOARDINGS PER DAY. BENCHES RECOMMENDED AT STOPS WITH APPROXIMATELY 5 OR MORE BOARDINGS PER DAY. TRASH CANS ESTIMATED AT ALL NEW LOCATIONS WITH SHELTERS OR BENCHES. SIGNS ASSUMED AT ALL STOPS IN THE SYSTEM. ENHANCED TRANSIT SIGNAGE INCLUDES COST OF EXISTING POLE TYPE PLUS ADDITIONAL SIGNAGE (ALUMINUM TYPE (A) AT $28.54/SQ. FT. WITH 2 SQ. FT. PER SIGN ASSUMED.

7.3 Improve signage at stops [Included in Recommendation 7.2]

7.4 Improve connections at transfer points [Included in Recommendation 7.2 and 7.3]
TRANSIT IMPROVEMENTS

7.5 Increasing frequency of Orange Route

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UNIT</th>
<th>UNIT COST</th>
<th>QUANTITY</th>
<th>TOTAL COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Cost (Additional Bus)</td>
<td>EA</td>
<td>$100,000.00</td>
<td>1</td>
<td>$100,000.00</td>
</tr>
<tr>
<td>Operating Expense</td>
<td>VRH</td>
<td>$73.22</td>
<td>3,744</td>
<td>$274,135.68</td>
</tr>
<tr>
<td>Contingency (25% of Subtotal)</td>
<td></td>
<td></td>
<td></td>
<td>$93,533.92</td>
</tr>
<tr>
<td>Total for Recommendation</td>
<td></td>
<td></td>
<td></td>
<td>$467,669.60</td>
</tr>
</tbody>
</table>

POTENTIAL FUNDING SOURCES: GRANTS

EXAMPLES OF APPLICABLE GRANT PROGRAMS: FEDERAL TRANSIT AUTHORITY (FTA)

ASSUMPTIONS: VRH STANDS FOR THE OPERATING COST PER VEHICLE REVENUE HOUR. OPERATING COST IS ESTIMATED AT 12 HOURS PER DAY, OPERATING 312 DAYS PER YEAR (NO SERVICE ON SUNDAYS).

TRANSIT IMPROVEMENTS

7.6 Extending Orange Route to Bay Street

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UNIT</th>
<th>UNIT COST</th>
<th>QUANTITY</th>
<th>TOTAL COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Cost - Extension to Bay Street</td>
<td>VRM</td>
<td>$3.56</td>
<td>4,867</td>
<td>$17,327.00</td>
</tr>
</tbody>
</table>

POTENTIAL FUNDING SOURCES: GRANTS, PUBLIC-PRIVATE PARTNERSHIP, CIP

EXAMPLES OF APPLICABLE GRANT PROGRAMS: FEDERAL TRANSIT AUTHORITY (FTA)

ASSUMPTIONS: VRM STANDS FOR THE OPERATING COST PER VEHICLE REVENUE MILE. THE EXTENSION IS ESTIMATED AT 1.3 TOTAL ADDITIONAL MILES FOR EACH OF THE 12 TRIPS PER DAY, OPERATING 312 DAYS PER YEAR. ASSUMES EXTENSION CAN BE DONE WITHIN THE EXISTING ROUTE’S CYCLE TIME.
## 9TH AVENUE CORRIDOR IMPROVEMENTS

### 8.1 Reduce conflict points for vehicles, bicycles, and pedestrians

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UNIT</th>
<th>UNIT COST</th>
<th>QUANTITY</th>
<th>TOTAL COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Removing Concrete Pavement</td>
<td>SF</td>
<td>$15.00</td>
<td>40,000</td>
<td>$600,000.00</td>
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<tr>
<td>5” Decorative Concrete Art Plazas</td>
<td>SF</td>
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<tr>
<td>11” Stamped Concrete Intersection Design</td>
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<td>$880,000.00</td>
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<tr>
<td>Decorative Site Furniture (Trash Receptacles)</td>
<td>EA</td>
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<td>50</td>
<td>$90,000.00</td>
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<tr>
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<td>EA</td>
<td>$400.00</td>
<td>70</td>
<td>$28,000.00</td>
</tr>
<tr>
<td>Street Trees</td>
<td>EA</td>
<td>$650.00</td>
<td>100</td>
<td>$65,000.00</td>
</tr>
<tr>
<td>Import Topsoil</td>
<td>CY</td>
<td>$70.00</td>
<td>7,000</td>
<td>$490,000.00</td>
</tr>
<tr>
<td>Landscape Irrigation</td>
<td>LS</td>
<td>$75,000.00</td>
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<td>$75,000.00</td>
</tr>
<tr>
<td>Compost and Mulch Topdress</td>
<td>CY</td>
<td>$180.00</td>
<td>7,000</td>
<td>$1,260,000.00</td>
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<tr>
<td>Intersection Enhancements</td>
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<tr>
<td>Landscape Amenity (4’ Bench)</td>
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<tr>
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<tr>
<td>Subtotal</td>
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<tr>
<td>Contingency (25% of Subtotal)</td>
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<td></td>
<td></td>
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<tr>
<td>Design and Management (20% of Subtotal + Contingency)</td>
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<tr>
<td>Total for Recommendation</td>
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<td>$14,232,000.00</td>
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</tbody>
</table>

### POTENTIAL FUNDING SOURCES:
- CIP FUNDING, GRANTS, PUBLIC-PRIVATE PARTNERSHIPS

### EXAMPLES OF APPLICABLE GRANT PROGRAMS:
- URBANIZED AREA FORMULA PROGRAM
- TRANSPORTATION INVESTMENT GENERATING ECONOMIC RECOVERY (TIGER) PROGRAM
- FIXING AMERICA’S SURFACE TRANSPORTATION (FAST) ACT SETS ASIDE SURFACE TRANSPORTATION BLOCK GRANT (STBG) PROGRAM
- FUNDING FOR TRANSPORTATION ALTERNATIVES (TA)
- H-GAC TRANSPORTATION IMPROVEMENT PROJECTS (TIP)

### ASSUMPTIONS:
- NUMBER AND TYPE OF TREES
- NUMBER AND TYPE OF SITE FURNISHINGS
- CROSSWALK DESIGN
- PROJECT PHASING
- LANDSCAPING ON MEDIANS
- NEW CURB CUTS
- NEW PAVEMENT MARKINGS AROUND MEDIANS
### 9TH AVENUE CORRIDOR IMPROVEMENTS

8.5 Streetscaping should be provided along roadways and within medians

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UNIT</th>
<th>UNIT COST</th>
<th>QUANTITY</th>
<th>TOTAL COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Removing Concrete Pavement</td>
<td>SF</td>
<td>$15.00</td>
<td>8,000</td>
<td>$120,000.00</td>
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<tr>
<td>Ornamental Trees</td>
<td>EA</td>
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<td>Street Trees</td>
<td>EA</td>
<td>$650.00</td>
<td>18</td>
<td>$11,000.00</td>
</tr>
<tr>
<td>Import Topsoil</td>
<td>CY</td>
<td>$70.00</td>
<td>400</td>
<td>$28,000.00</td>
</tr>
<tr>
<td>Landscape Irrigation</td>
<td>LS</td>
<td>$15,000.00</td>
<td>1</td>
<td>$15,000.00</td>
</tr>
<tr>
<td>Compost and Mulch Topdress</td>
<td>CY</td>
<td>$180.00</td>
<td>400</td>
<td>$72,000.00</td>
</tr>
<tr>
<td>General Project Cost (Workzone, Removal, Roadway, etc.)</td>
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<td>$500,000.00</td>
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</tbody>
</table>

| Subtotal                    |      |           |          | $750,700.00  |
| Contingency (25% of Subtotal) |      |           |          | $187,675.00  |
| Design and Management (20% of Subtotal + Contingency) |      |           |          | $187,675.00  |
| Total for Recommendation    |      |           |          | $1,126,050.00|

**POTENTIAL FUNDING SOURCES:** CIP FUNDING, GRANTS, PUBLIC-PRIVATE PARTNERSHIPS

**EXAMPLES OF APPLICABLE GRANT PROGRAMS:** COMMUNITY TREES GRANT PROGRAM

**ASSUMPTIONS:** NUMBER AND TYPE OF TREES, LANDSCAPING ON MEDIANS, NEW CURB CUTS, NEW PAVEMENT MARKINGS AROUND MEDIANS, LENGTH OF STREETSCAPING (600 LINEAR FEET ASSUMED FOR ABOVE COST ESTIMATE)
## HOUSING REVITALIZATION AND LAND USE OPTIMIZATION

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UNIT</th>
<th>UNIT COST</th>
<th>QUANTITY</th>
<th>TOTAL COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subtotal</td>
<td></td>
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<td>Contingency (25% of Subtotal)</td>
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<tr>
<td>Design and Management (20% of Subtotal + Contingency)</td>
<td></td>
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<tr>
<td>Total for Recommendation</td>
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<td></td>
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</tr>
</tbody>
</table>

**Potential Funding Sources:**

**Examples of Applicable Grant Programs:**

**Assumptions:**
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